1. Product and Company Identification

Product Code: 112P.5
Product Name: ACE STRIPPER
Reference #: 112P.5

Manufacturer Information

Company Name: W. M. Barr
2105 Channel Avenue
Memphis, TN 38113
Phone Number: (901)775-0100
Emergency Contact: 3E 24 Hour Emergency Contact (800)451-8346
Information: W.M. Barr Customer Service (800)398-3892
Web site address: www.wmbarr.com

Synonyms
GA1339787, QA1339795, 112P.5

2. Composition/Information on Ingredients

Hazardous Components (Chemical Name) | CAS # | Concentration | OSHA TWA | ACGIH TWA | Other Limits
--- | --- | --- | --- | --- | ---
1. Dichloromethane (Methylene chloride) | 75-09-2 | 20.0 -30.0 % | 25 ppm | 50 ppm | No data.
2. Toluene (Benzene, Methyl-; Toluol) | 108-88-3 | 30.0 -40.0 % | 200 ppm | 50 ppm | No data.
3. Methanol (Methyl alcohol; Carbinol; Wood alcohol) | 67-56-1 | 20.0 -30.0 % | 200 ppm | 200 ppm | No data.
4. Acetone | 67-64-1 | 20.0 -30.0 % | 1000 ppm | 500 ppm | No data.
5. Paraffin waxes and hydrocarbon waxes | 8002-74-2 | 1.0 -5.0 % | No data. | 2 mg/m3 | No data.

Hazardous Components (Chemical Name) | CAS # | OSHA STEL | ACGIH STEL | ACGIH CEIL
--- | --- | --- | --- | ---
1. Dichloromethane (Methylene chloride) | 75-09-2 | 125 ppm (15 min) | No data. | 300 ppm | No data.
2. Toluene (Benzene, Methyl-; Toluol) | 108-88-3 | 500 ppm/(10min) | 300 ppm | No data. | No data.
3. Methanol (Methyl alcohol; Carbinol; Wood alcohol) | 67-64-1 | No data. | No data. | 250 ppm | 2 mg/m3
4. Acetone | 67-64-1 | No data. | No data. | 750 ppm | No data.

3. Hazards Identification

Emergency Overview

Danger! Extremely flammable! Keep away from heat, sparks, flame, and all other sources of ignition. Vapors may cause flash fire or ignite explosively. Vapors may travel long distances to other areas and rooms away from work site. Do not smoke. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and all other sources of ignition anywhere in the structure, dwelling or building during use and until all vapors are gone from the work site. Keep away from electrical outlets and switches. Beware of static electricity that may be generated by synthetic clothing and other sources.

OSHA Regulatory Status:

This material is classified as hazardous under OSHA regulations.

Potential Health Effects (Acute and Chronic)

Inhalation Acute Exposure Effects:

Vapor harmful. May cause dizziness; headache; watering of eyes; irritation of respiratory tract; muscle weakness; muscle twitches; sweating; pallor; ringing in ears; irritation to the mucus membranes; gastric disturbances; edema of lungs; injury to kidney; liver; heart; pancreas and spleen; arm, leg and chest pains; hot flashes; increase in carboxyhemoglobin levels, which can cause stress to the cardiovascular system; vomiting; depression of the
central nervous system; fall in body temperature; numbness in fingers, arms, and legs; irregular or rapid heartbeat; depression; loss of coordination; weakness; drowsiness; loss of appetite; fatigue; irritation; vomiting; eye irritation; anesthesia; insomnia; lightheadedness; stomach and intestinal pain; heartburn; confusion; giddiness; narcosis; brain damage; hallucinations; unconsciousness; olfactory changes; shock; collapse; coma; and death. Severe overexposure may cause poisoning; convulsions; unconsciousness; and death. Elevated carboxyhemoglobin levels can be additive to the increase caused by smoking and other carbon monoxide sources. Intentional misuse of this product by deliberately concentrating and inhaling can be harmful or fatal.

Skin Contact Acute Exposure Effects:
Harmful if absorbed through skin. Product may be absorbed through skin. Causes severe burns. May cause irritation; drying and cracking of skin; burning; redness; blister; numbness in fingers and arms; erythema; dermatitis; defatting of skin; white patches and wrinkles on skin; itching; pain; and tissue destruction; intense pain if not promptly removed; skin discoloration and anesthetization. Absorption through skin may cause poisoning and death. May cause increase and cause additional symptoms listed under inhalation.

Eye Contact Acute Exposure Effects:
This material is an eye irritant. Causes severe burns. May cause irritation and injury; severe corneal effects; corneal damage; stinging; tearing; redness; and swelling. If not promptly removed, will injure eye tissue, which may result in permanent damage. May cause symptoms listed under inhalation. Vapors may also cause irritation.

Ingestion Acute Exposure Effects:
Poison. Cannot be made non-poisonous. Harmful or fatal if swallowed. May cause blindness; dizziness; nausea; headache; irritation to mouth; loss of coordination; stupor; nose, throat, and stomach irritation; abdominal pains, burns in mouth, pharynx and gastrointestinal tract; gastrointestinal irritation; muscle weakness and twitches; vomiting; diarrhea including bloody diarrhea; intense burning of mouth and throat; skin rash; urine output may be scanty and may contain hemoglobin; irregular breathing; frothing at mouth and nose; blue discoloration of skin; fall in blood pressure; depression of the central nervous system; collapse; shock; unconsciousness; and death. May produce additional symptoms listed under inhalation. Liquid aspirated into lungs, during vomiting, may cause chemical pneumonia and systemic effects.

Chronic Exposure Effects:
Reports have associated repeated and prolonged overexposure to solvents with neurological and other physiological damage. Prolonged or repeated contact may cause dermatitis. May cause dizziness; headache; fainting; skin rash; irritations; eruptions or discolorations; loss of appetite; difficulty swallowing; digestive disturbances; permanent central nervous system changes; jaundice; changes in blood; blood disorders; damage to bone marrow; mental confusion; mental disturbances; hallucinations; decreased response to visual and auditory stimulation; blindness; liver, kidney and lung damage; changes in blood; blood disorders; heart palpitations; and death. Some individuals may be hypersensitive to this material.

Signs and Symptoms Of Exposure
Primary Routes of Exposure:
Inhalation, ingestion, and dermal.

Medical Conditions Generally Aggravated By Exposure
Diseases of the blood, skin, liver, kidneys, lungs, cardiovascular system and respiratory system, alcoholism, and rhythm disorders of the heart.

4. First Aid Measures

Emergency and First Aid Procedures
Inhalation:
If user experiences breathing difficulty, move to air free of vapors. Administer oxygen or artificial respiration until medical assistance can be rendered.
Skin Contact:  
Irritation may result. Immediately wash with soap and water. Remove contaminated clothes and shoes. Wash clothing before reuse. Discard contaminated shoes.

Eye Contact:  
Immediately flush with water, remove any contact lenses, continue flushing with water for at least 15 minutes, then get medical attention.

Ingestion:  
Call your local poison control center, hospital emergency room, or physician immediately for instructions to induce vomiting. Never give anything by mouth to an unconscious person.

Note to Physician  
Poison. This product contains methanol and methylene chloride. Methanol is metabolized to formaldehyde and formic acid. These metabolites may cause metabolic acidosis, visual disturbances, and blindness. Since metabolism is required for these toxic symptoms, their onset may be delayed from 6 to 30 hours following ingestion. Ethanol competes for the same metabolic pathway and has been used as an antidote. Methanol is effectively removed by hemodialysis. Adrenalin should never be given to a person overexposed to methylene chloride. Call your local poison control center for further instructions.

5. Fire Fighting Measures

Flammability Classification: OSHA CLASS IB
Flash Pt: < 20.00 F  Method Used: TAG Closed Cup
Explosive Limits: LEL: 1.00  UEL: No data.

Fire Fighting Instructions
Self-contained respiratory protection should be provided for fire fighters fighting fires in buildings or confined areas. Storage containers exposed to fire should be kept cool with water spay to prevent pressure build-up. Stay away from heads of containers that have been exposed to intense heat or flame.

Flammable Properties and Hazards
No data available.

Extinguishing Media
Use carbon dioxide, dry powder, or foam.

Unsuitable Extinguishing Media
No data available.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled

Cleanup:
Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind, out of low areas, and ventilate closed spaces before entering. Shut off ignition sources; keep flares, smoking or flames out of hazard area.

Small Spills:
Take up liquid with sand, earth or other noncombustible absorbent material and place in a plastic container where applicable.

Large Spills:
Dike far ahead of spill for later disposal.
7. Handling and Storage

Precautions To Be Taken in Handling
Read carefully all cautions and directions on product label before use. Since empty container retains residue, follow all label warnings even after container is empty. Dispose of empty container according to all regulations. Do not reuse this container.

Precautions To Be Taken in Storing
Keep container tightly closed when not in use. Store in a cool, dry place. Exposure to high temperatures or prolonged exposure to sun may cause can to leak or swell. Once opened, remover should be used within six months or discarded to avoid can deterioration. Do not use near flames or at elevated temperatures.

8. Exposure Controls/Personal Protection

Respiratory Equipment (Specify Type)
For OSHA controlled work place and other regular users --Use only with adequate ventilation under engineered air control systems designed to prevent exceeding appropriate TLV. For occasional use, where engineered air control is not feasible, use properly maintained and properly fitted NIOSH approved respirator for organic solvent vapors. A dust mask does not provided protection against vapors.

Eye Protection
Safety glasses, chemical goggles or face shields are recommended to safeguard against potential eye contact, irritation, or injury. Contact lenses should not be worn while working with chemicals.

Protective Gloves
Wear impermeable gloves. Gloves contaminated with product should be discarded. Promptly remove clothing that becomes soiled with product.

Other Protective Clothing
Various application methods can dictate the use of additional protective safety equipment, such as impermeable aprons, etc., to minimize exposure. A source of clean water should be available in the work area for flushing eyes and skin. Do not eat, drink, or smoke in the work area. Wash hands thoroughly after use. Before reuse, thoroughly clean any clothing or protective equipment that has been contaminated by prior use. Discard any clothing or other protective equipment that cannot be decontaminated, such as gloves or shoes.

Engineering Controls (Ventilation etc.)
Use only with adequate ventilation to prevent buildup of vapors. Do not use in areas where vapors can accumulate and concentrate such as basements, bathrooms, or small enclosed areas. Whenever possible, use outdoors in an open area. If using indoors, open all windows and doors and maintain a cross ventilation of moving fresh air across the work area. If strong odor is noticed or you experience slight dizziness, headache, nausea or eye-watering -- Stop -- ventilation is inadequate. Leave area immediately. If the work area is not well ventilated, then do not use this product. A dust mask does not provide protection against vapors.

9. Physical and Chemical Properties

Physical States: [ ] Gas [X] Liquid [ ] Solid
Melting Point: No data.
Boiling Point: > 104.00 F
Autoignition Pt: No data.
Flash Pt: < 20.00 F Method Used: TAG Closed Cup
Explosive Limits: LEL: 1.00 UEL: No data.
Specific Gravity (Water = 1): No data.
Bulk density: 7.504 LB/GA
Vapor Pressure (vs. Air or mm Hg): No data.
Vapor Density (vs. Air = 1): No data.
Evaporation Rate (vs Butyl Acetate=1): > 1
Solubility in Water: No data.
Percent Volatile: 98.43 % by weight.
VOC / Volume: 443.0000 G/L
Heat Value: No data.
Particle Size: No data.
Corrosion Rate: No data.
Formula: 112P.5
pH: No data.

Appearance and Odor
Water white clear liquid with white particulates

10. Stability and Reactivity

Stability: Unstable [ ] Stable [ X ]

Conditions To Avoid - Instability
Stable. However, may decompose if heated.

Incompatibility - Materials To Avoid
Incompatible with strong oxidizing agents, nitric acid, strong alkalis, nitrogen peroxide, oxygen, strong caustics, chemically active metals such as magnesium or aluminum, sodium, or potassium.

Hazardous Decomposition Or Byproducts
Thermal decomposition may produce carbon monoxide, carbon dioxide, chlorine gas, hydrogen chloride, small quantities of phosgene, formaldehyde, and unidentified organic compounds in black smoke.

Hazardous Polymerization: Will occur [ ] Will not occur [ X ]

Conditions To Avoid - Hazardous Polymerization
No data available.

11. Toxicological Information

See related chart for NTP, IARC, ACGIH, and OSHA Carcinogenicity information for each ingredient.

Chronic Toxicological Effects
See related chart for NTP, IARC, ACGIH, and OSHA Carcinogenicity information for each ingredient.

Carcinogenicity/Other Information
See related chart for NTP, IARC, ACGIH, and OSHA Carcinogenicity information for each ingredient.

<table>
<thead>
<tr>
<th>Hazardous Components (Chemical Name)</th>
<th>CAS #</th>
<th>NTP</th>
<th>IARC</th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Dichloromethane (Methylene chloride)</td>
<td>75-09-2</td>
<td>Possible</td>
<td>2B</td>
<td>A3</td>
<td>Yes</td>
</tr>
<tr>
<td>2. Toluene (Benzene, Methyl-; Toluol)</td>
<td>108-88-3</td>
<td>No</td>
<td>3</td>
<td>A4</td>
<td>No</td>
</tr>
<tr>
<td>3. Methanol (Methyl alcohol; Carbinol; Wood alcohol)</td>
<td>67-56-1</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>5. Paraffin waxes and hydrocarbon waxes</td>
<td>8002-74-2</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

No data available.

12. Ecological Information

13. Disposal Considerations

Waste Disposal Method
Dispose in accordance with local, state, and federal regulations.

RCRA Waste ID Code: D001

14. Transport Information

LAND TRANSPORT (US DOT)
DOT Proper Shipping Name No data available.
**Additional Transport Information**

For D. O. T. information, contact W. M. Barr Technical Services at 1-800-398-3892.

---

**15. Regulatory Information**

### US EPA SARA Title III

<table>
<thead>
<tr>
<th>Hazardous Components (Chemical Name)</th>
<th>CAS #</th>
<th>Sec.302 (EHS)</th>
<th>Sec.304 RQ</th>
<th>Sec.313 (TRI)</th>
<th>Sec.110</th>
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</thead>
<tbody>
<tr>
<td>Dichloromethane (Methylene chloride)</td>
<td>75-09-2</td>
<td>No</td>
<td>Yes 1000 LB</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Toluene (Benzene, Methyl-; Toluol)</td>
<td>108-88-3</td>
<td>No</td>
<td>Yes 1000 LB</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Methanol (Methyl alcohol; Carbinol; Wood alcohol)</td>
<td>67-56-1</td>
<td>No</td>
<td>Yes 5000 LB</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>No</td>
<td>Yes 5000 LB</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Paraffin waxes and hydrocarbon waxes</td>
<td>8002-74-2</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
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</table>

### US EPA CAA, CWA, TSCA

<table>
<thead>
<tr>
<th>Hazardous Components (Chemical Name)</th>
<th>CAS #</th>
<th>EPA CAA</th>
<th>EPA CWA NPDES</th>
<th>EPA TSCA</th>
<th>CA PROP 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dichloromethane (Methylene chloride)</td>
<td>75-09-2</td>
<td>HAP</td>
<td>Yes</td>
<td>Inventory, 8A CAIR, 8A PAIR</td>
<td>Yes</td>
</tr>
<tr>
<td>Toluene (Benzene, Methyl-; Toluol)</td>
<td>108-88-3</td>
<td>HAP</td>
<td>Yes</td>
<td>Inventory, 8A CAIR, 8A PAIR</td>
<td>Yes</td>
</tr>
<tr>
<td>Methanol (Methyl alcohol; Carbinol; Wood alcohol)</td>
<td>67-56-1</td>
<td>HAP</td>
<td></td>
<td>Inventory</td>
<td></td>
</tr>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>No</td>
<td></td>
<td>Inventory, 4 Test, 12(b)</td>
<td></td>
</tr>
<tr>
<td>Paraffin waxes and hydrocarbon waxes</td>
<td>8002-74-2</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SARA (Superfund Amendments and Reauthorization Act of 1986) Lists:

- **Sec.302:** EPA SARA Title III Section 302 Extremely Hazardous Chemical with TPQ. * indicates 10000 LB TPQ if not volatile.
- **Sec.304:** EPA SARA Title III Section 304: CERCLA Reportable + Sec.302 with Reportable Quantity. ** indicates statutory RQ.
- **Sec.313:** EPA SARA Title III Section 313 Toxic Release Inventory. Note: -Cat indicates a member of a chemical category.
- **Sec.110:** EPA SARA 110 Superfund Site Priority Contaminant List

### TSCA (Toxic Substances Control Act) Lists:

- **Inventory:** Chemical Listed in the TSCA Inventory.
- **5A(2):** Chemical Subject to Significant New Rules (SNURS)
- **6A:** Commercial Chemical Control Rules
- **8A:** Toxic Substances Subject To Information Rules on Production
- **8A CAIR:** Comprehensive Assessment Information Rules - (CAIR)
- **8A PAIR:** Preliminary Assessment Information Rules - (PAIR)
- **8C:** Records of Allegations of Significant Adverse Reactions
- **8D:** Health and Safety Data Reporting Rules
- **8D TERM:** Health and Safety Data Reporting Rule Terminations
- **12(b):** Notice of Export

### Other Important Lists:

- **CWA NPDES:** EPA Clean Water Act NPDES Permit Chemical
- **CAA HAP:** EPA Clean Air Act Hazardous Air Pollutant
- **CAA ODC:** EPA Clean Air Act Ozone Depleting Chemical (1=CFC, 2=HCFC)
- **CA PROP 65:** California Proposition 65

### International Regulatory Lists:

**EPA Hazard Categories:**

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:
[X] Yes  [ ] No   Acute (immediate) Health Hazard
[X] Yes  [ ] No   Chronic (delayed) Health Hazard
[X] Yes  [ ] No   Fire Hazard
[ ] Yes  [X] No   Sudden Release of Pressure Hazard
[ ] Yes  [X] No   Reactive Hazard

16. Other Information

Company Policy or Disclaimer
The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.
SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

Product Identifier : Armstrong S-700 Floor Tile Adhesive Thin Spread
Product Code : 70010023
Trade Name/Synonyms : S-700
Recommended Use : Thin Spread adhesive for floor tiles.
Uses Advised Against : No information available.

Supplier's name and address:
Armstrong Flooring, Inc.
2500 Columbia Ave.
Lancaster, PA, USA  17603

Information Telephone No. : (800) 233-3823
Website Address : http://www.floorexpert.com
24 Hr Emergency Telephone # : CHEM-TEL: 1-800-255-3924 or +01-813-248-0585 (call collect)

SECTION 2 – HAZARDS IDENTIFICATION

GHS Classification per 29 CFR 1910.1200 (OSHA HCS 2012) and HPR (WHMIS 2015)
Acute Toxicity, Oral, Category 4
Skin Corrosion/Irritation, Category 2
Skin Sensitization, Category 1
Serious Eye Damage/Eye Irritation, Category 2A.

GHS Pictograms

Signal Word
Warning.

Hazard Statements
Harmful if swallowed.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.

Precautionary Statements
Avoid breathing dust/gas/vapours. Wear protective gloves and eye protection. Do not eat, drink or smoke when using this product. Wash hands and exposed skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Dispose of contents / container in accordance with federal, state, and local laws. Do not allow product to enter drains.

During normal usage of the product as recommended, airborne dusts and mists will not be present. See Section 7 (Handling and Storage) for further details.

Hazards Not Otherwise Classified
None.

% with Unknown Acute Toxicity
5% of this product consists of ingredients with unknown acute toxicity.
SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>% (by weight)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>8052-42-4</td>
<td>40.00 – 70.00</td>
</tr>
<tr>
<td>Rosin</td>
<td>8050-09-7</td>
<td>0.50 – 1.50</td>
</tr>
</tbody>
</table>

The exact percentages of the ingredients have been withheld by the manufacturer as trade secrets.

SECTION 4 – FIRST AID MEASURES

General : Call a Poison Center or doctor if you feel unwell.
Inhalation : If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing.
Skin contact : Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. If irritations or symptoms develop, seek medical attention/advice.
Eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
Ingestion : Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.
Notes for Physician : Treat symptomatically.

Signs and symptoms of short-term (acute) exposure

- **Inhalation** : Symptoms may include coughing and shortness of breath.
- **Skin** : Symptoms may include redness and itching.
- **Eyes** : Symptoms may include redness, itching, or pain.
- **Ingestion** : Symptoms such as gastric pain, nausea, vomiting, and diarrhea may occur.

Effects of long-term (chronic) exposure

- Prolonged inhalation may cause adverse lung effects with symptoms including coughing and shortness of breath. Prolonged exposure to the skin may cause a sensitization reaction in some individuals, where repeat exposures will result in an allergic skin reaction.

Indication of need for immediate medical attention or special treatment

- Difficulty breathing persists after removing the person to fresh air.
- Any exposure to the eye which causes irritation.

SECTION 5 – FIRE FIGHTING MEASURES

Suitable extinguishing media : Carbon dioxide, dry chemical powder, alcohol foam or water spray.
Unsuitable extinguishing media : Water jet may spread the burning material.
Hazardous combustion products : Carbon monoxide, carbon dioxide, sulfur oxides (SOx) as well as other toxic vapors and gases which are common to thermal degradation of organic compounds.

Special fire-fighting procedures/equipment

- Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame. After fires have been extinguished, carefully clean all equipment and surfaces exposed to fumes.

Environmental precautions : Do not allow material to enter drains or contaminate ground water system.
Fire hazards/conditions of flammability

- Not flammable under normal conditions of use. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions: Restrict access to area until completion of clean-up. All persons dealing with clean-up should wear the appropriate chemically protective equipment.

Protective equipment: Refer to Section 8 on this Safety Data Sheet, EXPOSURE CONTROLS / PERSONAL PROTECTION, for additional information on acceptable personal protective equipment.

Emergency Procedures: If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8002).

Methods and materials for containment and cleaning up: Ventilate area of release. Eliminate all ignition sources. Stop spill or leak at source if safely possible. Contain product with inert absorbent material, preventing it from entering sewer lines or waterways. Gather up spilled material and place in suitable container for later disposal (see Section 13). Residual of product, while still wet, can be cleaned up with warm soapy water. Notify the appropriate authorities as required.

Prohibited materials: None known.

Environmental precautions: Do not allow product to enter drains or waterways. Do not allow material to contaminate ground water system.

Reference to other sections: See Section 14 for disposal information.

SECTION 7 – HANDLING AND STORAGE

Safe handling procedures: Wear suitable protective equipment during handling. (See Section 8.) Observe good hygiene standards. Use only with adequate ventilation. Do not eat, drink or smoke in the work area. Wash thoroughly after handling. Avoid contact with eyes, skin, or clothing. Avoid repeated or prolonged skin contact. Avoid breathing vapors or mists of this product. Persons with a history of skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is being used. Once a person is sensitized, no further exposure to the material that caused the sensitization should be permitted. Sanding and grinding dusts may be harmful if inhaled. When removing this product from existing flooring (i.e. during a renovation), wear safety goggles and respiratory protection from dust due to blasting, chipping, or mechanically pulverizing. Wear protective clothing to prevent skin contact. Promptly remove any clothing that becomes contaminated. Clean contaminated clothing before reuse. Keep container tightly closed.

Storage requirements: Store in a cool, dry, well-ventilated area. Store away from heat and open flame. Avoid storing in direct sunlight. Store in original container. Keep tightly closed when not in use. Do not reuse empty container without commercial cleaning or reconditioning.

Incompatible materials: See Section 10.

Special packaging materials: Always keep in containers made of the same materials as the supply container.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Permissible Exposure Limits: No exposure limits have been established for the product itself. Below are exposure limits for the components in the product.
Ingredients | CAS # | ACWIH TLV | OSHA PEL |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>STEL</td>
</tr>
<tr>
<td>Asphalt</td>
<td>8052-42-4</td>
<td>0.5 mg/m³ (fume, inhalable Fraction, as Benzene soluble aerosol)</td>
<td>N/Av</td>
</tr>
<tr>
<td>Rosin</td>
<td>8050-09-7</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
</tbody>
</table>

**Engineering Controls**: Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits. Ventilation should effectively remove and prevent buildup of any vapor generated from the handling of this product.

**Personal Protection Equipment**

- **Eye / face protection**: Chemical goggles or safety glasses, as appropriate for the job.
- **Skin protection**: Wear gloves which are impervious to the material. Materials such as nitrile rubber or Viton (fluorocarbon rubber) are recommended. Consult with glove manufacturers regarding breakthrough time for this material.
- **Body protection**: Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact.
- **Respiratory protection**: If work process generates excessive quantities of vapor or dust, or exposures in excess of any PEL, wear an appropriate organic vapor respirator.
- **Site safety equipment**: An eyewash station and safety shower should be made available in the immediate working area.
- **General hygiene considerations**: Avoid contact with eyes, skin and clothing. Avoid breathing vapors/dust. Do not eat, drink or smoke when using this product. Upon completion of work, wash hands thoroughly. Remove soiled clothing and wash it thoroughly before reuse. Clean all equipment and clothing at end of each work shift.

### SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Paste</td>
</tr>
<tr>
<td>Appearance</td>
<td>Black paste</td>
</tr>
<tr>
<td>Odor</td>
<td>Asphalt</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>N/Av</td>
</tr>
<tr>
<td>pH</td>
<td>10.0 – 11.0</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1.04</td>
</tr>
<tr>
<td>Boiling point (°F / °C)</td>
<td>212 / 100</td>
</tr>
<tr>
<td>Coefficient of water/oil distribution</td>
<td>N/Av</td>
</tr>
<tr>
<td>Melting/Freezing point</td>
<td>N/Av</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Dispersible</td>
</tr>
<tr>
<td>Vapor pressure (mm Hg @ 20°C / 68°F)</td>
<td>N/Av</td>
</tr>
<tr>
<td>Evaporation rate (n-Butyl acetate = 1)</td>
<td>N/Av</td>
</tr>
<tr>
<td>Vapor density (Air = 1)</td>
<td>N/Av</td>
</tr>
<tr>
<td>Volatiles (% by weight)</td>
<td>Approximately 35%</td>
</tr>
<tr>
<td>Volatile organic compounds (VOCs)</td>
<td>&lt; 1 g/L SCAQMD 1168</td>
</tr>
<tr>
<td>Particle size</td>
<td>N/Av</td>
</tr>
<tr>
<td>Flammability classification</td>
<td>Not flammable</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt;93.3°C (200°F)</td>
</tr>
<tr>
<td>Lower flammable limit (% by vol)</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash point method</td>
<td>Setaflash closed</td>
</tr>
<tr>
<td>Upper flammable limit (% by vol)</td>
<td>Not available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>N/Av</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>15,000 cSt</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>Not available</td>
</tr>
</tbody>
</table>

**Explosion data**: Sensitivity to mechanical impact / static discharge

- Not expected to be sensitive to mechanical impact or static discharge.

### SECTION 10 – REACTIVITY AND STABILITY INFORMATION

- **Reactivity**: Not reactive.
- **Stability**: Stable under the recommended storage and handling conditions prescribed.
- **Hazardous reactions**: Hazardous polymerization does not occur.
- **Conditions to avoid**: Extreme heat.
- **Materials to avoid and incompatibility**: Strong oxidizing agents.
Safety Data Sheet
Armstrong S-700 Floor Tile Adhesive Thin Spread
Revised: November 8, 2018

Hazardous decomposition products
: None known, refer to hazardous combustion products in Section 5.

SECTION 11 – TOXICOLOGICAL INFORMATION

Routes of exposure
: Inhalation: YES  Skin Absorption: NO  Skin and Eyes: Yes  Ingestion: YES

Symptoms of exposure
: See Section 4.

Calculated Acute Toxicity Estimates for the Product

<table>
<thead>
<tr>
<th>Routes of exposure</th>
<th>LC50 (4 hr)</th>
<th>LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inhalation, rat</td>
<td>Oral, rat</td>
</tr>
<tr>
<td>Asphalt (contains &lt; 0.1% hydrogen sulfide, H2S)</td>
<td>N/Av</td>
<td>&gt; 5,000 mg/kg</td>
</tr>
<tr>
<td>Rosin</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
</tbody>
</table>

Toxicological data
: See below for individual ingredient acute toxicity data.

Ingredients
<table>
<thead>
<tr>
<th>Inhalation, rat</th>
<th>Oral, rat</th>
<th>Dermal, rabbit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt (contains &lt; 0.1% hydrogen sulfide, H2S)</td>
<td>N/Av</td>
<td>&gt; 5,000 mg/kg</td>
</tr>
<tr>
<td>Rosin</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
</tbody>
</table>

Skin corrosion or irritation
: May cause slight irritation to skin.

Serious eye damage / eye irritation
: May cause severe irritation to eyes.

Respiratory or skin sensitization
: Contains Rosin, which is known to cause skin sensitization reactions. When Rosin is molten, its vapors can also cause respiratory sensitization. Under normal conditions of use, this product will not generate Rosin vapors. See precautions recommended for persons with a history of skin sensitization problems or asthma in Section 7.

Germ cell mutagenicity
: None known.

Carcinogenic status
: This product contains trace amounts of Crystalline silica, quartz. Crystalline silica, quartz of respirable size (< 10 micron diameter) is classified as carcinogenic via inhalation by IARC (Group 1), ACGIH (Group A2), NTP (Group 1) and OSHA (OSHA Select carcinogen). During normal usage of the product as recommended, airborne dusts will not be present. See Section 7 for more information. No other components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

Reproductive toxicity
: None known.

Specific Target Organ Toxicity, Single Exposure
: None known.

Specific Target Organ Toxicity, Repeated Exposure
: None known.

Aspiration hazard
: None known.

Additional information
: N/Av

SECTION 12 – ECOLOGICAL INFORMATION

Environmental effects
: The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.

<table>
<thead>
<tr>
<th>Environmental effects</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecotoxicity</td>
<td>No data available.</td>
</tr>
<tr>
<td>Biodegradability</td>
<td>No data available.</td>
</tr>
<tr>
<td>Bioaccumulative potential</td>
<td>No data available.</td>
</tr>
<tr>
<td>Mobility in soil</td>
<td>No data available.</td>
</tr>
<tr>
<td>PBT and vPvB assessment</td>
<td>No data available.</td>
</tr>
<tr>
<td>Other adverse effects</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

SECTION 13 – DISPOSAL CONSIDERATION

Handling for disposal
: Handle waste according to recommendations in Section 7.

Methods of disposal
: You must test your waste using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes. Dispose in accordance with all applicable federal, state, provincial and local regulations.
Packaging: Handle contaminated packaging in the same manner as the product.

RCRA: If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14 – TRANSPORTATION INFORMATION

<table>
<thead>
<tr>
<th>Regulatory Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN Number</td>
</tr>
<tr>
<td>TDG</td>
</tr>
<tr>
<td>TDG Additional Information</td>
</tr>
<tr>
<td>49 CFR/DOT</td>
</tr>
<tr>
<td>49 CFR/DOT Additional Information</td>
</tr>
</tbody>
</table>

SECTION 15 – REGULATORY INFORMATION

Canadian Information:
This product has been classified according to the hazard criteria of the Hazardous Products Regulations (HPR). This SDS contains all of the information required by the HPR.

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on either the Domestic Substances List (DSL) or the Non-Domestic Substances List (NDSL).

US Federal Information:
TSCA: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

CERCLA Reportable Quantity (RQ) (40 CFR 117.302): None reported.
SARA TITLE III: Sec. 302, Extremely Hazardous Substances, 40 CFR 355: No Extremely Hazardous Substances are present in this material.

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes:
Immediate (Acute) health hazard
Chronic Health Hazard.

Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds or the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

SARA TITLE III: Sec. 313, Toxic Chemicals Notification, 40 CFR 372: This product is not subject to SARA notification requirements, since it does not contain any Toxic Chemical constituents above de minimus concentrations.

U.S. State Right To Know Laws
California Proposition 65: ★ WARNING: This product can expose you to crystalline silica quartz, which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov

SECTION 16 – OTHER INFORMATION

HMIS Rating

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Physical Hazard</th>
<th>PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>0</td>
<td>Gloves, safety glasses</td>
</tr>
</tbody>
</table>

Legend

- ACGIH: American Conference of Governmental Industrial Hygienists
- CAS: Chemical Abstract Services
- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
- CFR: Code of Federal Regulations
- DOT: Department of Transportation
- DSL: Domestic Substances List
- EPA: Environmental Protection Agency
- GHS: Globally Harmonized System
- HPR: Hazardous Products Regulations
- IARC: International Agency for Research on Cancer
- Inh: Inhalation
- N/A: Not Available
- N/Ap: Not Applicable
- NIOSH: National Institute of Occupational Safety and Health
- NTP: National Toxicology Program
- OSHA: Occupational Safety and Health Administration
- PEL: Permissible exposure limit
- RCRA: Resource Conservation and Recovery Act
- SARA: Superfund Amendments and Reauthorization Act
- STEL: Short Term Exposure Limit
- TG: Time Weighted Average
- TLV: Threshold Limit Values
- TSCA: Toxic Substance Control Act
- TWA: Time Weighted Average
- WHMIS: Workplace Hazardous Materials Identification System

Disclaimer of Liability

The Information presented herein is supplied as a guide to those who handle or use this product and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive. The manner and conditions of use and handling may involve other and additional considerations. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.

No warranty of any kind is given or implied. Armstrong World Industries, Inc. will not be liable for any damages, losses, injuries or consequential damages which may result from the use or reliance on any information contained herein.

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Visit our Website: http://www.floorexpert.com

Revision date:  11/8/18

End of Document
SAFETY DATA SHEET
Easy Task

Section 1. Identification

GHS product identifier : Easy Task
Product code : 608
Other means of identification : Not available.
Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against
Not applicable.

Supplier's details : Betco Corporation
400 Van Camp Road
Bowling Green, Ohio 43402
www.betco.com
888-462-3826

Emergency telephone number (with hours of operation) : Chemtrec (800) 424-9300 24 hour

Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

GHS label elements

Signal word : No signal word.
Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention : Not applicable.
Response : Not applicable.
Storage : Not applicable.
Disposal : Not applicable.
Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture
Other means of identification : Not available.

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>%</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanediol</td>
<td>≤3</td>
<td>107-21-1</td>
</tr>
</tbody>
</table>

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Date of issue/Date of revision : 8/27/2018
Date of previous issue : No previous validation
Version : 1
Section 3. Composition/information on ingredients

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

**Eye contact**: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

**Inhalation**: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

**Skin contact**: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

**Ingestion**: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

**Potential acute health effects**

- **Eye contact**: No known significant effects or critical hazards.
- **Inhalation**: No known significant effects or critical hazards.
- **Skin contact**: No known significant effects or critical hazards.
- **Ingestion**: No known significant effects or critical hazards.

**Over-exposure signs/symptoms**

- **Eye contact**: No specific data.
- **Inhalation**: No specific data.
- **Skin contact**: No specific data.
- **Ingestion**: No specific data.

**Indication of immediate medical attention and special treatment needed, if necessary**

- **Notes to physician**: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- **Specific treatments**: No specific treatment.
- **Protection of first-aiders**: No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

**Extinguishing media**

- **Suitable extinguishing media**: Use an extinguishing agent suitable for the surrounding fire.
- **Unsuitable extinguishing media**: None known.

**Specific hazards arising from the chemical**

- **Hazardous thermal decomposition products**: In a fire or if heated, a pressure increase will occur and the container may burst. Decomposition products may include the following materials: carbon dioxide, carbon monoxide.

**Special protective actions for fire-fighters**

- **Special protective actions for fire-fighters**: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Section 5. Fire-fighting measures

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures: Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits
Section 8. Exposure controls/personal protection

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
</table>

**Appropriate engineering controls**: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Environmental exposure controls**: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Individual protection measures**

**Hygiene measures**: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection**: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

**Skin protection**

**Hand protection**: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

**Body protection**: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection**: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection**: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

**Section 9. Physical and chemical properties**

**Appearance**

**Physical state**: Liquid.

**Color**: Green.

**Odor**: Fruity.

**Odor threshold**: Not available.

**pH**: 8 to 9.5

**Melting point**: Not available.

**Boiling point**: Not available.

**Flash point**: Closed cup: Not applicable. [Product does not sustain combustion.]

**Evaporation rate**: Not available.
Section 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Lower and upper explosive (flammable) limits</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not available.</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.9925</td>
</tr>
<tr>
<td>Solubility</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Not available.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not available.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flow time (ISO 2431)</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

Section 10. Stability and reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactivity</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
<tr>
<td>Chemical stability</td>
<td>The product is stable.</td>
</tr>
<tr>
<td>Possibility of hazardous reactions</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Incompatible materials</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</td>
</tr>
</tbody>
</table>

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanediol</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>4700 mg/kg</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Irritation/Corrosion

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanediol</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>1 hours 100 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>6 hours 1440 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>555 milligrams</td>
<td>-</td>
</tr>
</tbody>
</table>

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Date of issue/Date of revision : 8/27/2018  Date of previous issue : No previous validation  Version : 1
Section 11. Toxicological information

Not available.

Reproductive toxicity
Not available.

Teratogenicity
Not available.

Specific target organ toxicity (single exposure)
Not available.

Specific target organ toxicity (repeated exposure)
Not available.

Aspiration hazard
Not available.

Information on the likely routes of exposure

- Inhalation: Routes of entry anticipated: Oral. Routes of entry not anticipated: Dermal, Inhalation.
- Ingestion: No specific data.
- Skin contact: No specific data.
- Eye contact: No specific data.

Potential acute health effects

- Eye contact: No known significant effects or critical hazards.
- Inhalation: No known significant effects or critical hazards.
- Skin contact: No known significant effects or critical hazards.
- Ingestion: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact: No specific data.
- Inhalation: No specific data.
- Skin contact: No specific data.
- Ingestion: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects: Not available.
- Potential delayed effects: Not available.

Long term exposure

- Potential immediate effects: Not available.
- Potential delayed effects: Not available.

Potential chronic health effects
Not available.

- General: No known significant effects or critical hazards.
- Carcinogenicity: No known significant effects or critical hazards.
- Mutagenicity: No known significant effects or critical hazards.
- Teratogenicity: No known significant effects or critical hazards.
- Developmental effects: No known significant effects or critical hazards.
- Fertility effects: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates
Section 11. Toxicological information

<table>
<thead>
<tr>
<th>Route</th>
<th>ATE value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>241000.9 mg/kg</td>
</tr>
</tbody>
</table>

Section 12. Ecological information

**Toxicity**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanediol</td>
<td>Acute LC50 6900000 µg/l Fresh water</td>
<td>Crustaceans - Ceriodaphnia dubia - Neonate</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 41000000 µg/l Fresh water</td>
<td>Daphnia - Daphnia magna - Neonate</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 80500000 µg/l Fresh water</td>
<td>Fish - Pimephales promelas</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

**Persistence and degradability**

Not available.

**Bioaccumulative potential**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>logP_{ow}</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanediol</td>
<td>-1.36</td>
<td>-</td>
<td>low</td>
</tr>
</tbody>
</table>

**Mobility in soil**

Soil/water partition coefficient (K_{oc}) : Not available.

**Other adverse effects**

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

<table>
<thead>
<tr>
<th>DOT Classification</th>
<th>TDG Classification</th>
<th>Mexico Classification</th>
<th>ADR/RID</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Section 14. Transport information

<table>
<thead>
<tr>
<th>Packing group</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
</tr>
</thead>
</table>

Special precautions for user: **Transport within user's premises**: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL and the IBC Code: Not available.

Section 15. Regulatory information

**U.S. Federal regulations**

- **Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)**: Listed
- **Clean Air Act Section 602 Class I Substances**: Not listed
- **Clean Air Act Section 602 Class II Substances**: Not listed
- **DEA List I Chemicals (Precursor Chemicals)**: Not listed
- **DEA List II Chemicals (Essential Chemicals)**: Not listed
- **SARA 302/304**

**Composition/information on ingredients**

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>EHS</th>
<th>SARA 302 TPQ (lbs)</th>
<th>SARA 304 RQ (lbs)</th>
<th>SARA 302 TPQ (gallons)</th>
<th>SARA 304 RQ (gallons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>formaldehyde</td>
<td>&lt;0.1</td>
<td>Yes.</td>
<td>500</td>
<td>100</td>
<td>73.9</td>
<td>14.8</td>
</tr>
</tbody>
</table>

**SARA 304 RQ**: 533333.3 lbs / 2421333.3 kg [644482.2 gal / 2439630.6 L]

**SARA 311/312**

Classification: Not applicable.

**Composition/information on ingredients**

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanediol</td>
<td>≤3</td>
<td>SKIN IRRITATION - Category 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EYE IRRITATION - Category 2A</td>
</tr>
</tbody>
</table>

**SARA 313**

<table>
<thead>
<tr>
<th>Product name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form R - Reporting requirements</td>
<td>ethanediol</td>
<td>107-21-1</td>
</tr>
<tr>
<td>Supplier notification</td>
<td>ethanediol</td>
<td>107-21-1</td>
</tr>
</tbody>
</table>

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.
Section 15. Regulatory information

State regulations

Massachusetts: The following components are listed: ETHYLENE GLYCOL; 1,2-DIHYDROXYETHANE
New York: The following components are listed: Ethylene glycol
New Jersey: The following components are listed: ETHYLENE GLYCOL; 1,2-ETHANEDIOL
Pennsylvania: The following components are listed: 1,2-ETHANEDIOL

California Prop. 65

⚠️ WARNING: This product can expose you to chemicals including Formaldehyde, which is known to the State of California to cause cancer, and Ethylene Glycol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>No significant risk level</th>
<th>Maximum acceptable dosage level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol</td>
<td>-</td>
<td>Yes.</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>Yes.</td>
<td></td>
</tr>
</tbody>
</table>

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals
Not listed.

Montreal Protocol (Annexes A, B, C, E)
Not listed.

Stockholm Convention on Persistent Organic Pollutants
Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)
Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals
Not listed.

Inventory list

Australia: Not determined.
Canada: Not determined.
China: All components are listed or exempted.
Europe: Not determined.
Malaysia: Not determined.
New Zealand: All components are listed or exempted.
Philippines: Not determined.
Republic of Korea: All components are listed or exempted.
Taiwan: Not determined.
Thailand: Not determined.
Turkey: Not determined.
United States: Not determined.
Viet Nam: Not determined.
Section 16. Other information

Hazardous Material Information System (U.S.A.)

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Physical hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Instability/Reactivity</th>
<th>Special</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Procedure used to derive the classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not classified.</td>
<td></td>
</tr>
</tbody>
</table>

History

| Date of printing | 8/27/2018 |
| Date of issue/Date of revision | 8/27/2018 |
| Date of previous issue | No previous validation |
| Version | 1 |
| Key to abbreviations | ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
UN = United Nations |

References | Not available.

Notice to reader

Date of issue/Date of revision : 8/27/2018  Date of previous issue : No previous validation  Version : 1
Section 16. Other information

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.
# Material Safety Data Sheet

## I. Product:
**BLACK FLAG® FLYING INSECT KILLER**

## Description:
WATER BASED AEROSOL INSECTICIDE FOR COMMON HOUSEHOLD PESTS

## Other Designations
EPA Reg. No. 69421-16 (formerly 472-214)

## Distributor
Black Flag Insect Control Systems
% The Clorox Company
1221 Broadway
Oakland, CA 94612

## Emergency Telephone Nos.
For Medical Emergencies call:
(800) 446-1014
For Transportation Emergencies Chemtrac
(800) 424-9300

## II. Health Hazard Data

**CAUTION:** May cause skin irritation. Harmful if swallowed or absorbed through the skin. Do not breathe vapors or spray mist. Avoid contact with eyes, skin, and clothing.

**FIRST AID:**
- **INGESTION:** Call a physician. Do not induce vomiting.
- **EYE CONTACT:** Flush with plenty of water. Get medical attention if irritation persists.
- **SKIN CONTACT:** Remove any contaminated clothing and wash before reuse. Wash skin with soap and warm water. Get medical attention if irritation persists.
- **INHALATION:** Remove individual to fresh air. If breathing problems persist, seek prompt medical attention.

No medical conditions are known to be aggravated by exposure to this product. Under directed consumer use conditions this product is not expected to produce adverse health effects.

**KEEP OUT OF THE REACH OF CHILDREN**

## III. Hazardous Ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Concentration</th>
<th>Worker Exposure Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imidacloprid</td>
<td>0.2%</td>
<td>none established</td>
</tr>
<tr>
<td>d-Phenothrin</td>
<td>0.2%</td>
<td>none established</td>
</tr>
<tr>
<td>Aqueous solution</td>
<td>5 - 10%</td>
<td>500 ppm*</td>
</tr>
<tr>
<td>Light alkylate napthalam (petroleum)</td>
<td>CAS #84741-66-8</td>
<td>25-50%</td>
</tr>
<tr>
<td>Propellant</td>
<td>CAS #75-25-574-98-5</td>
<td>*total hydrocarbons (manufacturer recommendation)</td>
</tr>
</tbody>
</table>

None of the ingredients in this product is on the IARC, OSHA or NTP carcinogen list.

## IV. Special Protection and Precautions
Avoid contamination of food or foodstuffs. Do not use in food areas of commercial food handling establishments, restaurants, or other places where food is prepared or processed.

Do not allow children or pets to contact treated surfaces until spray has dried. This product is extremely toxic to fish and aquatic invertebrates. Do not apply directly to water.

**Handling and Storage/Other:** Contents under pressure. Keep away from heat, sparks and open flame. Do not puncture or incinerate container.

The following recommendations are given for production facilities and for other conditions and situations where there is increased potential for accidental, large-scale, or prolonged exposure:

**Hygienic Practices:** Wear safety glasses and gloves. Discontinue exposure to product if irritation or other adverse reactions develop.

**Engineering Controls:** Use general ventilation to minimize exposure to product.

**Work Practices:** Avoid eye and skin contact. Do not inhale vapor or mist.

## VI. Spill Procedures/Waste Disposal

**Spill Procedures:** Wear appropriate protective equipment and clothing. Remove sources of ignition. Cover any inert absorbent material. Sweep up and place in a waste disposal container. Flush area with water.

**Waste Disposal:** Do not puncture or incinerate. Empty, leaking, or full containers should be given to a disposal service equipped to dispose of pressurized containers. Disposal must be made in accordance with applicable governmental regulations.

## VII. Reactivity Data

**Storage Stability:** Stable at normal use and storage conditions

**Hazardous Polymerization:** None known

## IX. Physical Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Aerosol spray</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.0</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>Not determined</td>
</tr>
<tr>
<td>pH</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

**Flame Extension:** 0 inches
### VIII Fire and Explosion Data

**Extinguishing Media:** Dry Chemical, Foam, CO₂, Water

**Fire-Fighting Procedures:** Keep containers cool. Use equipment or shielding to protect personnel against venting, bursting, or rupturing containers. Self-contained breathing apparatus is recommended. **Fire and Explosion Words:** Container may rupture at temperatures >130°F. Do not puncture or incinerate.

**Flame Extension:** 0 inches

### IX Physical Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>aerosol spray</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.0</td>
</tr>
<tr>
<td>Pressure in Can</td>
<td>42-48 psig @ 70°F</td>
</tr>
<tr>
<td>pH</td>
<td>not determined</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>not determined</td>
</tr>
</tbody>
</table>

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DATA SUPPLIED IS FOR USE ONLY IN CONNECTION WITH OCCUPATIONAL SAFETY AND HEALTH

DATE PREPARED: 1/01
1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Pfizer Consumer Healthcare
Pfizer Inc
201 Tabor Road
Morris Plains, NJ 07950

Pfizer Ltd
Walton Oaks
Dorking Road
Tadworth
Surrey KT20 7NS, UK
+00 44 (0)1304 616161

Emergency telephone number:
1-973-385-2000
Hours of Operation - 24 Hours:
CHEMTREC (24 hours): 1-800-262-8200

Emergency telephone number:
ChemSafe (24 hours): +44 (0)208 762 8322

Material Name: Caladryl Clear Lotion

Trade Name: Caladryl
Chemical Family: Mixture
Intended Use: Consumer healthcare product used as topical analgesic, skin protectant

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Ingredient</th>
<th>CAS Number</th>
<th>EU EINECS List</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pramoxine hydrochloride</td>
<td>637-58-1</td>
<td>211-293-1</td>
<td>1</td>
</tr>
<tr>
<td>Zinc acetate dihydrate</td>
<td>5970-45-6</td>
<td>Not listed</td>
<td>0.1</td>
</tr>
<tr>
<td>SD Alcohol 36B</td>
<td>64-17-5</td>
<td>200-578-6</td>
<td>*</td>
</tr>
<tr>
<td>Camphor</td>
<td>76-22-2</td>
<td>200-945-0</td>
<td>*</td>
</tr>
<tr>
<td>Citric acid</td>
<td>77-92-9</td>
<td>201-069-1</td>
<td>*</td>
</tr>
<tr>
<td>Diazolidinyl urea</td>
<td>78491-02-8</td>
<td>278-928-2</td>
<td>*</td>
</tr>
<tr>
<td>Propylene glycol</td>
<td>57-55-6</td>
<td>200-338-0</td>
<td>*</td>
</tr>
<tr>
<td>Glycerin, USP</td>
<td>56-81-5</td>
<td>200-289-5</td>
<td>*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Number</th>
<th>EU EINECS List</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fragrance</td>
<td>NOT ASSIGNED</td>
<td>Not listed</td>
<td>*</td>
</tr>
<tr>
<td>Hypromellose</td>
<td>9004-65-3</td>
<td>Not listed</td>
<td>*</td>
</tr>
<tr>
<td>Methylparaben</td>
<td>99-76-3</td>
<td>202-785-7</td>
<td>*</td>
</tr>
<tr>
<td>Polysorbate 40</td>
<td>9005-66-7</td>
<td>Not listed</td>
<td>*</td>
</tr>
<tr>
<td>Propylparaben</td>
<td>94-13-3</td>
<td>202-307-7</td>
<td>*</td>
</tr>
<tr>
<td>Water, purified</td>
<td>7732-18-5</td>
<td>231-781-2</td>
<td>*</td>
</tr>
<tr>
<td>Sodium citrate, anhydrous</td>
<td>68-04-2</td>
<td>200-675-3</td>
<td>*</td>
</tr>
</tbody>
</table>

Additional Information: * Proprietary
Ingredient(s) indicated as hazardous have been assessed under standards for workplace safety.

3. HAZARDS IDENTIFICATION

Appearance: Clear lotion
Signal Word: CAUTION
Material Name: Caladryl Clear Lotion
Revision date: 13-Nov-2006

Statement of Hazard: May cause eye irritation
Topical anesthetic drug: may cause localized numbness

Additional Hazard Information:
Short Term: An Occupational Exposure Value (Limits, Bands, etc.) has been established for one or more of the ingredients (see Section 8).

EU Indication of danger: Not classified

Additional Information: For a more detailed discussion of potential health hazards and toxicity see Section 11. This document has been prepared in accordance with standards for workplace safety, which require the inclusion of all known hazards of the product or its ingredients regardless of the potential risk. The precautionary statements and warnings included may not apply in all cases. Your needs may vary depending upon the potential for exposure in your workplace.

4. FIRST AID MEASURES

Eye Contact: Immediately flush eyes with water for at least 15 minutes. If irritation occurs or persists, get medical attention.

Skin Contact: Remove clothing and wash affected skin with soap and water. If irritation occurs or persists, get medical attention.

Ingestion: Get medical attention. Do not induce vomiting unless directed by medical personnel. Never give anything by mouth to an unconscious person.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If discomfort persists, get medical attention.

5. FIRE FIGHTING MEASURES

Extinguishing Media: As for primary cause of fire.

Hazardous Combustion Products: Formation of toxic gases is possible during heating or fire.

Fire Fighting Procedures: Wear approved positive pressure, self-contained breathing apparatus and full protective turn out gear. Evacuate area and fight fire from a safe distance.

Fire / Explosion Hazards: Fine particles (such as dust and mists) may fuel fires/explosions.

6. ACCIDENTAL RELEASE MEASURES

Health and Safety Precautions: Personnel involved in clean-up should wear appropriate personal protective equipment (see Section 8). Minimize exposure.

Measures for Cleaning / Collecting: Contain the source of spill if it is safe to do so. Collect spill with absorbent material. Clean spill area thoroughly.

Measures for Environmental Protections: Place waste in an appropriately labeled, sealed container for disposal. Care should be taken to avoid environmental release.

Additional Consideration for Large Spills: Non-essential personnel should be evacuated from affected area. Report emergency situations immediately. Clean up operations should only be undertaken by trained personnel.

7. HANDLING AND STORAGE

General Handling: Use adequate ventilation. Avoid contact with eyes. Wash thoroughly after handling.
MATERIAL SAFETY DATA SHEET

Material Name: Caladryl Clear Lotion
Revision date: 13-Nov-2006

Storage Conditions: Store as directed by product packaging.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Substance</th>
<th>OSHA - Final PELs - TWAs:</th>
<th>ACGIH Threshold Limit Value (TWA)</th>
<th>Australia TWA</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD Alcohol 38B</td>
<td>= 1000 ppm TWA</td>
<td>= 2 mg/m³ TWA</td>
<td>= 10 mg/m³ TWA</td>
</tr>
<tr>
<td></td>
<td>= 1900 mg/m³ TWA</td>
<td>= 3 ppm TWA</td>
<td>= 150 ppm TWA</td>
</tr>
<tr>
<td>Camphor</td>
<td></td>
<td>= 19 mg/m³ STEL</td>
<td>= 474 mg/m³ TWA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>= 3 ppm STEL</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>= 12 mg/m³ TWA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>= 2 ppm TWA</td>
<td></td>
</tr>
<tr>
<td>Propylene glycol</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia TWA</td>
<td>= 10 mg/m³ TWA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>= 150 ppm TWA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>= 474 mg/m³ TWA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glycerin, USP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OSHA - Final PELs - TWAs:</td>
<td>= 15 mg/m³ TWA</td>
<td>= 5 mg/m³ TWA</td>
<td></td>
</tr>
<tr>
<td>ACGIH Threshold Limit Value (TWA)</td>
<td>= 10 mg/m³ TWA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia TWA</td>
<td>= 10 mg/m³ TWA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Engineering Controls: Keep airborne contamination levels below the exposure limits listed above in this section. General room ventilation is adequate unless the process generates dust, mist or fumes.

Personal Protective Equipment:
- **Hands:** Wear protective gloves when working with large quantities.
- **Eyes:** Safety glasses or goggles
- **Skin:** Wear protective clothing when working with large quantities.
- **Respiratory protection:** Not required for the normal use of this product. If the applicable Occupational Exposure Limit (OEL) is exceeded, wear an appropriate respirator with a protection factor sufficient to control exposures to below the OEL.

9. PHYSICAL AND CHEMICAL PROPERTIES:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Lotion</td>
</tr>
<tr>
<td>Molecular Formula</td>
<td>Mixture</td>
</tr>
<tr>
<td>Color</td>
<td>Clear</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>Mixture</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Stability: Stable
11. TOXICOLOGICAL INFORMATION

General Information: The information included in this section describes the potential hazards of the individual ingredients.

Acute Toxicity: (Species, Route, End Point, Dose)

Methylparaben
Mouse Oral LD50 > 8000 mg/kg
Rat Oral LD50 2280 mg/kg

Propylparaben
Mouse Oral LD50 6332 mg/kg
Mouse Intraperitoneal LD 50 200 mg/kg

Propylene glycol
Mouse Oral LD50 22,000 mg/kg
Rat Oral LD50 20,000 mg/kg
Rabbit Dermal LD50 20,800 mg/kg

Diazolidinyl urea
Rat Oral LD50 2570 mg/kg
Rabbit Dermal LD50 > 2000 mg/kg
Rat Inhalation LC50 4.5h (50% aq. solution) 1.3 mg/kg

Camphor
Mouse Oral LD50 1310 mg/kg

Zinc acetate dihydrate
Rat Oral LD50 794 mg/kg
Mouse Oral LD50 287 mg/kg

Glycerin, USP
Mouse Oral LD50 4090 mg/kg
Rat Oral LD50 12.8 g/kg
Rabbit Dermal LD50 > 10 g/kg
Rat Inhalation LC50 1 hr > 570 mg/m³
Rat Dermal LD 50 >21.9 g/kg

Pramoxine hydrochloride
Mouse Oral LD50 1050 mg/kg
Mouse IV LD50 79.5 mg/kg
Rabbit IV LD50 39 mg/kg

Hypermellose
Rat Oral LD50 > 10,000 mg/kg

Citric acid
Rat Oral LD50 3000 mg/kg

SD Alcohol 38B
Mouse  Oral  LD50  3450 mg/kg  
Rat  Oral  LD50  7060 mg/kg  
Rat  Inhalation  LC50 10h  20,000 ppm  

**Acute Toxicity Comments:** A greater than symbol (>) indicates that the toxicity endpoint being tested was not achievable at the highest dose used in the test.

**Irritation / Sensitization: (Study Type, Species, Severity)**

- **Propylene glycol**
  - Skin Irritation  Rabbit  Mild  
  - Eye Irritation  Rabbit  Mild  

- **Glycerin, USP**
  - Eye Irritation  Rabbit  Mild  

- **Citric acid**
  - Eye Irritation  Rabbit  Severe  
  - Skin Irritation  Rabbit  Mild  

- **SD Alcohol 38B**
  - Eye Irritation  Rabbit  Severe  

**Repeated Dose Toxicity: (Duration, Species, Route, Dose, End Point, Target Organ)**

- **Propylparaben**
  - 3 Week(s)  Rat  Oral  27.1 g/kg  LOAEL  Endocrine system  
  - 4 Week(s)  Rat  Oral  347.2 mg/kg  LOAEL  Male reproductive system  

**Carcinogen Status:** None of the components of this formulation are listed as a carcinogen by IARC, NTP or OSHA.

### 12. ECOLOGICAL INFORMATION

**Environmental Overview:** The environmental characteristics of this material have not been fully evaluated. Releases to the environment should be avoided.

**Aquatic Toxicity: (Species, Method, End Point, Duration, Result)**

- **Diazolidinyl urea**
  - Rainbow Trout  LC50  96 Hours  > 100 mg/L  
  - *Daphnia magna*  LC50  48 Hours  34.9 mg/L  

- **Glycerin, USP**
  - *Oncorhynchus mykiss* (Rainbow Trout)  LC50  96 Hours  50 mg/L  
  - *Daphnia Magna* (Water Flea)  EC-50  24 Hours  >500 mg/L  

- **SD Alcohol 38B**
  - Rainbow Trout  LC50/96h  12,900-15,300 mg/L
13. DISPOSAL CONSIDERATIONS

Disposal Procedures: Dispose of waste in accordance with all applicable laws and regulations.

14. TRANSPORT INFORMATION

Not regulated for transport under USDOT, EUADR, IATA, or IMDG regulations.

15. REGULATORY INFORMATION

EU Indication of danger: Not classified

OSHA Label:
CAUTION
May cause eye irritation
Topical anesthetic drug: may cause localized numbness

Canada - WHMIS: Classifications

WHMIS hazard class:
Class D, Division 2, Subdivision B

Pramoxine hydrochloride
EU EINECS List 211-293-1

Zinc acetate dihydrate
CERCLA/SARA 313 Emission reporting
CERCLA/SARA Hazardous Substances and their Reportable Quantities:
= 1.0 % de minimis concentration
= 1000 lb final RQ no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is equal to or exceeds 0.004 inches
= 454 kg final RQ no reporting of releases of this hazardous substance is required if the diameter of the solid metal released is equal to or exceeds 0.004 inches
Present

Australia (AICS):

SD Alcohol 38B
California Proposition 65
developmental toxicity, initial date 10/1/87 (when in alcoholic beverages)

Inventory - United States TSCA - Sect. 8(b)
Present

Australia (AICS):
Present

EU EINECS List 200-578-6

Camphor
MATERIAL SAFETY DATA SHEET

Material Name: Caladryl Clear Lotion
Revision date: 13-Nov-2006

---

**Inventory - United States TSCA - Sect. 8(b)**
Australia (AICS):
EU EINECS List

Present
Present
200-945-0

---

**Citric acid**

Inventory - United States TSCA - Sect. 8(b)
Australia (AICS):
EU EINECS List

Present
Present
201-069-1

---

**Diazolidinyl urea**

Inventory - United States TSCA - Sect. 8(b)
Australia (AICS):
EU EINECS List

Present
Present
278-928-2

---

**Hypromellose**

Inventory - United States TSCA - Sect. 8(b)
Australia (AICS):
EU EINECS List

XU
Present

---

**Methylparaben**

Inventory - United States TSCA - Sect. 8(b)
Australia (AICS):
EU EINECS List

Present
Present
202-785-7

---

**Polysorbate 40**

Inventory - United States TSCA - Sect. 8(b)
Australia (AICS):
EU EINECS List

XU
Present

---

**Propylene glycol**

Inventory - United States TSCA - Sect. 8(b)
Australia (AICS):
EU EINECS List

Present
Present
200-338-0

---

**Propylparaben**

Inventory - United States TSCA - Sect. 8(b)
Australia (AICS):
EU EINECS List

Present
Present
202-307-7

---

**Water, purified**

Inventory - United States TSCA - Sect. 8(b)
Australia (AICS):
EU EINECS List

Present
Present
231-791-2

---

**Sodium citrate, anhydrous**

Inventory - United States TSCA - Sect. 8(b)
Australia (AICS):
EU EINECS List

Present
Present
200-675-3

---

**Glycerin, USP**

Inventory - United States TSCA - Sect. 8(b)
Australia (AICS):
EU EINECS List

Present
Present
200-289-5

---

16. OTHER INFORMATION
MATERIAL SAFETY DATA SHEET

Material Name: Caladryl Clear Lotion
Revision date: 13-Nov-2006

Reasons for Revision: Updated Section 2 - Composition / Information on Ingredients. Updated Section 3 - Hazard Identification.

Prepared by: Toxicology and Hazard Communication
Pfizer Global Environment, Health, and Safety

Pfizer Inc believes that the information contained in this Material Safety Data Sheet is accurate, and while it is provided in good faith, it is without a warranty of any kind, expressed or implied.

End of Safety Data Sheet
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

· Trade name: CALCIUM CHLORIDE

· CAS Number:
  10043-52-4
  10035-04-08: dihydrate

· EC number:
  233-140-8

· Index number:
  017-013-00-2

· Registration number
  01-2119494219-28

1.2 Relevant identified uses of the substance or mixture and uses advised against

As brine for refrigeration plants; ice and dust control on roads; in cement production; in chemical synthesis; in washing and cleaning products; in fertiliser formulations; in absorbants; in water treatment products; in products such as pH-regulators, flocculants, precipitants, neutralisation agents; as a laboratory reagent; in the manufacture of textiles, leather, fur; in the manufacture of non-metallic mineral products, e.g. plasters, cement; in the manufacture of pulp, paper and paper products; in the manufacture of plastics and rubber products; in the manufacture of basic metals, including alloys; in mining; in the manufacture of wood and wood products; in the manufacture of computer, electronic and optical products, electrical equipment.

· Sector of Use

SU1   Agriculture, forestry, fishery
SU2a   Mining, (without offshore industries)
SU2b   Offshore industries
SU3   Industrial uses: Uses of substances as such or in preparations at industrial sites
SU4   Manufacture of food products
SU5   Manufacture of textiles, leather, fur
SU6a   Manufacture of wood and wood products
SU6b   Manufacture of pulp, paper and paper products
SU8   Manufacture of bulk, large scale chemicals (including petroleum products)
SU9   Manufacture of fine chemicals
SU10  Formulation [mixing] of preparations and/or re-packaging (excluding alloys)
SU11  Manufacture of rubber products
SU12  Manufacture of plastics products, including compounding and conversion
SU13  Manufacture of other non-metallic mineral products, e.g. plasters, cement
SU14  Manufacture of basic metals, including alloys
SU15  Manufacture of fabricated metal products, except machinery and equipment
SU16  Manufacture of computer, electronic and optical products, electrical equipment
SU17  General manufacturing, e.g. machinery, equipment, vehicles, other transport equipment
SU19  Building and construction work
SU20  Health services
SU22  Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
SU0   Other: Warehousing and support activities for transportation

Product category

PC2   Adsorbents
PC4   Anti-Freeze and de-icing products
PC12  Fertilisers
PC16  Heat transfer fluids
PC19  Intermediate
PC20  Processing aids such as pH-regulators, flocculants, precipitants, neutralization agents
PC21  Laboratory chemicals
PC27  Plant protection products
PC35  Washing and cleaning products (including solvent based products)
PC37  Water treatment chemicals
PC0   Other: use as additive

· Article category

AC8   Paper articles
AC 0   Other: deicing material

· Application of the substance / the mixture

The substance has many industrial, professional and consumer applications.

(Contd. on page 2)
SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008

GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

2.2 Label elements
Labelling according to Regulation (EC) No 1272/2008
The substance is classified and labelled according to the CLP regulation.

Hazard pictograms GHS07
Signal word Warning

Hazard statements
H319 Causes serious eye irritation.

Precautionary statements
P260 Do not breathe dust.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.
P401 Store in accordance with local/regional/national/international regulations.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.1 Chemical characterisation: Substances
CAS No. Description
10043-52-4: Calcium chloride (anhydrous)
10035-04-08: Calcium chloride (dihydrate)

Identification number(s)
EC number: 233-140-8
Index number: 017-013-00-2

(Contd. on page 3)
**SECTION 4: First aid measures**

- **4.1 Description of first aid measures**
  - **After inhalation:** Supply fresh air; consult doctor in case of complaints.
  - **After skin contact:**
    - Immediately rinse with water.
    - If skin irritation continues, consult a doctor.
  - **After eye contact:**
    - Rinse opened eye for several minutes under running water. Then consult a doctor.
    - Check for and remove any contact lenses.
  - **After swallowing:**
    - Rinse out mouth and then drink plenty of water.
    - Do not induce vomiting; call for medical help immediately.
    - If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

- **4.2 Most important symptoms and effects, both acute and delayed**
  - No further relevant information available.

- **4.3 Indication of any immediate medical attention and special treatment needed**
  - No further relevant information available.

**SECTION 5: Firefighting measures**

- **5.1 Extinguishing media**
  - Use fire extinguishing methods suitable to surrounding conditions.

- **5.2 Special hazards arising from the substance or mixture**
  - Not combustible. Gives off irritating or toxic fumes (or gases) in a fire.

- **5.3 Advice for firefighters**
  - **Protective equipment:**
    - Wear self-contained respiratory protective device.
    - Wear fully protective suit.
    - Do not inhale explosion gases or combustion gases.
  - **Additional information**
    - Non-combustible solid.
    - Freely soluble in water.
    - Hygroscopic.
    - Aqueous solution reacts alkaline.

**SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures**
  - Avoid formation of dust.
  - Ensure adequate ventilation.

- **6.2 Environmental precautions:**
  - Do not allow to enter sewers/ surface or ground water.
  - Do not allow to penetrate the ground/soil.

- **6.3 Methods and material for containment and cleaning up:**
  - Pick up mechanically.
  - Send for recovery or disposal in suitable receptacles.

- **6.4 Reference to other sections**
  - See Section 7 for information on safe handling.
  - See Section 8 for information on personal protection equipment.
  - See Section 13 for disposal information.
SECTION 7: Handling and storage

7.1 Precautions for safe handling
- Prevent formation of dust.
- Ensure good ventilation/exhaustion at the workplace.
- Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities
- Storage:
  - Requirements to be met by storerooms and receptacles:
    - Prevent any seepage into the ground.
  - Information about storage in one common storage facility: Not required.
  - Further information about storage conditions:
    - Store in cool, dry conditions in well sealed receptacles.
    - Protect from humidity and water.

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
- Ingredients with limit values that require monitoring at the workplace: Not required.
- DNELs
  - Workers
    - Acute / short-term exposure - local effects
      - Inhalation DN(M)EL
        - DNEL (Derived No Effect Level): 10 mg/m³
    - Long-term exposure - local effects
      - Inhalation DN(M)EL
        - DNEL (Derived No Effect Level): 5 mg/m³
  - General population
    - Acute / short-term exposure - local effects
      - Inhalation DN(M)EL
        - DNEL (Derived No Effect Level): 5 mg/m³
    - Long-term exposure - local effects
      - Inhalation DN(M)EL
        - DNEL (Derived No Effect Level): 2.5 mg/m³

- Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls
- Personal protective equipment:
  - Select PPE appropriate for the operations taking place taking into account the product properties.
- General protective and hygienic measures:
  - Do not breath dust
  - Keep away from foodstuffs, beverages and feed.
  - Immediately remove all soiled and contaminated clothing
  - Wash hands before breaks and at the end of work.
  - Avoid contact with the eyes.
  - Avoid close or long term contact with the skin.
  - Do not eat, drink, smoke or sniff while working.
  - Ensure that eyewash stations and safety showers are close to the workstation location.
- Respiratory protection:
  - Use suitable respiratory protective device in case of insufficient ventilation.
Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

**Protection of hands:**

**Protective gloves**

The glove material has to be impermeable and resistant to the product/substance/preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Wear suitable chemical resistant protective gloves for frequent or prolonged operations tested to EN374 with an acceptable permeation test. Suitable materials include neoprene (chloroprene), PVC and nitrile rubber.

Contaminated gloves should be carefully rinsed with water before reuse.

Non suitable materials: Leather gloves.

**Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

**Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:**

**Tightly sealed goggles**

Most materials for protective googles and face visors will probably be suitable eg. polycarbonate.

**Body protection:**

**Protective work clothing**

Body protection must be chosen depending on product properties, activity and possible exposure.

**SECTION 9: Physical and chemical properties**

| · 9.1 Information on basic physical and chemical properties |
| · General Information |
| · Appearance: |
| Form: Solid |
| Colour: White |
| · Odour: Odourless |
| Odour threshold: Not determined. |
| · pH-value (100 g/l) at 20 °C: 8-10 |
| · Change in condition |
| Melting point/freezing point: 782 °C |
| Initial boiling point and boiling range: 1601 °C |
| · Flash point: Not applicable. |
| · Flammability (solid, gas): Product is not flammable. |
| · Ignition temperature: |
| Decomposition temperature: Not determined. |
| · Auto-ignition temperature: Not determined. |
| · Explosive properties: Product does not present an explosion hazard. |

(Contd. on page 6)
Trade name: CALCIUM CHLORIDE

- Explosion limits:
  - Lower: Not determined.
  - Upper: Not determined.

- Vapour pressure: Not applicable.

- Density at 20 °C: 2.15 g/cm³
- Relative density: Not determined.
- Vapour density: Not applicable.
- Evaporation rate: Not applicable.

- Solubility in / Miscibility with water at 20 °C: 740 g/l
- Partition coefficient: n-octanol/water: Not determined.

- Viscosity:
  - Dynamic: Not applicable.
  - Kinematic: Not applicable.

- 9.2 Other information No further relevant information available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability
  - Thermal decomposition / conditions to be avoided:
    The substance decomposes on heating at high temperature and on burning producing toxic and corrosive fumes.
  - 10.3 Possibility of hazardous reactions
    The solution in water is a weak base. Attacks zinc in presence of water forming highly flammable hydrogen gas. Dissolves violently in water with liberation of much heat. Calcium chloride liquors can cause pitting of and corrosion of some grades of stainless steel and under high temperature and stress conditions can promote stress corrosion cracking. The substance can react dangerously with: bromine trifluoride; boron trioxide + calcium oxide; zinc -> hydrogen.
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: Hydrogen chloride (HCl)
- Additional information:
  Non-combustible solid.
  Freely soluble in water.
  Hygroscopic.
  Aqueous solution reacts alkaline.

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
  - Acute toxicity Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:

<table>
<thead>
<tr>
<th>10043-52-4 Calcium chloride</th>
<th>Oral LD50</th>
<th>&gt;2000 mg/kg (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dermal LD50</td>
<td>&gt;5000 mg/kg (rabbit)</td>
<td></td>
</tr>
<tr>
<td>Inhalative LC50/4 h</td>
<td>&gt;160 mg/l (rat)</td>
<td></td>
</tr>
</tbody>
</table>

- Primary irritant effect:
  - Skin corrosion/irritation Based on available data, the classification criteria are not met.

(Contd. on page 7)
Trade name: CALCIUM CHLORIDE

- Serious eye damage/irritation
  Causes serious eye irritation.
- Respiratory or skin sensitisation
  Based on available data, the classification criteria are not met.
- Subacute to chronic toxicity:
  Repeated or prolonged contact with skin may cause dermatitis. The substance may have effects on the nasal mucous membrane, resulting in ulcerations.
- Additional toxicological information:
  ROUTES OF EXPOSURE: The substance can be absorbed into the body by inhalation of its solution aerosol.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
  - Germ cell mutagenicity
    Based on available data, the classification criteria are not met.
  - Carcinogenicity
    Based on available data, the classification criteria are not met.
  - Reproductive toxicity
    Based on available data, the classification criteria are not met.
- STOT-single exposure
  Based on available data, the classification criteria are not met.
- STOT-repeated exposure
  Based on available data, the classification criteria are not met.
- Aspiration hazard
  Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- 12.1 Toxicity
  Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability
  No further relevant information available.
- 12.3 Bioaccumulative potential
  Product is not expected to bioaccumulate.
- 12.4 Mobility in soil
  No further relevant information available.
- Additional ecological information:
  General notes:
  Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water
  Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- 12.5 Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.
- 12.6 Other adverse effects
  No further relevant information available.

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
  Recommendation
  Recommended Hierarchy of Controls:
  - Minimise waste;
  - Reuse if not contaminated;
  - Recycle, if possible; or
  - Safe disposal (if all else fails).
  Contact waste processors for recycling information.
  Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.
- European waste catalogue
  Waste key numbers in accordance with the European Waste Catalogue (EWC) are origin-referred defined.
  Since this product is used in several industries, no waste key can be provided by the supplier. The waste key number should be determined in arrangement with your waste disposal partner or the responsible authority.
- Uncleaned packaging:
  - Recommendation: Disposal must be made according to official regulations.
  - Recommended cleansing agents: Water, if necessary together with cleansing agents.
### SECTION 14: Transport information

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>14.1 UN-Number</td>
<td></td>
<td>Void</td>
</tr>
<tr>
<td></td>
<td>ADR, ADN</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IMDG, IATA</td>
<td>Void</td>
</tr>
<tr>
<td>14.2 UN proper shipping name</td>
<td></td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>ADN</td>
<td>Void</td>
</tr>
<tr>
<td></td>
<td>IMDG, IATA</td>
<td>Void</td>
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<tr>
<td>14.3 Transport hazard class(es)</td>
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<td>ADN/R Class:</td>
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<td>14.4 Packing group</td>
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<td></td>
<td>IMDG, IATA</td>
<td>Void</td>
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<td>14.5 Environmental hazards:</td>
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<tr>
<td></td>
<td>Marine pollutant:</td>
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</tr>
<tr>
<td>14.6 Special precautions for user</td>
<td></td>
<td>Not applicable.</td>
</tr>
<tr>
<td>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</td>
<td></td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Transport/Additional information:</td>
<td></td>
<td>Not dangerous according to the above specifications.</td>
</tr>
<tr>
<td>UN &quot;Model Regulation&quot;:</td>
<td></td>
<td>Void</td>
</tr>
</tbody>
</table>

### SECTION 15: Regulatory information

- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Department issuing SDS: Product safety department.
- Abbreviations and acronyms:
  - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  - IMDG: International Maritime Code for Dangerous Goods
  - IATA: International Air Transport Association
  - GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  - EINECS: European Inventory of Existing Commercial Chemical Substances
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - DNEL: Derived No-Effect Level (REACH)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative
  - Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
MATERIAL SAFETY DATA SHEET

PRODUCT NAME: ABOUT FACE EMULSION SPRAY BUFF
PRODUCT CODE: 208 (formerly 0517)
PRODUCT CLASS: BUFFING COMPOUND

SECTION I - MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME: CELLO PROFESSIONAL PRODUCTS
ADDRESS: 1354 Old Post Road, Havre de Grace, MD 21078
EMERGENCY PHONE – INFOTRAC 24 HOURS: 800-535-5053
INFORMATION PHONE: 806-638-4850

SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION

REPORTABLE COMPONENTS | CAS NUMBER | VAPOR PRESSURE @ TEMP | WEIGHT PERCENT
--- | --- | --- | ---
# DIPROPYLENE GLYCOL MONOMETHYL ETHER | 034500-94-9 | 35 mm Hg | 7.0

ACGIH: TWA 100 ppm 8 HRS; STEL 150 ppm 15 MIN
OSHA: TWA 100 ppm 8 HRS; STEL 150 ppm 15 MIN

* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.
# Indicates hazardous chemical(s) subject to the reporting requirements of section 312 of Title III and of 40 CFR 370.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT: 212°F
VAPOR DENSITY: Heavier than air
EVAPORATION RATE: Slower than water
APPEARANCE: Off white milky liquid
ODOR: Mint
pH: 8.5 ± 0.5
VOLATILE: 90.5%

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: NONE
FLASH METHOD: SETA FLASH
FLAMMABLE LIMITS IN AIR BY VOLUME: LOWER: N/A, UPPER: N/A
EXTINGUISHING MEDIA: If involved in a fire use foam, CO2 or water fog
SPECIAL FIREFIGHTING PROCEDURES: If involved in a fire, spray containers with water to keep fire exposed containers cool.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Area will become slippery if material is released.

SECTION V - REACTIVITY DATA

STABILITY: Stable
CONDITIONS TO AVOID: Extreme heat or freezing temperatures
INCOMPATIBILITY (MATERIALS TO AVOID): Acids, strong alkalies and oxidants
HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Normal products of combustion-carbon dioxide and carbon monoxide
HAZARDOUS POLYMERIZATION: Will not occur

SECTION VI - HEALTH HAZARD DATA

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Not considered a hazard
SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Can cause irritation to eyes, causing corneal damage. Can also cause skin irritation and defaturing
SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Absorption through skin may cause headache, nausea, dizziness, and vomiting
INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Single dose ingestions are not considered hazardous. Extremely large doses could cause injury.
HEALTH HAZARDS (ACUTE AND CHRONIC): Contact with eyes can cause corneal damage. Extended overexposure can cause dizziness, headaches, nausea, and drying of the skin
CARCINOGENICITY: NTP CARCINOGEN: No, IARC MONOGRAPHS: No, OSHA REGULATED: No, NOT LISTED
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Existing dermatological conditions may be aggravated by overexposure

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Dike area to contain material. Area may become slippery. Absorb product onto porous material such as sand, diatomaceous earth or commercial absorbent material. Shovel up into leak proof containers.
WASTE DISPOSAL METHOD: Consult local, state and or federal authorities for proper disposal
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Do not store near acids, oxidizers, and alkalies. Keep from excessive heat and keep from freezing. Do not store near consumables. Keep out of reach of children.

SECTION VIII - CONTROL MEASURES

RESPIRATORY PROTECTION: None needed for normal use
VENTILATION: Good ventilation is required. In the absence of good ventilation mechanical devices are recommended.
PROTECTIVE GLOVES: Chemical resistant gloves recommended
EYE PROTECTION: Safety splash goggles recommended
OTHER PROTECTIVE CLOTHING OR EQUIPMENT: None required
WORK/HYGIENIC PRACTICES: Wash hands after use and before eating, drinking, or smoking. Remove contaminated clothing and wash before reuse.

SECTION IX - REGULATORY INFORMATION

ALL INGREDIENTS OF THIS PRODUCT ARE LISTED ON THE US TOXIC SUBSTANCE CONTROL ACT (TSCA) INVENTORY.

This product is not a DOT hazardous material. BILL of LADING (all sizes): "Compound, cleaning and/or polishing"

The ingredients from Section II are subject to the following reporting requirements:
MA - The Massachusetts Hazardous Substance List
NJ - The New Jersey Right-to-Know Hazardous Substance List
PA - The Pennsylvania Hazardous Substance List

SECTION X - DISCLAIMER

The information contained herein has been developed based upon current available scientific data. New information may be developed from time to time which may render the conclusions of this report obsolete. Therefore, no warranty is extended or implied as to the applicability of this information to the users intended purpose or for the consequences of its use or misuse.
1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name Clorox® Plus Tilex® Mold & Mildew Remover

Other means of identification

EPA Registration Number 5813-24

Recommended use of the chemical and restrictions on use

Recommended use Mold and mildew remover spray

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address
The Clorox Company
1221 Broadway
Oakland, CA 94612

Phone: 1-510-271-7000

Emergency telephone number

Emergency Phone Numbers For Medical Emergencies, call: 1-800-446-1014
For Transportation Emergencies, call Chemtrec: 1-800-424-9300
2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

| Serious eye damage/eye irritation | Category 2A |

GHS Label elements, including precautionary statements

Emergency Overview

<table>
<thead>
<tr>
<th>Signal word</th>
<th>Warning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard Statements</td>
<td></td>
</tr>
<tr>
<td>Causes serious eye irritation</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Physical State</th>
<th>Odor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear, pale yellow</td>
<td>Liquid</td>
<td>Herbaceous, marine, bleach</td>
</tr>
</tbody>
</table>

Precautionary Statements - Prevention
Wash hands and any exposed skin thoroughly after handling.
Wear eye protection/face protection such as safety glasses.

Precautionary Statements - Response
If in eyes:  Rinse cautiously with water for several minutes.  Remove contact lenses, if present and easy to do.  Continue rinsing.
If eye irritation persists:  Get medical advice/attention.

Precautionary Statements - Storage
None

Precautionary Statements - Disposal
None

Hazards not otherwise classified (HNOC)
The following medical conditions may be aggravated by exposure to high concentrations of vapor or mist:  heart conditions or chronic respiratory problems such as asthma, emphysema, or obstructive lung disease.

Unknown Toxicity
0.085% of the mixture consists of ingredient(s) of unknown toxicity

Other information
May cause skin irritation.

Interactions with Other Chemicals
Reacts with other household chemicals such as products containing ammonia, toilet bowl cleaners, rust removers, vinegar, or acids to produce hazardous gases, such as chlorine and other chlorinated compounds.
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hypochlorite</td>
<td>7681-52-9</td>
<td>1 - 5</td>
<td>*</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>1310-73-2</td>
<td>0.1 - 1</td>
<td>*</td>
</tr>
</tbody>
</table>

* The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

General Advice

Show this safety data sheet to the doctor in attendance.

Eye Contact

Rinse with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.

Skin Contact

Take off contaminated clothing. Rinse skin with plenty of water for 15-20 minutes. If irritation develops and persists, call a doctor.

Inhalation

Move to fresh air. If breathing is affected, call a doctor.

Ingestion

Call a poison control center or doctor. Have person sip a glassful of water if able to swallow. DO NOT induce vomiting unless told to do so by a poison control center or doctor.

Protection of First-aider

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Effects

Stinging and irritation of eyes.

Indication of any immediate medical attention and special treatment needed

Notes to Physician

Treat symptomatically.
5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media
CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical
No information available.

Explosion Data
Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions
Avoid contact with eyes, skin, and clothing. Use personal protective equipment as required.

Other Information
Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

Environmental Precautions
See Section 12 for ecological Information.

Methods and material for containment and cleaning up

Methods for Containment
Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up
Absorb and containerize. Wash residual down to sanitary sewer. Contact the sanitary treatment facility in advance to assure ability to process washed-down material.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling
Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage
Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Products
Products containing ammonia, toilet bowl cleaners, rust removers, vinegar, or acids.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hypochlorite</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>7681-52-9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>Ceiling: 2 mg/m³</td>
<td>TWA: 2 mg/m³</td>
<td>IDLH: 10 mg/m³</td>
</tr>
<tr>
<td>1310-73-2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Appropriate engineering controls

Engineering Measures
- Showers
- Eyewash stations
- Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection
- If splashes are likely to occur: Wear safety glasses with side shields (or goggles). None required for consumer use.

Skin and Body Protection
- Wear protective gloves and protective clothing.

Respiratory Protection
- If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures
- Remove and wash contaminated clothing before re-use. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.
9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks/ Method</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical State</strong></td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td><strong>Appearance</strong></td>
<td>Clear</td>
<td></td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>Pale yellow</td>
<td></td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Herbaceous, marine, bleach</td>
<td></td>
</tr>
<tr>
<td><strong>Odor Threshold</strong></td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>12.4 - 12.8</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Melting/freezing point</strong></td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Boiling point / boiling range</strong></td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Flash Point</strong></td>
<td>Not flammable</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Flammability Limits in Air</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Vapor pressure</strong></td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Vapor density</strong></td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Specific Gravity</strong></td>
<td>~1.04</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Water Solubility</strong></td>
<td>Soluble in water</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Solubility in other solvents</strong></td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Partition coefficient: n-octanol/water</strong></td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Autoignition temperature</strong></td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Kinematic viscosity</strong></td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Dynamic viscosity</strong></td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Explosive Properties</strong></td>
<td>Not explosive</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Oxidizing Properties</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Softening Point</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>VOC Content (%)</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Particle Size</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Particle Size Distribution</strong></td>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity
Reacts with other household chemicals such as products containing ammonia, toilet bowl cleaners, rust removers, vinegar, or acids to produce hazardous gases, such as chlorine and other chlorinated compounds.

Chemical stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to avoid
None known based on information supplied.

Incompatible materials
Products containing ammonia, toilet bowl cleaners, rust removers, vinegar, or acids.

Hazardous Decomposition Products
None known based on information supplied.
11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

**Inhalation**
Exposure to vapor or mist may irritate respiratory tract.

**Eye Contact**
May cause eye irritation.

**Skin Contact**
Prolonged contact may cause irritation.

**Ingestion**
Ingestion may cause irritation to mucous membranes and gastrointestinal tract, nausea, vomiting, and diarrhea.

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hypochlorite</td>
<td>8200 mg/kg (Rat)</td>
<td>&gt;10000 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>7681-52-9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>-</td>
<td>1350 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>1310-73-2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Information on toxicological effects

**Symptoms**
May cause redness and tearing of the eyes.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization**
No information available.

**Mutagenic Effects**
No information available.

**Carcinogenicity**
The table below indicates whether each agency has listed any ingredient as a carcinogen.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hypochlorite</td>
<td>-</td>
<td>Group 3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7681-52-9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*IARC (International Agency for Research on Cancer)*
*Group 3 - Not Classifiable as to Carcinogenicity in Humans*

**Reproductive Toxicity**
No information available.

**STOT - single exposure**
No information available.

**STOT - repeated exposure**
*Chronic Toxicity*
Carcinogenic potential is unknown.

*Target Organ Effects*
Respiratory system, eyes, skin, gastrointestinal tract (GI).

**Aspiration Hazard**
No information available.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document

Not applicable
12. ECOLOGICAL INFORMATION

Ecotoxicity
The environmental impact of this product has not been fully investigated.

Persistence and Degradability
No information available.

Bioaccumulation
No information available.

Other adverse effects
No information available.

13. DISPOSAL CONSIDERATIONS

Disposal methods
Dispose of in accordance with all applicable federal, state, and local regulations.

Contaminated Packaging
Do not reuse empty containers. Dispose of in accordance with all applicable federal, state, and local regulations.

14. TRANSPORT INFORMATION

DOT
Not restricted.

TDG
Not restricted for road or rail.

ICAO
Not restricted, as per Special Provision A197, Environmentally Hazardous Substance exception.

IATA
Not restricted, as per Special Provision A197, Environmentally Hazardous Substance exception.

IMDG/IMO
Not restricted, as per IMDG Code 2.10.2.7, Marine Pollutant exception.

15. REGULATORY INFORMATION

Chemical Inventories

TSCA
All components of this product are either on the TSCA 8(b) Inventory or otherwise exempt from listing.

DSL/NDSL
All components are on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories
- Acute Health Hazard: Yes
- Chronic Health Hazard: No
- Fire Hazard: No
- Sudden Release of Pressure Hazard: No
- Reactive Hazard: No

Clean Water Act
This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hypochlorite</td>
<td>100 lb</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>1000 lb</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous Substances RQs</th>
<th>Extremely Hazardous Substances RQs</th>
<th>RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hypochlorite</td>
<td>100 lb</td>
<td></td>
<td>RQ 100 lb final RQ RQ 45.4 kg final RQ</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>1000 lb</td>
<td></td>
<td>RQ 1000 lb final RQ RQ 454 kg final RQ</td>
</tr>
</tbody>
</table>

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hypochlorite</td>
<td>X</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>X</td>
</tr>
</tbody>
</table>

International Regulations

Canada
WHMIS Hazard Class
D2B - Toxic materials
16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazard</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and Chemical Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazard</th>
<th>Flammability</th>
<th>Physical Hazard</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>B</td>
</tr>
</tbody>
</table>

Prepared By
Product Stewardship
23 British American Blvd.
Latham, NY 12110
1-800-572-6501

Revision Date
May 4, 2018

Revision Note
Revisions Sections 1, 2, 4, 8, and 12.

Reference
1062754/50049006.004

General Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier
Trade name: Good Sense Breakdown

1.2 Relevant identified uses of the substance or mixture and uses advised against identified uses:
For professional use only.
AISE-P305 - Sanitary cleaner. Manual process
AISE-P306 - Sanitary cleaner. Spray and wipe manual process
AISE-P411 - Carpet cleaner, Spray and brush manual process
AISE-P607 - Drain cleaner. Manual process
Uses advised against: Uses other than those identified are not recommended

1.3 Details of the supplier of the safety data sheet
Diversey Europe Operations BV, Meersenbroeksedijk 2, 3542DN Utrecht, The Netherlands

Contact details
Diversey Ltd
Weston Favell Centre, Northampton NN3 8PD, United Kingdom
Tel: 01604 405311, Fax: 01604 406809
Regulatory Email: MSDSinfoUK@sealedair.com

1.4 Emergency telephone number
For medical or environmental emergency only:
call 0800 052 0185

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
The product has been classified and labelled in accordance with Regulation (EC) No 1272/2008.

Eye Irrit. 2 (H315)

The product does not meet the criteria for classification in accordance with Directive 1999/45/EC and corresponding national legislation

2.2 Label elements

Signal word: Warning.

Contains EUH208: d-limonene (Limonene)

Hazard statements:
H319 - Causes serious eye irritation.
EUH208 - May produce an allergic reaction.

2.3 Other hazards
No other hazards known. The product does not meet the criteria for PBT or vPvB in accordance with Regulation (EC) No 1907/2006, Annex XIII.
SECTION 3: Composition/information on ingredients

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>EC number</th>
<th>CAS number</th>
<th>REACH number</th>
<th>Classification</th>
<th>Classification (1999/45/EC)</th>
<th>Notes</th>
<th>Weight percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>alkyl alcohol ethoxylate</td>
<td>Polymer*</td>
<td>88430-46-3</td>
<td>[4]</td>
<td>Acute Tox. 4 (H202) Eye Dam. 1 (H316) Aquatic Chronic 3 (H412)</td>
<td>XnR22 XnR41</td>
<td></td>
<td>1-3</td>
</tr>
<tr>
<td>d-limonene</td>
<td>227-815-5</td>
<td>5899-27-5</td>
<td>01-2119829223-47</td>
<td>Flam. Liq. 3 (H226) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) Skin Sens. 16 (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)</td>
<td>R10 XnR38-43 N/R50/R53 XnR65</td>
<td></td>
<td>0.1-1</td>
</tr>
<tr>
<td>1,2-benzisothiazol-3(2H)-one</td>
<td>220-120-9</td>
<td>2634-33-5</td>
<td></td>
<td>Acute Tox. 4 (H202) Skin Irrit. 2 (H315) Eye Dam. 1 (H319) Skin Sens. 1 (H317) Aquatic Acute 1 (H400)</td>
<td>T;R22 XnR22 XLF26-41-43 N/R50</td>
<td></td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>alpha-cedrene</td>
<td>207-418-4</td>
<td>409-81-4</td>
<td></td>
<td>No data available</td>
<td>N/R50/R53 XnR65</td>
<td></td>
<td>&lt;0.01</td>
</tr>
</tbody>
</table>

* Polymer.  
For the full text of the R, H and EUH phrases mentioned in this Section, see Section 16.  
[1] Exempted: Ionic mixture. See Regulation (EC) No 1907/2006, Annex V, paragraph 3 and 4. This salt is potentially present, based on calculation, and included for classification and labelling purposes only. Each starting material of the ionic mixture is registered, as required.  

SECTION 4: First aid measures

4.1 Description of first aid measures  
Inhalation:  
Get medical attention or advice if you feel unwell.  
Skin contact:  
Wash skin with plenty of lukewarm, gently flowing water. If skin irritation occurs: Get medical advice or attention.  
Eye contact:  
Immediately rinse eyes cautiously with lukewarm water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation occurs and persists, get medical attention.  
Ingestion:  
Immediately drink 1 glass of water. Get medical attention or advice if you feel unwell.  
Self-protection of first aider:  
Consider personal protective equipment as indicated in subsection 8.2.

4.2 Most important symptoms and effects, both acute and delayed  
Inhalation:  
No known effects or symptoms in normal use.  
Skin contact:  
No known effects or symptoms in normal use.  
Eye contact:  
Causes severe irritation.  
Ingestion:  
No known effects or symptoms in normal use.  

4.3 Indication of any immediate medical attention and special treatment needed  
No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

SECTION 5: Firefighting measures

5.1 Extinguishing media  
Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture  
No special hazards known.

5.3 Advice for firefighters  
As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures  
No special measures required.

6.2 Environmental precautions  
Do not allow to enter drainage system, surface or ground water. Dilute with plenty of water.

6.3 Methods and material for containment and cleaning up  
Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust).
6.4 Reference to other sections
For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Measures to prevent fire and explosions:
No special precautions required.

Measures required to protect the environment:
For environmental exposure controls see subsection 8.2.

Advises on general occupational hygiene:
Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless advised by Sealed Air. Wash hands before breaks and at the end of workday. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Use personal protective equipment as required. Use only with adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities
Store in accordance with local and national regulations. Keep only in original container. Store in a closed container. For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

7.3 Specific end use(s)
No specific advice for end use available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Workplace exposure limits
Air limit values, if available:

Biological limit values, if available:

Recommended monitoring procedures, if available:

Additional exposure limits under the conditions of use, if available:

DNEL/DNEL and PNEC values
Human exposure

<table>
<thead>
<tr>
<th>DNEL oral exposure - Consumer (mg/kg bw)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ingredient(s)</strong></td>
</tr>
<tr>
<td>-----------------------------------------</td>
</tr>
<tr>
<td>alkyl alcohol ethoxylate</td>
</tr>
<tr>
<td>d-limonene</td>
</tr>
<tr>
<td>1,2-benzenedithiol-3(2H)-one</td>
</tr>
<tr>
<td>alpha-cedrene</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DNEL dermal exposure - Worker</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ingredient(s)</strong></td>
</tr>
<tr>
<td>-------------------------------</td>
</tr>
<tr>
<td>alkyl alcohol ethoxylate</td>
</tr>
<tr>
<td>d-limonene</td>
</tr>
<tr>
<td>1,2-benzenedithiol-3(2H)-one</td>
</tr>
<tr>
<td>alpha-cedrene</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DNEL dermal exposure - Consumer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ingredient(s)</strong></td>
</tr>
<tr>
<td>-------------------------------</td>
</tr>
<tr>
<td>alkyl alcohol ethoxylate</td>
</tr>
<tr>
<td>d-limonene</td>
</tr>
<tr>
<td>1,2-benzenedithiol-3(2H)-one</td>
</tr>
<tr>
<td>alpha-cedrene</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DNEL inhalatory exposure - Worker (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ingredient(s)</strong></td>
</tr>
<tr>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>alkyl alcohol ethoxylate</td>
</tr>
<tr>
<td>d-limonene</td>
</tr>
<tr>
<td>1,2-benzenedithiol-3(2H)-one</td>
</tr>
<tr>
<td>alpha-cedrene</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DNEL inhalatory exposure - Consumer (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ingredient(s)</strong></td>
</tr>
<tr>
<td>--------------------------------------------</td>
</tr>
</tbody>
</table>

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Good Sense Breakdown

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Surface water, fresh (mg/l)</th>
<th>Surface water, marine (mg/l)</th>
<th>Intermittent (mg/l)</th>
<th>Sewage treatment plant (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>alkyl alcohol ethoxylate</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>di-limonene</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,2-benzenothiazol-3(2H)-one</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>alpha-cedrine</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
</tbody>
</table>

Environmental exposure - PNEC, continued

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Sediment, freshwater (mg/kg)</th>
<th>Sediment, marine (mg/kg)</th>
<th>Soil (mg/kg)</th>
<th>Air (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>alkyl alcohol ethoxylate</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>di-limonene</td>
<td>0.0054</td>
<td>0.00054</td>
<td>-</td>
<td>1.6</td>
</tr>
<tr>
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<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>alpha-cedrine</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
</tbody>
</table>

8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2. If available, please refer to the product information sheet for application and handling instructions. Normal use conditions are assumed for this section.

Recommended safety measures for handling the undiluted product:

Appropriate engineering controls: Use only in well ventilated areas.

Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

Personal protective equipment

Eye / face protection: Safety glasses are not normally required. However, their use is recommended in those cases where splashes may occur when handling the product.

Hand protection: Rinse and dry hands after use. For prolonged contact protection for the skin may be necessary.

Body protection: No special requirements under normal use conditions.

Respiratory protection: Respiratory protection is not normally required. However, inhalation of vapour, spray, gas or aerosols should be avoided.

Environmental exposure controls: No special requirements under normal use conditions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Information in this section refers to the product, unless it is specifically stated that substance data is listed.

Method / remark

Physical State: Liquid

Colour: Red

Odour: Perfumed

Odour threshold: Not applicable

pH: ~ 10 (neat)

Melting point/freezing point (°C): Not determined

Initial boiling point and boiling range (°C): Not determined

Substance data, boiling point

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Value (°C)</th>
<th>Method</th>
<th>Atmospheric pressure (kPa)</th>
</tr>
</thead>
<tbody>
<tr>
<td>alkyl alcohol ethoxylate</td>
<td>No data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>di-limonene</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,2-benzenothiazol-3(2H)-one</td>
<td>175-178</td>
<td>Method not given</td>
<td>1013</td>
</tr>
<tr>
<td>alpha-cedrine</td>
<td>No data</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Method / remark

Flash point (°C): Not applicable.

Sustained combustion: Not determined

Evaporation rate: Not determined

Flammability (solid, gas): Not determined

Upper/lower flammability limit (%): Not determined

Substance data, flammability or explosive limits, if available

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Lower limit</th>
<th>Upper limit</th>
</tr>
</thead>
</table>

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Good Sense Breakdown

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Value (Pa)</th>
<th>Method</th>
<th>Temperature (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>alkyl alcohol ethoxylate</td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d-limonene</td>
<td>190-230</td>
<td>Method not given</td>
<td>20</td>
</tr>
<tr>
<td>1,2-benzisothiazol-3(2H)-one</td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>alpha-cedrene</td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Vapour density: Not determined
Relative density: 1.00 g/cm³ (20 °C)
Solubility in / Miscibility with Water: Fully miscible

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Value (g/l)</th>
<th>Method</th>
<th>Temperature (°C)</th>
</tr>
</thead>
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<tr>
<td>alkyl alcohol ethoxylate</td>
<td>Soluble</td>
<td>Method not given</td>
<td></td>
</tr>
<tr>
<td>d-limonene</td>
<td>Insoluble</td>
<td>Method not given</td>
<td>20</td>
</tr>
<tr>
<td>1,2-benzisothiazol-3(2H)-one</td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>alpha-cedrene</td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Autoignition temperature: Not determined
Decomposition temperature: Not determined
Viscosity: Not determined
Explosive properties: Not explosive.
Oxidising properties: Not oxidising

9.2 Other information
Surface tension (N/m): Not determined
Corrosion to metals: Not corrosive

Substance data, dissociation constant, if available:

SECTION 10: Stability and reactivity

10.1 Reactivity
No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability
Stable under normal storage and use conditions.

10.3 Possibility of hazardous reactions
No hazardous reactions known under normal storage and use conditions.

10.4 Conditions to avoid
None known under normal storage and use conditions.

10.5 Incompatible materials
Reacts with acids.

10.6 Hazardous decomposition products
None known under normal storage and use conditions.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Mixture data:
Relevant calculated ATP(s):
ATE - Oral (mg/kg): >2000

Substance data, where relevant and available, are listed below.
### Acute toxicity

#### Acute oral toxicity

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Endpoint</th>
<th>Value (mg/kg)</th>
<th>Species</th>
<th>Method</th>
<th>Exposure time (h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethyl alcohol ethoxylate</td>
<td>LD₅₀</td>
<td>&gt; 2000</td>
<td>Rat</td>
<td>Method not given</td>
<td></td>
</tr>
<tr>
<td>d-limonene</td>
<td>LD₅₀</td>
<td>4400 - 5102</td>
<td>Rat</td>
<td>Method not given</td>
<td></td>
</tr>
<tr>
<td>1,2-benzisothiazol-3(2H)-one</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>alpha-cedrene</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Acute dermal toxicity

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Endpoint</th>
<th>Value (mg/kg)</th>
<th>Species</th>
<th>Method</th>
<th>Exposure time (h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethyl alcohol ethoxylate</td>
<td>LD₅₀</td>
<td>&gt; 2000</td>
<td>Rabbit</td>
<td>Method not given</td>
<td></td>
</tr>
<tr>
<td>d-limonene</td>
<td>LD₅₀</td>
<td>&gt; 5000</td>
<td>Rabbit</td>
<td>Method not given</td>
<td></td>
</tr>
<tr>
<td>1,2-benzisothiazol-3(2H)-one</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>alpha-cedrene</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Acute inhalative toxicity

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Endpoint</th>
<th>Value (mg/kg)</th>
<th>Species</th>
<th>Method</th>
<th>Exposure time (h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethyl alcohol ethoxylate</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d-limonene</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,2-benzisothiazol-3(2H)-one</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>alpha-cedrene</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Irritation and corrosivity

#### Skin irritation and corrosivity

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Result</th>
<th>Species</th>
<th>Method</th>
<th>Exposure time (h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethyl alcohol ethoxylate</td>
<td>Not irritant</td>
<td>Rabbit</td>
<td>Method not given</td>
<td></td>
</tr>
<tr>
<td>d-limonene</td>
<td>Irritant</td>
<td></td>
<td>Method not given</td>
<td></td>
</tr>
<tr>
<td>1,2-benzisothiazol-3(2H)-one</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>alpha-cedrene</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Eye irritation and corrosivity

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Result</th>
<th>Species</th>
<th>Method</th>
<th>Exposure time (h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethyl alcohol ethoxylate</td>
<td>Severe damage</td>
<td>Rabbit</td>
<td>Method not given</td>
<td></td>
</tr>
<tr>
<td>d-limonene</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,2-benzisothiazol-3(2H)-one</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>alpha-cedrene</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Respiratory tract irritation and corrosivity

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Result</th>
<th>Species</th>
<th>Method</th>
<th>Exposure time (h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethyl alcohol ethoxylate</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d-limonene</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,2-benzisothiazol-3(2H)-one</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>alpha-cedrene</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Sensitisation

#### Sensitisation by skin contact

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Result</th>
<th>Species</th>
<th>Method</th>
<th>Exposure time (h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethyl alcohol ethoxylate</td>
<td>Not sensitising</td>
<td>Guinea pig</td>
<td>Method not given</td>
<td></td>
</tr>
<tr>
<td>d-limonene</td>
<td>Sensitising</td>
<td>Guinea pig</td>
<td>Method not given</td>
<td></td>
</tr>
<tr>
<td>1,2-benzisothiazol-3(2H)-one</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>alpha-cedrene</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Sensitisation by inhalation

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Result</th>
<th>Species</th>
<th>Method</th>
<th>Exposure time (h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethyl alcohol ethoxylate</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d-limonene</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,2-benzisothiazol-3(2H)-one</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>alpha-cedrene</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

#### Mutagenicity

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ethyl alcohol ethoxylate</td>
<td>No evidence for mutagenic</td>
<td>Method not</td>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>
### Good Sense Breakdown

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Endpoint</th>
<th>Specific effect</th>
<th>Value (mg/kg bw/d)</th>
<th>Species</th>
<th>Method</th>
<th>Exposure time (days)</th>
<th>Remarks and other effects reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>d-limonene</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,2-benzisothiazol-3(2H)-one</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>alpha-cedrene</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Carcinogenicity

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>alkyl alcohol ethoxylate</td>
<td>No evidence for carcinogenicity, negative test results</td>
</tr>
<tr>
<td>d-limonene</td>
<td>No data available</td>
</tr>
<tr>
<td>1,2-benzisothiazol-3(2H)-one</td>
<td>No data available</td>
</tr>
<tr>
<td>alpha-cedrene</td>
<td>No data available</td>
</tr>
</tbody>
</table>

### Toxicity for reproduction

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Endpoint</th>
<th>Specific effect</th>
<th>Value (mg/kg bw/d)</th>
<th>Species</th>
<th>Method</th>
<th>Exposure time (days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>alkyl alcohol ethoxylate</td>
<td>NOAEL</td>
<td></td>
<td>&gt; 250</td>
<td>Rat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d-limonene</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>1,2-benzisothiazol-3(2H)-one</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>alpha-cedrene</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No data available</td>
</tr>
</tbody>
</table>

### Repeated dose toxicity

#### Sub-acute or sub-chronic oral toxicity

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Endpoint</th>
<th>Value (mg/kg bw/d)</th>
<th>Species</th>
<th>Method</th>
<th>Exposure time (days)</th>
<th>Specific effects and organs affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>alkyl alcohol ethoxylate</td>
<td>NOAEL</td>
<td>80</td>
<td>OECD 411 (EU B.26)</td>
<td>No data available</td>
<td>Sub-chronic dermal toxicity</td>
<td></td>
</tr>
</tbody>
</table>

### Sub-chronic dermal toxicity

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Endpoint</th>
<th>Value (mg/kg bw/d)</th>
<th>Species</th>
<th>Method</th>
<th>Exposure time (days)</th>
<th>Specific effects and organs affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>alkyl alcohol ethoxylate</td>
<td>NOAEL</td>
<td>80</td>
<td>OECD 411 (EU B.26)</td>
<td>No data available</td>
<td>Sub-chronic inhalation toxicity</td>
<td></td>
</tr>
</tbody>
</table>

### Sub-chronic inhalation toxicity

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Endpoint</th>
<th>Value (mg/kg bw/d)</th>
<th>Species</th>
<th>Method</th>
<th>Exposure time (days)</th>
<th>Specific effects and organs affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>alkyl alcohol ethoxylate</td>
<td>NOAEL</td>
<td>80</td>
<td>OECD 411 (EU B.26)</td>
<td>No data available</td>
<td>Chronic toxicity</td>
<td></td>
</tr>
</tbody>
</table>

### Chronic toxicity

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Exposure route</th>
<th>Endpoint</th>
<th>Value (mg/kg bw/d)</th>
<th>Species</th>
<th>Method</th>
<th>Exposure time</th>
<th>Specific effects and organs affected</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>alkyl alcohol ethoxylate</td>
<td>NOAEL</td>
<td>80</td>
<td>Method not given</td>
<td>Sub-chronic exposure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### STOT-single exposure

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Affected organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>alkyl alcohol ethoxylate</td>
<td>No data available</td>
</tr>
<tr>
<td>d-limonene</td>
<td>No data available</td>
</tr>
<tr>
<td>1,2-benzisothiazol-3(2H)-one</td>
<td>No data available</td>
</tr>
<tr>
<td>alpha-cedrene</td>
<td>No data available</td>
</tr>
</tbody>
</table>

### STOT-repeated exposure
### Good Sense Breakdown

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Affected organ(s)</th>
<th>Data availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>alkyl alcohol ethoxylate</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>d-limonene</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>1,2-benzisothiazole-3(2H)-one</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>alpha-cedrene</td>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>

### Aspiration hazard

Substances with an aspiration hazard (H304), if any, are listed in section 3. If relevant, see section 9 for dynamic viscosity and relative density of the product.

### Potential adverse health effects and symptoms

Effects and symptoms related to the product, if any, are listed in subsection 4.2.

### SECTION 12: Ecological information

#### 12.1 Toxicity

No data is available on the mixture.

Substance data, where relevant and available, are listed below:

#### Aquatic short-term toxicity

**Aquatic short-term toxicity - fish**

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Endpoint</th>
<th>Value (mg/l)</th>
<th>Species</th>
<th>Method</th>
<th>Exposure time (h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>alkyl alcohol ethoxylate</td>
<td>LC₅₀</td>
<td>5 - 7</td>
<td>Fish (IC 49oz/cf, c.f)</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>d-limonene</td>
<td>LC₅₀</td>
<td>0.72</td>
<td>Pimephales promelas</td>
<td>OECD 203</td>
<td>96</td>
</tr>
<tr>
<td>1,2-benzisothiazole-3(2H)-one</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>alpha-cedrene</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Aquatic short-term toxicity - crustacea**

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Endpoint</th>
<th>Value (mg/l)</th>
<th>Species</th>
<th>Method</th>
<th>Exposure time (h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>alkyl alcohol ethoxylate</td>
<td>EC₅₀</td>
<td>5.3</td>
<td>Daphnia magna Straus</td>
<td>92/99/EC</td>
<td>48</td>
</tr>
<tr>
<td>d-limonene</td>
<td>EC₅₀</td>
<td>0.36</td>
<td>Daphnia magna Straus</td>
<td>OECD 202</td>
<td>48</td>
</tr>
<tr>
<td>1,2-benzisothiazole-3(2H)-one</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>alpha-cedrene</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Aquatic short-term toxicity - algae**

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Endpoint</th>
<th>Value (mg/l)</th>
<th>Species</th>
<th>Method</th>
<th>Exposure time (h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>alkyl alcohol ethoxylate</td>
<td>EC₅₀</td>
<td>1.4 - 47</td>
<td>Not specified</td>
<td>92/98/EC</td>
<td>72</td>
</tr>
<tr>
<td>d-limonene</td>
<td>EC₅₀</td>
<td>150</td>
<td>Desmodesmus subspicatus</td>
<td>OECD 201</td>
<td>72</td>
</tr>
<tr>
<td>1,2-benzisothiazole-3(2H)-one</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>alpha-cedrene</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Aquatic short-term toxicity - marine species**

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Endpoint</th>
<th>Value (mg/l)</th>
<th>Species</th>
<th>Method</th>
<th>Exposure time (days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>alkyl alcohol ethoxylate</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d-limonene</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,2-benzisothiazole-3(2H)-one</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>alpha-cedrene</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Impact on sewage plants - toxicity to bacteria**

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Endpoint</th>
<th>Value (mg/l)</th>
<th>Bacteria</th>
<th>Method</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>alkyl alcohol ethoxylate</td>
<td>EC₅₀</td>
<td>&gt; 140</td>
<td>Bacteria</td>
<td>Method not given</td>
<td></td>
</tr>
<tr>
<td>d-limonene</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,2-benzisothiazole-3(2H)-one</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>alpha-cedrene</td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Aquatic long-term toxicity
### Good Sense Breakdown

#### Aquatic long-term toxicity - fish

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Endpoint</th>
<th>Value (mg/l)</th>
<th>Species</th>
<th>Method</th>
<th>Exposure time</th>
<th>Effects observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>alkyl alcohol ethoxylate</td>
<td>EC 9</td>
<td>6063</td>
<td>Not specified</td>
<td>Method not given</td>
<td>21 day(s)</td>
<td></td>
</tr>
<tr>
<td>d-limonene</td>
<td></td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,2-benzenedithiol-3(2H)-one</td>
<td></td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>alpha-cedrene</td>
<td></td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Aquatic long-term toxicity - on algae

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Endpoint</th>
<th>Value (mg/l)</th>
<th>Species</th>
<th>Method</th>
<th>Exposure time</th>
<th>Effects observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>alkyl alcohol ethoxylate</td>
<td></td>
<td>2579</td>
<td>Daphnia magna</td>
<td>Method not given</td>
<td>21 day(s)</td>
<td></td>
</tr>
<tr>
<td>d-limonene</td>
<td></td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,2-benzenedithiol-3(2H)-one</td>
<td></td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>alpha-cedrene</td>
<td></td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Endpoint</th>
<th>Value (mg/kg dw sediment)</th>
<th>Species</th>
<th>Method</th>
<th>Exposure time (days)</th>
<th>Effects observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>alkyl alcohol ethoxylate</td>
<td></td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d-limonene</td>
<td></td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,2-benzenedithiol-3(2H)-one</td>
<td></td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>alpha-cedrene</td>
<td></td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Terrestrial toxicity - soil invertebrates, including earthworms, if available:

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Endpoint</th>
<th>Value (mg/kg dw soil)</th>
<th>Species</th>
<th>Method</th>
<th>Exposure time (days)</th>
<th>Effects observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>alkyl alcohol ethoxylate</td>
<td></td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d-limonene</td>
<td></td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Terrestrial toxicity - plants, if available:

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Endpoint</th>
<th>Value (mg/kg dw soil)</th>
<th>Species</th>
<th>Method</th>
<th>Exposure time (days)</th>
<th>Effects observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>alkyl alcohol ethoxylate</td>
<td></td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d-limonene</td>
<td></td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Terrestrial toxicity - birds, if available:

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Endpoint</th>
<th>Value (mg/kg dw soil)</th>
<th>Species</th>
<th>Method</th>
<th>Exposure time (days)</th>
<th>Effects observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>alkyl alcohol ethoxylate</td>
<td></td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d-limonene</td>
<td></td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Terrestrial toxicity - beneficial insects, if available:

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Endpoint</th>
<th>Value (mg/kg dw soil)</th>
<th>Species</th>
<th>Method</th>
<th>Exposure time (days)</th>
<th>Effects observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>alkyl alcohol ethoxylate</td>
<td></td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d-limonene</td>
<td></td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Terrestrial toxicity - soil bacteria, if available:

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Endpoint</th>
<th>Value (mg/kg dw soil)</th>
<th>Species</th>
<th>Method</th>
<th>Exposure time (days)</th>
<th>Effects observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>alkyl alcohol ethoxylate</td>
<td></td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d-limonene</td>
<td></td>
<td></td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 12.2 Persistence and degradability
Good Sense Breakdown

Abiotic degradation
Abiotic degradation - photodegradation in air, if available:
Abiotic degradation - hydrolysis, if available:
Abiotic degradation - other processes, if available:

Biodegradation
Ready biodegradability - aerobic conditions

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Incubation</th>
<th>Analytical method</th>
<th>DT₅₀</th>
<th>Method</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>alkyl alcohol ethoxylate</td>
<td>80%</td>
<td>OECD 301C</td>
<td></td>
<td></td>
<td>Ready biodegradable</td>
</tr>
<tr>
<td>d-limonene</td>
<td>80% in 28 days</td>
<td>OECD 301D</td>
<td></td>
<td></td>
<td>Ready biodegradable</td>
</tr>
<tr>
<td>1,2-benzenedisulfon-3(2H)-one</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>alpha-cedrene</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No data available</td>
</tr>
</tbody>
</table>

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

The surfactant(s) contained in this preparation complies (comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

12.3 Bioaccumulative potential
Partition coefficient n-octanol/water (log Kow)

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Value</th>
<th>Method</th>
<th>Evaluation</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>alkyl alcohol ethoxylate</td>
<td>3.11 - 4.19</td>
<td></td>
<td></td>
<td>High potential for bioaccumulation</td>
</tr>
<tr>
<td>d-limonene</td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,2-benzenedisulfon-3(2H)-one</td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>alpha-cedrene</td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Bioconcentration factor (BCF)

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Value</th>
<th>Species</th>
<th>Method</th>
<th>Evaluation</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>alkyl alcohol ethoxylate</td>
<td>&lt; 500</td>
<td></td>
<td></td>
<td></td>
<td>High potential for bioaccumulation</td>
</tr>
<tr>
<td>d-limonene</td>
<td>833.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,2-benzenedisulfon-3(2H)-one</td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>alpha-cedrene</td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12.4 Mobility in soil
Adsorption/Description to soil or sediment

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Adsorption coefficient Log Koc</th>
<th>Description coefficient Log Koc(DES)</th>
<th>Method</th>
<th>Soil/sediment type</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>alkyl alcohol ethoxylate</td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d-limonene</td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,2-benzenedisulfon-3(2H)-one</td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>alpha-cedrene</td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12.5 Results of PBT and vPvB assessment
Substances that fulfill the criteria for PBT/vPvB, if any, are listed in section 3.

12.6 Other adverse effects
No other adverse effects known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Waste from residues / unused products:
The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

European Waste Catalogue:
20 01 29 - detergents containing dangerous substances.

Empty packaging Recommendation: Dispose of observing national or local regulations.
Suitable cleaning agents: Water, if necessary with cleaning agent.

SECTION 14: Transport information

ADR, RID, ADR, IMDG, ICAO/IATA
14.1 UN number: Non-dangerous goods
14.2 UN proper shipping name: Non-dangerous goods
14.3 Transport hazard class(es): Non-dangerous goods
14.4 Packing group: Non-dangerous goods
14.5 Environmental hazards: Non-dangerous goods
14.6 Special precautions for user: Non-dangerous goods
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: The product is not transported in bulk tankers.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Authorisations or restrictions (Regulation (EC) No 1907/2006, Title VII respectively Title VIII): Not applicable.

Ingredients according to EC Detergents Regulation 648/2004
EDTA and salts thereof, non-ionic surfactants
perfumes, Phenoxethanol, Limonene, Benzyl Salicylate, Hexyl Cinnamal, Linalool, Citronellol,
Butylphenyl Methylpropional, Hydroxysyhexyl 3-Cyclohexene Carboxaldehyde, Geraniol,
Benzisothiazolinone

< 5%

15.2 Chemical safety assessment
A chemical safety assessment has not been carried out on the mixture

SECTION 16: Other Information

The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract.

SDS code: MSDS7187 Version: 02.0 Revision: 2015-05-28

Reason for revision:
Overall design adjusted in accordance with Amendment 453/2010, Annex II of Regulation (EC) No 1907/2006. This data sheet contains changes from the previous version in section(s): 1, 3, 8, 13.

Classification procedure
The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11 for toxicological information and section 12 for ecological information.

Full text of the R, H and EUH phrases mentioned in section 3:
- H226 - Flammable liquid and vapour.
- H303 - Harmful if swallowed.
- H304 - May be fatal if swallowed and entersalways.
- H315 - Causes skin irritation.
- H317 - May cause an allergic skin reaction.
- H318 - Causes serious eye damage.
- H400 - Very toxic to aquatic organisms.
- H410 - Very toxic to aquatic life with long lasting effects.
- H412 - Harmful to aquatic life with long lasting effects.
- R10 - Flammable.
- R22 - Harmful if swallowed.
- R36 - Irritating to skin.
- R41 - Risk of serious damage to eyes.
- R43 - May cause sensitisation by skin contact.
- R50 - Very toxic to aquatic organisms.
- R53 - Harmful; may cause long-term adverse effects in the aquatic environment.

Abbreviations and acronyms:
- AISE - The International Association for Soaps, Detergents and Maintenance Products
- CENL - Defined No Effect Limit
- EUH - CLP Specific hazard statement
- PBT - Persistent, Bioaccumulative and Toxic
- PNEC - Predicted No Effect Concentration
- REACH number - REACH registration number, without supplier specific part
- vPvB - very Persistent and very Bioaccumulative
- ATE - Acute Toxicity Estimate

End of Safety Data Sheet
**CREW NA SC - USE SOLUTION**

<table>
<thead>
<tr>
<th>National Fire Protection Association (NFPA)</th>
<th>Fire Hazard</th>
<th>Hazardous Material Information System (HMIS)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Health 1</td>
<td>Health 1</td>
</tr>
<tr>
<td></td>
<td>Reactivity 0</td>
<td>Fire Hazard 0</td>
</tr>
<tr>
<td></td>
<td>Reactivity 0</td>
<td>Reactivity 0</td>
</tr>
</tbody>
</table>

**Protective Clothing**

- None required.

**Emergency Overview**

Blue. Liquid. See Section 9.

CAUTION: May be mildly irritating to eyes. May be mildly irritating to skin.

**Section 1. Chemical Product and Company Identification**

<table>
<thead>
<tr>
<th>Product Name</th>
<th>CREW NA SC - USE SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
<td>126298D</td>
</tr>
<tr>
<td>PMS#</td>
<td>Not available.</td>
</tr>
<tr>
<td>Validation Date</td>
<td>12/17/2002</td>
</tr>
<tr>
<td>U.S. Headquarters</td>
<td>Johnson Wax Professional</td>
</tr>
<tr>
<td></td>
<td>8310 16th Street</td>
</tr>
<tr>
<td></td>
<td>Sturtevant, Wisconsin 53177-0902</td>
</tr>
<tr>
<td></td>
<td>Phone: (888) 352-2249</td>
</tr>
<tr>
<td>MSDS#</td>
<td>126298/1-DIL</td>
</tr>
<tr>
<td>Canadian Headquarters</td>
<td>Johnson Wax Professional</td>
</tr>
<tr>
<td>Canadian Headquarters</td>
<td>100 Matheson Blvd. East, Suite 203</td>
</tr>
<tr>
<td>Canadian Headquarters</td>
<td>Mississauga, Ontario L4Z 2G7</td>
</tr>
<tr>
<td>Canadian Headquarters</td>
<td>Phone: (905) 755-0913 or</td>
</tr>
<tr>
<td>Canadian Headquarters</td>
<td>(888) 746-5971</td>
</tr>
<tr>
<td>Print Date</td>
<td>12/17/2002</td>
</tr>
<tr>
<td>Supersedes</td>
<td>No Previous Validation.</td>
</tr>
<tr>
<td>In Case of</td>
<td>(800) 851-7145</td>
</tr>
<tr>
<td>Emergency</td>
<td></td>
</tr>
</tbody>
</table>

**Section 2. Composition and Information on Ingredients**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>% by Weight</th>
<th>Exposure Limits</th>
<th>LC50/LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Di-N-Alkyl Dimethyl Ammonium Chloride</td>
<td>68424-95-3</td>
<td>&lt; 1.0</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>60-100</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**Section 3. Hazards Identification**

**Routes of Entry**

Inhalation. Skin contact. Eye contact.

**Potential Acute Health Effects**

- **Eyes**: May be mildly irritating to eyes.
- **Skin**: May be mildly irritating to skin.

**Inhalation**: None known.

**Ingestion**: None known.

**Medical Conditions**

None known.

**Aggravated by Overexposure**

See Toxicological Information (section 11).

**Section 4. First Aid Measures**

**Eye Contact**

Flush immediately with plenty of water. Get medical attention if irritation occurs.

**Skin Contact**

Flush immediately with plenty of water. Get medical attention if irritation occurs.

**Inhalation**

No specific first aid measures are required.

**Ingestion**

No specific first aid measures are required.
## Section 5. Fire Fighting Measures

<table>
<thead>
<tr>
<th>Property</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability of the Product</td>
<td>None known.</td>
</tr>
<tr>
<td>Flash Points</td>
<td>Not available.</td>
</tr>
<tr>
<td>Products of Combustion</td>
<td>None known.</td>
</tr>
<tr>
<td>Fire Fighting Media and Instructions</td>
<td>Extinguish with water spray or carbon dioxide, dry chemical powder or appropriate foam. Normal fire fighting procedure may be used.</td>
</tr>
<tr>
<td>Special Remarks on Fire and Explosion Hazards</td>
<td>None known.</td>
</tr>
</tbody>
</table>

## Section 6. Accidental Release Measures

<table>
<thead>
<tr>
<th>Property</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Precautions</td>
<td>Put on appropriate personal protective equipment (see Section 8).</td>
</tr>
<tr>
<td>Environmental Precautions and Clean-up Methods</td>
<td>In the event of major spillage: Use appropriate containment to avoid environmental contamination. Sweep or scrape up material. Place in suitable clean, dry containers for disposal by approved methods. Use a water rinse for final clean-up.</td>
</tr>
</tbody>
</table>

## Section 7. Handling and Storage

<table>
<thead>
<tr>
<th>Property</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handling</td>
<td>Avoid contact with skin and eyes. FOR INDUSTRIAL USE ONLY</td>
</tr>
<tr>
<td>Storage</td>
<td>Store in a dry, cool and well-ventilated area. Protect from freezing. KEEP OUT OF REACH OF CHILDREN.</td>
</tr>
</tbody>
</table>

## Section 8. Exposure Controls/Personal Protection

<table>
<thead>
<tr>
<th>Property</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering Controls</td>
<td>No special ventilation requirements. General room ventilation is adequate.</td>
</tr>
<tr>
<td>Personal Protection</td>
<td></td>
</tr>
<tr>
<td>Eyes</td>
<td>No special protective clothing is required.</td>
</tr>
<tr>
<td>Hands</td>
<td>No special protective clothing is required.</td>
</tr>
<tr>
<td>Respiratory</td>
<td>No special protective clothing is required.</td>
</tr>
<tr>
<td>Feet</td>
<td>No special protective clothing is required.</td>
</tr>
<tr>
<td>Body</td>
<td>No special protective clothing is required.</td>
</tr>
</tbody>
</table>

## Section 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State and Appearance</td>
<td>Liquid.</td>
</tr>
<tr>
<td>Odor</td>
<td>Fresh.</td>
</tr>
<tr>
<td>Color</td>
<td>Blue.</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Boiling/Condensation Point</td>
<td>100°C (212°F)</td>
</tr>
<tr>
<td>Melting/Freezing Point</td>
<td>0°C (32°F)</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Complete.</td>
</tr>
</tbody>
</table>

## Section 10. Stability and Reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability and Reactivity</td>
<td>The product is stable.</td>
</tr>
<tr>
<td>Conditions of Instability</td>
<td>None known.</td>
</tr>
<tr>
<td>Incompatibility with Various Substances</td>
<td>Reactive with acids.</td>
</tr>
<tr>
<td>Hazardous Decomposition Products</td>
<td>When exposed to fire: Produces normal products of combustion.</td>
</tr>
<tr>
<td>Hazardous Polymerization</td>
<td>Will not occur.</td>
</tr>
</tbody>
</table>
**Section 11. Toxicological Information**

| Acute toxicity | ORAL (LD50) Estimated to be greater than 5000 mg/kg (rat). |
| Effects of Chronic Exposure | None known. |
| Other Toxic Effects | Not available. |

**Section 12. Ecological Information**

Not available.

**Section 13. Disposal Considerations**

Waste Information No special precautions. Dispose of according to all federal, state and local regulations.

**Section 14. Transport Information**

| DOT Classification | Not regulated |
| TDG Classification | Not regulated |

**Section 15. Regulatory Information**

Reporting in this section is based on ingredients disclosed in Section 2

**US Regulations**

Registered Product Information Not applicable.

**Canadian Regulations**

WHMIS Classification CLASS D-2B: Material causing other toxic effects (TOXIC).

WHMIS Icon ![WHMIS Icon](image)

Registered Product Information Not applicable.

Chemical Inventory Status All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

**Section 16. Other Information**

Other Special Considerations Not available.

Version 1

Notice to Reader

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MATERIAL SAFETY DATA SHEET
According to 91/155/EEC, 93/112/EC, 2001/58/EC

FOR EMERGENCY AND GENERAL INFORMATION
TOLL FREE HELPLINE : 1800 209 2095
Diversey India Hygiene Pvt. Ltd., 501, 5th Floor, Ackruti Centre Point,
MIDC Central Road, Andheri (East), Mumbai - 400093. INDIA
Tel.: +91 22 66444222 Fax: +91 22 66444223

SECTION 1 - PRODUCT IDENTIFICATION

Product Name : Virex II 256

Application of the product :

SECTION 2 - HAZARDS IDENTIFICATION

Classification :

-image

C, Corrosive

Emergency Overview : Danger. Corrosive. Causes Skin and Eye burns. Harmful or fatal if swallowed. Combustible liquid and vapour.

Principle routes of exposure : Eye contact. Skin contact. Inhalation.

Eyes : Corrosive. Causes permanent damage including blindness.

Skin : Corrosive. Causes permanent damage.

Inhalation : May cause irritation and corrosive effects to nose, throat and respiratory tract.

Ingestion : May be irritating to mouth, throat and stomach.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterization
Description : Mixture in water of non-dangerous ingredients and the substances listed below.

Hazardous ingredients :

<table>
<thead>
<tr>
<th>CAS</th>
<th>Ingredients</th>
<th>% by Weight</th>
<th>LD50 Oral-Rat (mg/kg)</th>
<th>LD50 Dermal-Rabbit</th>
<th>LC50 Inhalation-Rat</th>
</tr>
</thead>
<tbody>
<tr>
<td>1643-20-5</td>
<td>Lauril dimethyl amine oxide</td>
<td>0.1-1.5%</td>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
</tr>
<tr>
<td>64-17-5</td>
<td>ethyl alcohol</td>
<td>1-5%</td>
<td>7060</td>
<td>Not available</td>
<td>=124.7 mg/l (4 h)</td>
</tr>
<tr>
<td>68424-85-1</td>
<td>N-Alkyl Dimethyl Benzyl Ammonium Chloride</td>
<td>5-10%</td>
<td>426</td>
<td>Not available</td>
<td>Not available</td>
</tr>
<tr>
<td>7173-51-5</td>
<td>Didecyl Dimethyl Ammonium Chloride</td>
<td>5-10%</td>
<td>84</td>
<td>Not available</td>
<td>Not available</td>
</tr>
</tbody>
</table>

SECTION 4 - FIRST AID MEASURES

Inhalation : If breathing is affected, remove to fresh air. If person is not breathing, call an ambulance and then give artificial respiration, preferably by mouth to mouth, if possible. Get medical attention immediately.

Skin contact : Take off contaminated clothing. Rinse immediately with plenty of water for 15-20 minutes. Get medical attention immediately.

Eye contact : Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Get medical attention immediately.

Ingestion : Call a doctor or poison control center immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Never give anything by mouth to an unconscious person.

Notes to Physician : Probable mucosal damage may contraindicate the use of gastric lavage.
**Product Name : Virex II 256**

**Aggravated Medical Conditions** : Individuals with chronic respiratory disorders such as asthma, chronic bronchitis, emphysema, etc., may be more susceptible to irritating effects.

**SECTION 5 - FIRE FIGHTING MEASURES**

**Suitable extinguishing media** : Use dry chemical, CO2, water spray or "alcohol" foam.

**Specific hazards** : Although this product has a flash point below 200°F, it is an aqueous solution containing an alcohol and does not sustain combustion.

**Unusual hazards** : Corrosive material (see Sections 8 and 10)

**Specific methods** : No special methods required.

**Special protective equipment for firefighters** : As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**Extinguishing media which must not be used for safety reasons** : No information available.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

**Protection of personnel** : Put on appropriate personal protective equipment (see Section 8)

**Environmental precautions and Clean-up Method** : Clean-up methods - Large spillage. Remove all sources of ignition. Absorb spill with inert material (eg. dry sand or earth), then place in a chemical waste container. Use a water rinse for a final clean-up.

**SECTION 7 - HANDLING AND STORAGE**

**Handling ( see also sections 8 and 15)**

Avoid contact with eyes, skin and clothing. Do not taste or swallow. Avoid breathing vapors or spray mists. Use only with adequate ventilation. Remove and wash contaminated clothing and footwear before re-use. Wash thoroughly after handling. Product residue may remain on in empty containers. All precautions for handling the product must be used in handling the empty container and residue. COMBUSTIBLE LIQUID AND VAPOUR. Keep away from open flames, hot surfaces and sources of ignition. Use only in well-ventilated areas. FOR COMMERCIAL AND INDUSTRIAL USE ONLY.

**Storage** : Protect from freezing. Keep tightly closed in a dry cool and well-ventilated place., KEEP OUT OF REACH OF CHILDREN.

**SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION**

**Engineering Controls** : Good general ventilation should be sufficient to control airborne levels. Respiratory protection is not required if food ventilation is maintained.

**Personal Protection Equipment:**

**Breathing equipment** : In case of insufficient ventilation wear suitable respiratory equipment. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

**Protection of hands** : Chemical resistant gloves.

**Eye protection** : Chemical splash goggles.

**Skin and body protection** : Protective footwear. If major exposure is possible wear suitable protective clothing and footwear.

**Hygiene measures** : If major exposure is possible, wear suitable protective clothing and footwear.

<table>
<thead>
<tr>
<th>CAS</th>
<th>Ingredients</th>
<th>ACGIH</th>
<th>OSHA</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5</td>
<td>ethyl alcohol</td>
<td>1000 ppm (STEL)</td>
<td>1000 ppm (TWA) 1900 mg/m³ (TWA)</td>
<td>1000 ppm (TWA) 1900 mg/m³ (TWA)</td>
</tr>
</tbody>
</table>
SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

General information :
Form : Liquid
Appearance : Aqueous solution
Colour : Clear Blue
Odour : Minty
Specific gravity : 1.0
Bulk Density : No information available
Evaporation rate : No information available
Vapor density : No information available
Change in condition :
Melting point/ Melting range : Not determined
Boiling point/ Boiling range : Not determined
Decomposition temperature : Not determined
Autoignition temperature : No information available
Solubility : Completely Soluble
Solubility in other solvents : No information available
Partition coefficient :
(n-octanol/water)
Elemental phosphorus : 0.00% by wt.
Density :
Flash point : > 187°F > 86.1°C
Viscosity : No information available
VOC : 3.1%*
pH-value :
Dilution pH:
8.8@1:256
Explosion limits :
upper : Not determined
lower : Not determined

* - Title 17, California Code of Regulations, Division 3, Chapter 1, Subchapter 8.5, Article 2, Consumer Products, Sections 94508

SECTION 10 - STABILITY AND REACTIVITY

Stability : The product is stable.
Polymerization: Hazardous polymerization does not occur.
Hazardous decomposition products : None reasonably foreseeable.
Materials to avoid : Oxidizing agents.
Conditions to avoid: Keep away from heat. Keep away from open flames, hot surfaces and sources of ignition.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute toxicity : Corrosive. Oral LD50 estimated to be between 1000-2000 mg/kg. Dermal LD50 estimated to be >2000 mg/kg
Component information : See Section 3
Chronic toxicity : None known.
Specific Effects :
Product Name : Virex II 256

Carcinogenic effects : None known
Mutageic effects : None known
Reproductive toxicity : None known
Target organ effects : None known

SECTION 12 - ECOLOGICAL INFORMATION

Environmental information : No data available.

SECTION 13 - DISPOSAL CONSIDERATIONS

Do not contaminate water, food or feed by storage or disposal.
Storage : Store in original container in areas inaccessible to children. Open dumping is prohibited. Do not reuse empty container.
Container Disposal : See product label for complete disposal instructions. Always dispose of according to all federal, state and local applicable regulations.

SECTION 14 - TRANSPORT INFORMATION

Land transport ADR/RID (cross-border)

ADR/RID Class : 8 Corrosive substances
Kemler Number : 80
UN-Number : 1903
Packaging Group : III
Label : 8
Proper Shipping Name : DISINFECTANT, LIQUID, CORROSIVE, N.O.S, (DIDECYL DIMETHYL AMMONIUM CHLORIDE, ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE)

Maritime transport IMDG :

IMDG Class : 8
UN-Number : 1903
Label : 8
Packaging Group : III
Proper Shipping Name : DISINFECTANT, LIQUID, CORROSIVE, N.O.S, (DIDECYL DIMETHYL AMMONIUM CHLORIDE, ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE)

Air transport ICAO-TI and IATA-DGR :

ICAO / IATA Class: 8
Product Name : Virex II 256

UN-Number : 1903
Label : 8
Packaging Group : III
Proper Shipping Name : DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (DIDECYL DIMETHYL AMMONIUM CHLORIDE, ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE)

Transport / Additional Information : Transport regulations include special provisions for certain classes of dangerous goods packed in limited quantities.

SECTION 15 - REGULATORY INFORMATION

International Inventories at CAS# Level : All components of this product are listed on the following inventories : U.S.A. (TSCA)

US Regulations :
EPA Reg. No. : 70627-24

California Proposition 65 : This product is not subject to the reporting requirements under California's Proposition 65

CERCLA/SARA

SARA 311/312 Hazard Categories :
Immediate : X
Delayed : -
Fire : X
Reactivity : -
Sudden Release of Pressure : -

SECTION 16 - OTHER INFORMATION

The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract.

Department issuing material safety data sheet:
Contact :
Diversey India Hygiene Pvt. Ltd.,
501, 5th Floor, Ackruti Centre Point, MIDC Central Road,
Andheri (East), Mumbai - 400093, INDIA.
Tel.: +91 2266444222. Fax: +91 2266444223

* In case of local regulation change or formulation change this MSDS may undergo revision before the stated revision date.
# Division of Facilities Services

## DOD Hazardous Material Information (ANSI Format)
For Cornell University Convenience Only

<table>
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<tr>
<th>Section 1 - Product and Company Identification</th>
<th>Section 9 - Physical &amp; Chemical Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 2 - Compositon/Information on Ingredients</td>
<td>Section 10 - Stability &amp; Reactivity Data</td>
</tr>
<tr>
<td>Section 3 - Hazards Identification Including Emergency Overview</td>
<td>Section 11 - Toxicological Information</td>
</tr>
<tr>
<td>Section 4 - First Aid Measures</td>
<td>Section 12 - Ecological Information</td>
</tr>
<tr>
<td>Section 5 - Fire Fighting Measures</td>
<td>Section 13 - Disposal Considerations</td>
</tr>
<tr>
<td>Section 6 - Accidental Release Measures</td>
<td>Section 14 - MSDS Transport Information</td>
</tr>
<tr>
<td>Section 7 - Handling and Storage</td>
<td>Section 15 - Regulatory Information</td>
</tr>
<tr>
<td>Section 8 - Exposure Controls &amp; Personal Protection</td>
<td>Section 16 - Other Information</td>
</tr>
</tbody>
</table>

The information in this document is compiled from information maintained by the United States Department of Defense (DOD). Anyone using this information is solely responsible for the accuracy and applicability of this information to a particular use or situation. Cornell University does not in any way warrant or imply the applicability, viability or use of this information to any person or for use in any situation.

## Section 1 - Product and Company Identification

**EASY-OFF OVEN CLEANER**

**Product Identification:** EASY-OFF OVEN CLEANER  
**Date of MSDS:** 04/02/1986  
**Technical Review Date:** 04/11/1988  
**FSC:** 7930  
**NIIN:** 00-923-0254  
**Submitter:** B DT  
**Status Code:** C  
**MFN:** 01  
**Article:** N  
**Kit Part:** N

**Manufacturer's Information**

**Manufacturer's Name:** BOYLE-MIDWAY DIVISION  
**Post Office Box:** N/K  
**Manufacturer's Address1:** N/K  
**Manufacturer's Address2:** CRANFORD, NJ 07016  

[http://msds.ehs.cornell.edu/msds/MSDSDOD/A89/M44408.htm](http://msds.ehs.cornell.edu/msds/MSDSDOD/A89/M44408.htm)  

6/26/2003
Item Description

Item Name:
Item Manager:
Specification Number: NK
Type/Grade/Class: NK
Unit of Issue:
Unit of Issue Quantity:
Type of Container:

Contractor Information

Contractor's Name: BOYLE-MIDWAY DIV OF AMERICAN HOME
Post Office Box: N/K
Contractor's Address1: SOUTH AVENUE AND HALE STREET
Contractor's Address2: CRANFORD, NJ 07016
Contractor's Telephone: 908-276-3900
Contractor's CAGE: DO084

Section 2 - Composition/Information on Ingredients

Ingredient Name: BUTANE
Ingredient CAS Number: 106-97-8 Ingredient CAS Code: M
RTECS Number: EJ4200000 RTECS Code: M
=WT: =WT Code:
=Volume: =Volume Code:
>WT: >WT Code:
>Volume: >Volume Code:
<WT: <WT Code:
<Volume: <Volume Code:
( % Low WT: % Low WT Code:
% High WT: % High WT Code:
% Low Volume: % Low Volume Code:
% High Volume: % High Volume Code:

http://msds.ehs.cornell.edu/msds/MSDSDOD/A89/M44408.htm

6/26/2003
Ingredient Name: DIETHYLENE GLYCOL MONOBUTYL ETHER
Ingredient CAS Number: 112-34-5 Ingredient CAS Code: M
RTECS Number: KJ9100000 RTECS Code: M

Ingredient Name: ETHANOLAMINE
Ingredient CAS Number: 141-43-5 Ingredient CAS Code: M
RTECS Number: KJ5775000 RTECS Code: M
EASY-OFF OVEN CLEANER

ACGIH STEL: N/P ACGIH STEL Code:
EPA Reporting Quantity:
DOT Reporting Quantity:
Ozone Depleting Chemical: N

Ingredient Name: SODIUM HYDROXIDE (SARA III)
Ingredient CAS Number: 1310-73-2 Ingredient CAS Code: M
RTECS Number: WB4900000 RTECS Code: M
<WT: =WT Code:
<Volume: =Volume Code:
>WT: >WT Code:
>Volume: >Volume Code:
<WT: <WT Code:
<Volume: <Volume Code:
% Low WT: % Low WT Code:
% High WT: % High WT Code:
% Low Volume: % Low Volume Code:
% High Volume: % High Volume Code:
% Text: <5
% Environmental Weight:
Other REC Limits: N/K
OSHA PEL: 2 MG/M3 OSHA PEL Code: M
OSHA STEL: OSHA STEL Code:
ACGIH TLV: C 2 MG/M3; 9293 ACGIH TLV Code: M
ACGIH STEL: N/P ACGIH STEL Code:
EPA Reporting Quantity: 1000 LBS
DOT Reporting Quantity: 1000 LBS

Ingredient Name: WATER
Ingredient CAS Number: 7732-18-5 Ingredient CAS Code: M
RTECS Number: ZC0110000 RTECS Code: M
<WT: =WT Code:
<Volume: =Volume Code:
>WT: >WT Code:
>Volume: >Volume Code:
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% Low WT: % Low WT Code:
% High WT: % High WT Code:
% Low Volume: % Low Volume Code:
% High Volume: % High Volume Code:
% Text: >70
% Environmental Weight:
Other REC Limits: N/K
OSHA PEL: N/K OSHA PEL Code: M
OSHA STEL: OSHA STEL Code:
ACGIH TLV: N/K ACGIH TLV Code: M
ACGIH STEL: N/P ACGIH STEL Code:
EPA Reporting Quantity:
DOT Reporting Quantity:
Ozone Depleting Chemical: N

http://msds.ehs.cornell.edu/msds/MSDS/DOD/A89/M44408.htm

6/26/2003
Health Hazards Acute & Chronic: HARMFUL IF SWALLOWED. CONTAINS SODIUM HYDROXIDE (E). CONTACT WILL CAUSE BURNS. AVOID CONTACT WITH SKIN, EYES, MUCOUS MEMBRANES AND CLOTHING. AVOID BREATHING SPRAY MIST.

Signs & Symptoms of Overexposure:
SAME AS ACUTE AND CHRONIC.

Medical Conditions Aggravated by Exposure:
N/K

LD50 LC50 Mixture: N/K

Route of Entry Indicators:
Inhalation: YES
Skin: YES
Ingestion: YES

Carcinogenicity Indicators
NTP: N/P
IARC: N/P
OSHA: N/P

Carcinogenicity Explanation: N/K

Section 4 - First Aid Measures
EASY-OFF OVEN CLEANER

First Aid:
IF INGESTED DRINK A GLASSFUL OF WATER OR MILD AND CALL PHYSICIAN IMMEDIATELY. SKIN CONTACT: FLOOD SKIN WITH WATER 10 MINUTES AND WASH THOROUGHLY WITH SOAP AND WATER. EYE CONTACT: FLUSH WITH WATER 15 MINUTES AND GET PROMPT MEDICAL ATTENTION. NO SPECIFIC PROCEDURE REQUIRED IF INHALED.

Section 5 - Fire Fighting Measures
EASY-OFF OVEN CLEANER

Fire Fighting Procedures:
NONE

Unusual Fire or Explosion Hazard:
CONTENTS UNDER PRESSURE.

Extinguishing Media:
WATER, CO2, DRY CHEMICAL

Flash Point: Flash Point Text: N/K

Autoignition Temperature:
Autoignition Temperature Text: N/A
Lower Limit(s): N/K
Upper Limit(s): N/K

Section 6 - Accidental Release Measures

http://msds.ehs.cornell.edu/msds/MSDSDOD/A89/M44408.htm

6/26/2003
Spill Release Procedures:
WEAR RUBBER GLOVES. SOAK UP WITH ABSORBENT MATERIAL. RINSE AREA WITH 10-15% VINEGAR SHUTTER. WIPE DRY. WRAP ABSORBED MATERIAL IN PLASTIC BAG. AVOID CONTACT WITH REACTIVE METALS SUCH AS ALUMINUM.

Section 7 - Handling and Storage

Handling and Storage Precautions:

Other Precautions:

Section 8 - Exposure Controls & Personal Protection

Repiratory Protection:
N/K

Ventilation:
N/K

Protective Gloves:
RUBBER GLOVES

Eye Protection: EYE PROTECTION RECOMMENDED

Other Protective Equipment: PROTECTIVE CLOTHING AND EQUIPMENT REQUIRED.

Work Hygienic Practices: N/K

Supplemental Health & Safety Information: AVOID SPRAYING OVER PILOT LIGHT. KEEP OFF DOOR CRATED LIGHT SWITCH, HEATING ELEMENT, THERMOSTAT, BULB RECEPTACLES, ETC.

Section 9 - Physical & Chemical Properties

HCC:
NRC/State License Number:
Net Property Weight for Ammo:
Boiling Point: Boiling Point Text: N/K
Melting/Freezing Point: Melting/Freezing Text: N/K
Decomposition Point: Decomposition Text: N/K
Vapor Pressure: 21-26@70 F Vapor Density: N/K
Percent Volatile Organic Content:
Specific Gravity: 1.05
Volatile Organic Content Pounds per Gallon:
pH: N/K
Volatile Organic Content Grams per Liter:
Viscosity: N/P
Evaporation Weight and Reference: N/K
Solubility in Water: COMPLETE
Appearance and Odor: WHITE DENSE FOAM WHEN SPRAYED. CHARACTERISTIC FLORAL.
Percent Volatiles by Volume: 80
Corrosion Rate: N/K

Section 10 - Stability & Reactivity Data

http://msds.ehs.cornell.edu/msds/MSDSDOD/A89/M44408.htm

6/26/2003
EASY-OFF OVEN CLEANER

Stability Indicator: YES
Materials to Avoid:
DO NOT SPRAY ON EXTERIOR OVEN SURFACES, ALUMINUM, CHROME, BAKED ENAMEL, KEEP OFF ALL ELECTRICAL CONNECTIONS.

Condition to Avoid:
N/K

Hazardous Decomposition Products:
N/K

Hazardous Polymerization Indicator: NO

Conditions to Avoid Polymerization:
WILL NOT OCCUR

Section 11 - Toxico gological Information
EASY-OFF OVEN CLEANER

Toxico gological Information:
N/P

Section 12 - Ecological Information
EASY-OFF OVEN CLEANER

Ecological Information:
N/P

Section 13 - Disposal Considerations
EASY-OFF OVEN CLEANER

Waste Disposal Methods:
1. CARD SINGLE UNIT IN TRASH. MANAGE LARGE QUANTITIES AS EPA CORROSIVE WASTE. MAY BE NEUTRALIZED AND DISCHARGED TO SANITARY SEWER. OTHERWISE TRANSPORT TO SECURE LANDFILL, APPROVED INCINERATOR OR OTHER FACILITY. DEGAS CANS AND COLLECT LIQUID CONTENTS.

Section 14 - MSDS Transport Information
EASY-OFF OVEN CLEANER

Transport Information:
N/P

Section 15 - Regulatory Information
EASY-OFF OVEN CLEANER

SARA Title III Information:
N/P
Federal Regulatory Information:
N/P
State Regulatory Information:
N/P

Section 16 - Other Information
EASY-OFF OVEN CLEANER

Other Information:
N/P

HAZCOM Label Information

http://msds.chs.cornell.edu/msds/MSDSDOD/A89/M44408.htm

6/26/2003
Section 1. Chemical Product and Company Identification

Product Name: STRIDE DC - CITRUS
Product Use: Industrial/Institutional: Disinfectant.
MSDS#: 126162002

Canadian Headquarters
JohnsonDiversey - Canada, Inc.
2401 Bristol Circle
Oakville, Ontario L6H 6P1
Phone: 1-888-746-5971

Section 2. Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>% by Weight</th>
<th>Exposure Limits</th>
<th>LC50/LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trisodium Salt of NTA</td>
<td>5064-31-3</td>
<td>0.1-1</td>
<td>Not available.</td>
<td>ORAL (LD50): Acute: 1100 mg/kg [Rat].</td>
</tr>
<tr>
<td>n-Alkyl Dimethyl Benzyl Ammonium Chlorides</td>
<td>68391-01-5</td>
<td>6.25</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>n-Alkyl Dimethyl Ethylbenzyl Ammonium Chlorides</td>
<td>68956-79-6</td>
<td>6.25</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Alkylphenoxy Polyethoxyethano</td>
<td>26027-38-3</td>
<td>5-10</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

Section 3. Hazards Identification

Routes of Entry: Inhalation. Skin contact. Eye contact.

Potential Acute Health Effects

- **Eyes**: Corrosive. May cause permanent damage including blindness.
- **Skin**: Corrosive. May cause permanent damage.
- **Inhalation**: May cause irritation and corrosive effects to nose, throat and respiratory tract.
- **Ingestion**: Corrosive. May cause burns to mouth, throat, and stomach.

Medical Conditions: Individuals with chronic respiratory disorders such as asthma, chronic bronchitis, emphysema, etc., may be more susceptible to irritating effects.

See Toxicological Information (section 11)

Section 4. First Aid Measures

**Eye Contact**: Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention immediately.

**Skin Contact**: Flush immediately with plenty of water for at least 15 minutes. Get medical attention immediately.

**Inhalation**: If breathing is difficult: Remove to fresh air. Get medical attention immediately.

**Ingestion**: Do not induce vomiting! Immediately drink plenty of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Continued on Next Page
### Section 5. Fire Fighting Measures

<table>
<thead>
<tr>
<th>Flammability of the Product</th>
<th>None known.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Points</td>
<td>Closed cup: &gt;93.3°C (200°F).</td>
</tr>
<tr>
<td>Products of Combustion</td>
<td>None known.</td>
</tr>
<tr>
<td>Fire Fighting Media and Instructions</td>
<td>Extinguish with water spray or carbon dioxide, dry chemical powder or appropriate foam. Normal fire fighting procedure may be used.</td>
</tr>
<tr>
<td>Protective Clothing (Fire)</td>
<td>Put on appropriate personal protective equipment (see Section 8).</td>
</tr>
<tr>
<td>Special Remarks on Fire and Explosion Hazards</td>
<td>Corrosive material (See sections 8 and 10).</td>
</tr>
</tbody>
</table>

### Section 6. Accidental Release Measures

| Personal Precautions | Put on appropriate personal protective equipment (see Section 8). |
| Environmental Precautions and Clean-up Methods | In the event of major spillage: Use appropriate containment to avoid environmental contamination. Sweep or scrape up material. Place in suitable clean, dry containers for disposal by approved methods. Use a water rinse for final clean-up. |

### Section 7. Handling and Storage

| Handling | Avoid contact with eyes, skin and clothing. Do not taste or swallow. Avoid breathing vapors or spray mists. Wash thoroughly after handling. Remove and wash contaminated clothing and footwear before re-use. Product residue may remain on/in empty containers. All precautions for handling the product must be used in handling the empty container and residue. FOR COMMERCIAL AND INDUSTRIAL USE ONLY. |
| Storage | Store in a dry, cool and well-ventilated area. Protect from freezing. Keep container tightly closed. KEEP OUT OF REACH OF CHILDREN. |

### Section 8. Exposure Controls/Personal Protection

| Engineering Controls | Good general ventilation should be sufficient to control airborne levels. Respiratory protection is not required if good ventilation is maintained. |
| Personal Protection |  |
| Eyes | Chemical splash goggles. |
| Hands | Chemical resistant gloves. Includes: Neoprene gloves. Rubber gloves. |
| Respiratory | If mists/vapors are not adequately controlled by ventilation, use appropriate respiratory protection to avoid over exposure. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. |
| Feet | Protective footwear. |
| Body | If major exposure is possible, wear suitable protective clothing and footwear. |

### Section 9. Physical and Chemical Properties

| Physical State and Appearance | Liquid. |
| Odor | Lemon like. |
| Color | Clear Yellow. |
| pH | 11 to 12.5 [Basic.] |
| Specific Gravity | 1.04 |
| Boiling/Condensation Point | >93°C (199.4°F) |
| Solubility in water | Complete. |

Continued on Next Page
Section 10. Stability and Reactivity

<table>
<thead>
<tr>
<th>Stability and Reactivity</th>
<th>The product is stable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conditions of Instability</td>
<td>Excessive heat.</td>
</tr>
<tr>
<td>Incompatibility with Various Substances</td>
<td>Reactive with acids.</td>
</tr>
<tr>
<td>Hazardous Decomposition Products</td>
<td>When exposed to fire: Produces normal products of combustion. Toxic decomposition products include: Oxides of sodium.</td>
</tr>
<tr>
<td>Hazardous Polymerization</td>
<td>Will not occur.</td>
</tr>
</tbody>
</table>

Section 11. Toxicological Information

<table>
<thead>
<tr>
<th>Acute toxicity</th>
<th>Corrosive.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effects of Chronic Exposure</td>
<td>None known.</td>
</tr>
<tr>
<td>Other Toxic Effects</td>
<td>Based upon ingestion of NTA in lifetime feeding studies, NTA has been shown to induce tumors in the urinary tracts of rats and mice. However, on a practical basis and according to guidelines for classification of experimental animal carcinogens of the American Council of Governmental Industrial Hygienists (ACGIH), NTA would not be considered an occupational carcinogen of any practical significance.</td>
</tr>
</tbody>
</table>

Section 12. Ecological Information

Not available.

Section 13. Disposal Considerations

Waste Information

PESTICIDAL WASTE - Observe all applicable Federal/Provincial/State regulations and Local/Municipal ordinances regarding disposal of pesticide wastes.

Section 14. Transport Information

DOT Classification

| DOT Proper Shipping Name | Please refer to the Bill of Lading/receiving documents for up to date shipping information. |

TDG Classification

| TDG Proper Shipping Name | Please refer to the Bill of Lading/receiving documents for up to date shipping information. |
| TDG Class | |

Section 15. Regulatory Information

Reporting in this section is based on ingredients disclosed in Section 2

US Regulations

Federal | Not applicable. |
State | Not applicable. |

This product is not subject to the reporting requirements under California's Proposition 65.

Registered Product Information | Not applicable. |

Canadian Regulations

Canadian NPRI | Canadian NPRI: Alkylphenoxy Polyethoxyethanol. |

WHMIS Classification | Exempt - regulated under the P.C.P. Act. |

WHMIS Icon | |

Registered Product Information | P.C.P.: 23850 |

Chemical Inventory Status | All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory. All the ingredients are on the DSL list. |
### Section 16. Other Information

<table>
<thead>
<tr>
<th>Other Special Considerations</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version</td>
<td>1.01</td>
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</tbody>
</table>

**Notice to Reader**

This document has been prepared using data from sources considered technically reliable. It does not constitute a warranty, express or implied, as to the accuracy of the information contained within. Actual conditions of use and handling are beyond seller’s control. User is responsible to evaluate all available information when using product for any particular use and to comply with all Federal, State, Provincial and Local laws and regulations.
1. Identification

- **Product identifier**: Hillyard Instant Hand Sanitizer Gel
- **Other means of identification**:
  - **SDS number**: 16SAM03090A
  - **Product code**: HIL00402
  - **Recommended use**: Instant Hand Sanitizer
  - **Recommended restrictions**: For Labeled Use Only

2. Hazard(s) identification

- **Physical hazards**: Flammable liquids, Category 2
- **Health hazards**: Serious eye damage/eye irritation, Category 2A
- **Environmental hazards**: Not classified.
- **OSHA defined hazards**: Not classified.

**Label elements**

- **Signal word**: Danger
- **Hazard statement**: Highly flammable liquid and vapor. Causes serious eye irritation.
- **Precautionary statement**:
  - **Response**: If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. In case of fire: Use appropriate media to extinguish.
  - **Storage**: Store in a well-ventilated place. Keep cool.
  - **Disposal**: Buyer assumes all risk and liability associated with disposal of this product (original concentration or dilution) in violation of applicable law in compliance with applicable federal, state and local requirements.
Hazard(s) not otherwise classified (HNOC)  
Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

Supplemental information  
None.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td></td>
<td>64-17-5</td>
<td>60 - &lt; 70</td>
</tr>
</tbody>
</table>

Other components below reportable levels  
64 - 17 - 5

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation  
Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact  
Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if irritation develops and persists. If skin irritation or rash occurs, discontinue use.

Eye contact  
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion  
Rinse mouth thoroughly. Never give anything by mouth to a victim who is unconscious or is having convulsions. If ingestion of a large amount does occur, call a poison control center immediately.

Most important symptoms/effects, acute and delayed  
Headache. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Coughing.

Indication of immediate medical attention and special treatment needed  
Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

General information  
Take off all contaminated clothing immediately. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media  
Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media  
Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical  
Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters  
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions  
In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

Specific methods  
Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards  
Highly flammable liquid and vapor.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures  
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. This product is miscible in water. Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

7. Handling and storage

Precautions for safe handling

Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid contact with eyes. Avoid prolonged exposure. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol (CAS 64-17-5)</td>
<td>PEL</td>
<td>1900 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1000 ppm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
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<td>STEL</td>
<td>1000 ppm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol (CAS 64-17-5)</td>
<td>TWA</td>
<td>1900 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1000 ppm</td>
</tr>
</tbody>
</table>

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

General ventilation normally adequate.

Individual protection measures, such as personal protective equipment

Eye/face protection

Avoid contact with eyes.

Skin protection

Hand protection

Not applicable.

Other

Not applicable.

Respiratory protection

Not applicable.

Thermal hazards

None known.

General hygiene considerations

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
9. Physical and chemical properties

Appearance Clear, colorless to slightly amber viscous liquid.

Physical state Liquid.

Form Liquid.

Color Colorless to slight amber

Odor Pleasant odor

Odor threshold Not available

pH 6.25 - 7.25

Melting point/freezing point Not available

Initial boiling point and boiling range 181 °F (82.78 °C)

Flash point 73.0 °F (22.8 °C) Tag Closed Cup

Evaporation rate < 1 Ethyl ether=1

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 30.22 mm Hg

Vapor density 1.2864 Air=1

Relative density 0.885 at 77°F

Solubility(ies)

Solubility (water) 100 % Complete

Partition coefficient (n-octanol/water) Not available

Auto-ignition temperature Not available

Decomposition temperature Not available

Viscosity 10000 - 20000 cP

Other information

Density 7.33 - 7.41 lb/gal

Explosive properties Not explosive.

Oxidizing properties Not oxidizing.

Percent volatile 97.7 - 98.7 %

VOC Not available

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions Hazardous polymerization does not occur.

Conditions to avoid Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition products No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation Prolonged inhalation may be harmful.

Skin contact No adverse effects due to skin contact are expected.

Eye contact Causes serious eye irritation.

Ingestion Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics

Headache. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Coughing.

Information on toxicological effects

**Acute toxicity**

Not known.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hillyard Instant Hand Sanitizer Gel</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>Dog</td>
<td>8.864 g/kg</td>
</tr>
<tr>
<td>LD50</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Components</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Species</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethanol (CAS 64-17-5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td>Mouse</td>
<td>39 mg/l, 4 Hours</td>
</tr>
<tr>
<td>LC50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>6.2 g/kg</td>
</tr>
<tr>
<td>LD50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Skin corrosion/irritation

Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitization

- **Respiratory sensitization**: Not a respiratory sensitizer.
- **Skin sensitization**: This product is not expected to cause skin sensitization.
- **Germ cell mutagenicity**: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity

- US. National Toxicology Program (NTP) Report on Carcinogens: Not listed.

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure

Not classified.

Specific target organ toxicity - repeated exposure

Not classified.

Aspiration hazard

Prolonged inhalation may be harmful.

Chronic effects

Prolonged inhalation may be harmful.

12. Ecological information

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hillyard Instant Hand Sanitizer Gel</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>10784.0215 mg/l, 48 hours estimated</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>16064.5674 mg/l, 96 hours estimated</td>
</tr>
<tr>
<td><strong>Components</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Species</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethanol (CAS 64-17-5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>7.7 - 11.2 mg/l, 48 hours</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Fathead minnow (Pimephales promelas) &gt; 100 mg/l, 96 hours</td>
</tr>
</tbody>
</table>
Persistence and degradability
No data is available on the degradability of this product.

Bioaccumulative potential
Partition coefficient n-octanol / water (log Kow)
Ethanol -0.31

Mobility in soil
No data available.

Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions
Buyer assumes all risk and liability associated with disposal of this product (original concentration or dilution) in violation of applicable law.

Local disposal regulations
Dispose in accordance with all applicable regulations.

Hazardous waste code
D001: Waste Flammable material with a flash point <140 F
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging
Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT
UN number UN1170
UN proper shipping name ETHANOL SOLUTIONS
Transport hazard class(es)
Class 3
Subsidiary risk -
Label(s) 3
Packing group II
Special precautions for user
Read safety instructions, SDS and emergency procedures before handling.
Special provisions 24, IB2, T4, TP1
Packaging exceptions 150
Packaging non bulk 202
Packaging bulk 242
ERG number 127

IATA
UN number UN1170
UN proper shipping name ETHANOL SOLUTIONS (Ethanol)
Transport hazard class(es)
Class 3
Subsidiary risk -
Label(s) Flammable 3
Packing group II
Environmental hazards Yes
ERG Code 127
Special precautions for user
Read safety instructions, SDS and emergency procedures before handling.
Other information
Passenger and cargo aircraft Allowed with restrictions.
Cargo aircraft only Allowed with restrictions.

IMDG
UN number UN1170
UN proper shipping name ETHANOL SOLUTIONS (Ethanol), MARINE POLLUTANT (Ethanol)
Transport hazard class(es)
Class 3
Subsidiary risk -
Label(s) Flammable 3
Packing group II
Marine pollutant

Environmental hazards
Marine pollutant: Yes
EmS: F-E, S-E

Special precautions for user
Read safety instructions, SDS and emergency procedures before handling.

Ethanol

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not established.

DOT

FLAMMABLE LIQUID

IATA; IMDG

Flammable Liquid

Marine pollutant

General information
IMDG Regulated Marine Pollutant. PACKAGES 1 LITER AND SMALLER ARE SHIPPED LIMITED QUANTITY OR ORM-D

15. Regulatory information

US federal regulations
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List or Exempt.

This product is regulated by the FDA as an Over the Counter Drug Product. It is labeled in accordance with FDA regulations.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.

SARA 304 Emergency release notification
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)
Not regulated.
Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical
<table>
<thead>
<tr>
<th>Classified hazard categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammable (gases, aerosols, liquids, or solids)</td>
</tr>
<tr>
<td>Serious eye damage or eye irritation</td>
</tr>
</tbody>
</table>

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA)
Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace
Ethanol (CAS 64-17-5) Low priority

US state regulations

California Proposition 65
California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s). A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 05-14-2015
Revision date 01-09-2019
Version # 03
HMIS® ratings
- Health: 2
- Flammability: 3
- Physical hazard: 0

Disclaimer
No representations or warranties, either express or implied, of merchantability, fitness for a particular purpose, or of any nature are made with respect to the product(s) or information contained in this material safety data sheet. The information and recommendations contained in this Material Safety Data Sheet are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. All information contained herein is presented in good faith and is believed to be appropriate and accurate. The buyer or user assumes all risks associated with the use, misuse or disposal of this product. The buyer or user is responsible to comply with all federal, state or local regulations concerning the use, misuse or disposal of these products.

Revision information
This document has undergone significant changes and should be reviewed in its entirety.
1. Identification

Product identifier: QT-TB

Other means of identification:
- SDS number: 538N-57A
- Product code: HIL01011
- Product registration number: 1839-83-1658

Recommended use: Disinfectant/Cleaner

Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information:
- Manufacturer: HILLYARD INDUSTRIES
  - Address: 302 North Fourth St.
    St. Joseph, MO 64501
- Contact person: Regulatory Affairs
- Telephone number: (816) 233-1321 (Ext. 8285)
- Fax: (816) 383-8485
- E-mail: regulatoryaffairs@hillyard.com
- Emergency telephone #: (800) 424-9300

(Only in the event of chemical emergency involving a spill, leak, fire, exposure, or accident involving chemicals.)

2. Hazard(s) identification

Physical hazards: Flammable liquids
- Category 4

Health hazards: Serious eye damage/eye irritation
- Category 2B

Environmental hazards: Not classified.

OSHA defined hazards: Not classified.

Label elements:
- Hazard symbol: None.
- Signal word: Warning

Precautionary statement:
- Prevention: Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Wash thoroughly after handling. Wear protective gloves/eye protection/face protection.
- Response: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. In case of fire: Use appropriate media to extinguish.
- Storage: Store in a well-ventilated place. Keep cool.
- Disposal: Buyer assumes all risk and liability associated with disposal of this product (original concentration or dilution) in violation of applicable law in compliance with applicable federal, state and local requirements.

Hazard(s) not otherwise classified (HNOC): None known.

Supplemental information: None.

3. Composition/information on ingredients

Mixtures
### 4. First-aid measures

**Inhalation**
Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact**
Wash off with soap and water. Get medical attention if irritation develops and persists.

**Eye contact**
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

**Ingestion**
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth thoroughly. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

**Most important symptoms/effects, acute and delayed**
Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

**Indication of immediate medical attention and special treatment needed**
Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

**General information**
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 5. Fire-fighting measures

**Suitable extinguishing media**
Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

**Unsuitable extinguishing media**
Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical**
The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters**
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire fighting equipment/instructions**
In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

**Specific methods**
Use standard firefighting procedures and consider the hazards of other involved materials.

**General fire hazards**
Combustible liquid.

### 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Keep away from open flames, hot surfaces and sources of ignition. When using do not smoke. Avoid contact with eyes. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

DO NOT CONTAMINATE WATER, FOOD, OR FEED BY STORAGE OR DISPOSAL.

PESTICIDE STORAGE - Store in a dry place no lower in temperature than 50ºF or higher than 120ºF.

Keep away from heat, sparks and open flame. Store away from incompatible materials (see Section 10 of the SDS).

Do not contaminate water, food or feed by storage or disposal. Pesticide Storage: Open dumping is prohibited. Store in original container in areas inaccessible to children.

8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>US. ACGIH Threshold Limit Values</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Components</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-(2-butoxyethoxy)ethanol (CAS 112-34-5)</td>
<td>TWA</td>
<td>10 ppm</td>
<td>Inhalable fraction and vapor.</td>
</tr>
</tbody>
</table>

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

Individual protection measures, such as personal protective equipment

Eye/face protection

Use safety eyewear with splash guards or side shields, chemical goggles, or face shields.

Skin protection

Hand protection

Wear protective gloves.

Other

None normally required. If unable to avoid prolonged or repeated contact with skin, wear impervious clothing.

Respiratory protection

Not normally required with adequate ventilation. If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Clear, colorless liquid

Physical state

Liquid.

Form

Liquid.

Color

Colorless

Odor

Lemon odor

Odor threshold

Not available
pH 12 - 13 Concentrate

Melting point/freezing point Not applicable / Not available

Initial boiling point and boiling range 210 °F (98.89 °C)

Flash point > 180.0 °F (> 82.2 °C) Tag Closed Cup

Evaporation rate < 1 (ethyl ether = 1)

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits
- Explosive limit - lower (%) Not available.
- Explosive limit - upper (%) Not available.

Vapor pressure 17.36 mm Hg

Vapor density 1.03 Air = 1

Relative density 1.02 at 77°F

Solubility(ies)
- Solubility (water) 100 % Complete

Partition coefficient Not available

(n-octanol/water)

Auto-ignition temperature Not available

Decomposition temperature Not available

Viscosity Not available

Other information
- Density 8.49 lb/gal
- Percent volatile 96.5 - 97.5 %
- VOC (Weight %) 8.01 %

10. Stability and reactivity

Reactivity Reacts violently with strong acids. This product may react with oxidizing agents.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

Conditions to avoid Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Do not mix with other chemicals. Contact with incompatible materials.

Incompatible materials Acids. Oxidizing agents.

Hazardous decomposition products No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation Prolonged inhalation may be harmful.

Skin contact No adverse effects due to skin contact are expected.

Eye contact Causes eye irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

Information on toxicological effects

Acute toxicity Toxicity data is not available for this mixture. Data below are estimates based on summation methods.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>QT-TB</td>
<td>Acute</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dermal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LD50</td>
<td>33750 mg/kg estimated</td>
</tr>
</tbody>
</table>

Material name: QT-TB  
HIL01011  Version #: 01  Issue date: 04-04-2015  
SDS US  
4 / 8
### Test Results

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inhalation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Mouse</td>
<td>5882.353 mg/l, 2 Hours estimated</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>5871.021 mg/l, 4 Hours estimated</td>
</tr>
<tr>
<td></td>
<td>Guinea pig</td>
<td>12058.823 mg/l, 0.5 Hours estimated</td>
</tr>
<tr>
<td></td>
<td>Rabbit</td>
<td>7058.8237 mg/l, 4 Hours estimated</td>
</tr>
<tr>
<td><strong>Oral</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Guinea pig</td>
<td>24837.5996 mg/kg estimated</td>
</tr>
<tr>
<td></td>
<td>Mouse</td>
<td>27265.4043 mg/kg estimated</td>
</tr>
<tr>
<td></td>
<td>Rabbit</td>
<td>27500 mg/kg estimated</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>48439.9336 mg/kg estimated</td>
</tr>
</tbody>
</table>

### Components

<table>
<thead>
<tr>
<th>2-(2-butoxyethoxy)ethanol (CAS 112-34-5)</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dermal</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
<td>2700 mg/kg</td>
</tr>
<tr>
<td><strong>Oral</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Guinea pig</td>
<td>2000 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Mouse</td>
<td>2400 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Rabbit</td>
<td>2200 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>4500 mg/kg</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tetrasodium ethylenediamine tetraacetate (CAS 64-02-8)</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Oral</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>&gt; 2000 mg/kg</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation**
- Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation**
- Causes eye irritation.

**Respiratory or skin sensitization**
- **Respiratory sensitization**
  - Not a respiratory sensitizer.
- **Skin sensitization**
  - This product is not expected to cause skin sensitization.
- **Germ cell mutagenicity**
  - No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity**
- This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

- Not listed.

**Reproductive toxicity**
- This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure**
- Not classified.

**Specific target organ toxicity - repeated exposure**
- Not classified.

**Aspiration hazard**
- Prolonged inhalation may be harmful.

**Chronic effects**
- Prolonged inhalation may be harmful.

### 12. Ecological information

**Ecotoxicity**
- The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
### Product Test Results

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquatic</td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50 27111.5469 mg/l, 48 hours estimated</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50 14750.9004 mg/l, 96 hours estimated</td>
</tr>
</tbody>
</table>

### Components Test Results

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-butoxyethoxy)ethanol (CAS 112-34-5)</td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>LC50 1300 mg/l, 96 hours</td>
</tr>
<tr>
<td>Tetrasodium ethylenediamine tetraacetate (CAS 64-02-8)</td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>LC50 472 - 500 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

### Persistence and degradability

- No data is available on the degradability of this product.

### Bioaccumulative potential

- **Partition coefficient n-octanol / water (log Kow)**
  - 2-(2-butoxyethoxy)ethanol 0.56

### Mobility in soil

- No data available.

### Other adverse effects

- No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

#### Disposal instructions

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. Buyer assumes all risk and liability associated with disposal of this product (original concentration or dilution) in violation of applicable law.

#### Local disposal regulations

Dispose in accordance with all applicable regulations.

#### Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

#### Waste from residues / unused products

PESTICIDE DISPOSAL – Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

#### Contaminated packaging

CONTAINER DISPOSAL – Nonrefillable container. Do not reuse or refill container. Clean container promptly after emptying. Triple rinse as follows: Fill container ¼ full with water. Tip container on its side and roll it back and forth, ensuring at least one complete revolution for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Repeat this procedure two more times. Offer for recycling or reconditioning, if available. If not available, puncture and dispose in a sanitary landfill. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

### 14. Transport information

#### DOT

Not regulated as dangerous goods.

### 15. Regulatory information

#### US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List or Exempt.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.
SARA 304 Emergency release notification
Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
- Immediate Hazard - Yes
- Delayed Hazard - No
- Fire Hazard - Yes
- Pressure Hazard - No
- Reactivity Hazard - No

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical
No

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations
Safe Drinking Water Act (SDWA)
Not regulated.

FIFRA Information
FIFRA: This product is a U.S. EPA Registered pesticide, EPA Reg. No. 1839-83-1658, and is subject to certain labeling requirements under Federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide products. The hazard information required on the pesticide label is reproduced here.

PRECAUTIONARY STATEMENTS - HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION
KEEP OUT OF REACH OF CHILDREN. Causes moderate eye irritation. Avoid contact with eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco.

FIRST AID: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person. If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)
Not listed.

US. Massachusetts RTK - Substance List
Not regulated.

US. New Jersey Worker and Community Right-to-Know Act
Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law
Not listed.

US. Rhode Island RTK
Not regulated.

US. California Proposition 65
California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region Inventory name On inventory (yes/no)*
United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).
16. Other information, including date of preparation or last revision

Issue date: 04-04-2015

Version #: 01

HMIS® ratings
- Health: 1
- Flammability: 2
- Physical hazard: 0

Disclaimer

No representations or warranties, either express or implied, of merchantability, fitness for a particular purpose, or of any nature are made with respect to the product(s) or information contained in this material safety data sheet. The information and recommendations contained in this Material Safety Data Sheet are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. All information contained herein is presented in good faith and is believed to be appropriate and accurate. The buyer or user assumes all risks associated with the use, misuse or disposal of this product. The buyer or user is responsible to comply with all federal, state or local regulations concerning the use, misuse or disposal of these products.
1. Identification

Product identifier RE-JUV-NAL

Other means of identification

<table>
<thead>
<tr>
<th>SDS number</th>
<th>543N-29A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product code</td>
<td>HIL00705</td>
</tr>
<tr>
<td>Product registration number</td>
<td>1839-169-1658</td>
</tr>
</tbody>
</table>

Recommended use Disinfectant/Cleaner

Recommended restrictions For Labeled Use Only

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name HILLYARD INDUSTRIES

Address 302 North Fourth St.

St. Joseph, MO 64501

Contact person Regulatory Affairs

Telephone number (816) 233-1321 (Ext. 8285)

Fax (816) 383-8485

E-mail regulatoryaffairs@hillyard.com

Emergency telephone # (800) 424-9300

(Only in the event of chemical emergency involving a spill, leak, fire, exposure or accident involving chemicals)

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards

Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 1

Environmental hazards

Hazardous to the aquatic environment, acute hazard Category 2

Hazardous to the aquatic environment, long-term hazard Category 2

OSHA defined hazards

Not classified.

Label elements

Signal word Danger

Hazard statement Causes skin irritation. Causes serious eye damage. Toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention

Wash thoroughly after handling. Avoid release to the environment. Wear eye protection/face protection. Wear protective gloves.

Response

If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. Collect spillage.

Storage Store away from incompatible materials.
Disposal

Buyer assumes all risk and liability associated with disposal of this product (original concentration or dilution) in violation of applicable law in compliance with applicable federal, state and local requirements. CONTAINER DISPOSAL: Triple rinse (or equivalent), then offer clean, dry container for recycling or reconditioning.

Hazard(s) not otherwise classified (HNOC)
None known.

Supplemental information
None known.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkyl dimethyl benzyl ammonium chloride (C12-16)</td>
<td></td>
<td>68424-85-1</td>
<td>2.170%</td>
</tr>
<tr>
<td>Octyl decyl dimethyl ammonium chloride</td>
<td></td>
<td>32426-11-2</td>
<td>1.627%</td>
</tr>
<tr>
<td>Didecyl dimethyl ammonium chloride</td>
<td></td>
<td>7173-51-5</td>
<td>0.814%</td>
</tr>
<tr>
<td>Dioctyl dimethyl ammonium chloride</td>
<td></td>
<td>5538-94-3</td>
<td>0.814%</td>
</tr>
<tr>
<td>Other components below reportable levels</td>
<td></td>
<td>94.59111008</td>
<td></td>
</tr>
</tbody>
</table>

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

Ingestion Rinse mouth thoroughly. Drink water as a precaution. Never give anything by mouth to a victim who is unconscious or is having convulsions. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions Move containers from fire area if you can do so without risk.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
This product is miscible in water. Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Do not get this material in contact with eyes. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). DO NOT CONTAMINATE WATER, FOOD, OR FEED BY STORAGE OR DISPOSAL. PESTICIDE STORAGE – Store in original container in a cool (temperature no lower than 50°F or higher than 120°F), dry and locked storage area inaccessible to children.

8. Exposure controls/personal protection

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection

Chemical safety goggles when working with concentrate.

Skin protection

Hand protection

Use protective gloves when dealing with the concentrate.

Other

Impervious boots and aprons where splashing of concentrate is a problem; otherwise, use uniforms or coveralls.

Respiratory protection

Not normally required with adequate ventilation.

Thermal hazards

None known.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Clear, red liquid

Physical state

Liquid.

Form

Liquid.

Color

Red

Odor

Floral fragrance

Odor threshold

Not available

pH

6 - 7 Concentrate

Melting point/freezing point

Not applicable / Not available

Initial boiling point and boiling range

> 201 °F (> 93.89 °C)

Flash point

> 201.0 °F (> 93.9 °C) Tag Closed Cup

Evaporation rate

< 1 Ethyl ether = 1

Flammability (solid, gas)

Not applicable.

Upper/lower flammability or explosive limits

Explosive limit - lower (%)

Not available.

Explosive limit - upper (%)

Not available.
10. Stability and reactivity

Reactivity
The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability
Material is stable under normal conditions.

Possibility of hazardous reactions
No dangerous reaction known under conditions of normal use.

Conditions to avoid
Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials
Strong oxidizing agents.

Hazardous decomposition products
No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

<table>
<thead>
<tr>
<th>Route</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Prolonged inhalation may be harmful.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td>Eye contact</td>
<td>Causes serious eye damage.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Expected to be a low ingestion hazard.</td>
</tr>
</tbody>
</table>

Symptoms related to the physical, chemical and toxicological characteristics
Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity
Not known.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>RE-JUV-NAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Mouse</td>
<td>16000 mg/l, 2 Hours estimated</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>4269 mg/l, 4 Hours estimated</td>
</tr>
<tr>
<td></td>
<td>Guinea pig</td>
<td>32800 mg/l, 0.5 Hours estimated</td>
</tr>
<tr>
<td></td>
<td>Mouse</td>
<td>19200 mg/l, 4 Hours estimated</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>Guinea pig</td>
<td>826 g/kg estimated</td>
</tr>
<tr>
<td>LD50</td>
<td>Mouse</td>
<td>29318 mg/kg estimated</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>9741 mg/kg estimated</td>
</tr>
<tr>
<td>Components</td>
<td>Species</td>
<td>Test Results</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Didecyl dimethyl ammonium chloride (CAS 7173-51-5)</td>
<td>Acute</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dermal</td>
<td>Rabbit</td>
</tr>
<tr>
<td></td>
<td>Oral</td>
<td>Mouse</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rat</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation**
- Causes skin irritation.

**Serious eye damage/eye irritation**
- Causes serious eye damage.

**Respiratory or skin sensitization**

- **Respiratory sensitization**
  - Not a respiratory sensitizer.

- **Skin sensitization**
  - This product is not expected to cause skin sensitization.

- **Germ cell mutagenicity**
  - No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity**
- This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

- **IARC Monographs. Overall Evaluation of Carcinogenicity**
  - Not listed.

- **US. National Toxicology Program (NTP) Report on Carcinogens**
  - Not listed.

  - Not regulated.

**Reproductive toxicity**
- This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure**
- Not classified.

**Specific target organ toxicity - repeated exposure**
- Not classified.

**Aspiration hazard**
- Not an aspiration hazard.

**Chronic effects**
- Prolonged inhalation may be harmful.

### 12. Ecological information

**Ecotoxicity**
- Toxic to aquatic life with long lasting effects.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>RE-JUV-NAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Daphnia 126.6858 mg/l, 48 hours estimated</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Fish 58.9702 mg/l, 96 hours estimated</td>
</tr>
</tbody>
</table>

**Components**

<table>
<thead>
<tr>
<th>Alkyl dimethyl benzyl ammonium chloride (C12-16) (CAS 68424-85-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquatic</td>
</tr>
<tr>
<td>Fish</td>
</tr>
<tr>
<td>LC50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Didecyl dimethyl ammonium chloride (CAS 7173-51-5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquatic</td>
</tr>
<tr>
<td>Fish</td>
</tr>
<tr>
<td>LC50</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

**Persistence and degradability**
- No data is available on the degradability of this product.

**Bioaccumulative potential**
- No data available.

**Mobility in soil**
- No data available.
Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions
PESTICIDE DISPOSAL - Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Local disposal regulations
Dispose in accordance with all applicable regulations.

Hazardous waste code
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging
CONTAINER DISPOSAL – Non-refillable container. Do not reuse or refill this container. Clean container promptly after emptying. After rinsing container, offer empty metal drums or plastic containers for recycling if available or puncture and dispose of in a sanitary landfill or by incineration. RINSING INSTRUCTIONS - Triple rinse container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

14. Transport information

DOT
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not established.

15. Regulatory information

US federal regulations
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List or Exempt.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.

SARA 304 Emergency release notification
Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical
No

SARA 313 (TRI reporting)
Not regulated.
**Safe Drinking Water Act (SDWA)**

Not regulated.

**FIFRA Information**

FIFRA: This product is a U.S. EPA Registered pesticide, EPA Reg. No. 1839-169-1658, and is subject to certain labeling requirements under Federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide products. The hazard information required on the pesticide label is reproduced here.

**PRECAUTIONARY STATEMENTS: HAZARDS TO HUMANS AND DOMESTIC ANIMALS.**

**DANGER**

KEEP OUT OF REACH OF CHILDREN. CORROSIVE. Causes irreversible eye damage and skin burns. Do not get in eyes, on skin or on clothing. May be fatal if absorbed through the skin. Harmful if swallowed. Wear goggles or face shield, rubber gloves, and protective clothing. Remove contaminated clothing and wash before reuse. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

FIRST AID Have the product container or label with you when calling a poison control center or doctor, or going for treatment. If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person. If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

**US state regulations**

**US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**International Inventories**

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A “Yes” indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A “No” indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

| Issue date | 03-11-2015 |
| Revision date | 09-02-2016 |
| Version # | 02 |
| HMIS® ratings | Health: 3, Flammability: 0, Physical hazard: 0 |

**Disclaimer**

No representations or warranties, either express or implied, of merchantability, fitness for a particular purpose, or of any nature are made with respect to the product(s) or information contained in this material safety data sheet. The information and recommendations contained in this Material Safety Data Sheet are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. All information contained herein is presented in good faith and is believed to be appropriate and accurate. The buyer or user assumes all risks associated with the use, misuse or disposal of this product. The buyer or user is responsible to comply with all federal, state or local regulations concerning the use, misuse or disposal of these products. HILLYARD cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user’s responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

**Revision information**

This document has undergone significant changes and should be reviewed in its entirety.
1. Identification

Product identifier: SUPROX

Other means of identification

SDS number: 548N-84A
Product code: HIL00833
Recommended use: General Cleaner
Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer
Company name: HILLYARD INDUSTRIES
Address: 302 North Fourth St.
St. Joseph, MO 64501
Contact person: Regulatory Affairs
Telephone number: (816) 233-1321 (Ext. 8285)
Fax: (816) 383-8485
E-mail: regulatoryaffairs@hillyard.com
Emergency telephone #: (800) 424-9300
(Only in the event of chemical emergency involving a spill, leak, fire, exposure, or accident involving chemicals.)

2. Hazard(s) identification

Physical hazards: Not classified.
Health hazards: Serious eye damage/eye irritation Category 1
Environmental hazards: Not classified.
OSHA defined hazards: Not classified.

Label elements

Signal word: Danger
Hazard statement: Causes serious eye damage. May be harmful if swallowed. May cause respiratory irritation. May cause skin irritation.

Precautionary statement

Prevention
Do not get in eyes, on skin, and clothing. Do not ingest. If prolonged or repeated contact with concentrate is possible, wear rubber or other impervious gloves and splash goggles. Use only as directed: Improper dilution can lead to adverse health effects.

Response
If swallowed: Rinse mouth. Do NOT induce vomiting. Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If on skin: Wash with plenty of water. Get medical attention if irritation develops and persists. If inhaled: Remove person to fresh air and keep comfortable for breathing.

Storage
Store away from incompatible materials.

Disposal
Buyer assumes all risk and liability associated with disposal of this product (original concentration or dilution) in violation of applicable law. Waste from normal use may be sewered to a public-owned treatment works in compliance with applicable federal, state and local requirements.

Hazard(s) not otherwise classified (HNOC): None known.

Supplemental information: None.
3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3 Videt</td>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Hydrogen Peroxide</td>
<td></td>
<td>7722-84-1</td>
<td>5 - &lt; 10</td>
</tr>
<tr>
<td>Fragance</td>
<td></td>
<td></td>
<td>&lt; 0.3</td>
</tr>
</tbody>
</table>

Other components below reportable levels 80 - < 90

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation

Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact

Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

Ingestion

Call a physician or poison control center immediately. Rinse mouth thoroughly. If swallowed, do NOT induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

Move containers from fire area if you can do so without risk.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Avoid discharge into drains, water courses or onto the ground.
7. Handling and storage

Precautions for safe handling
Do not get this material in contact with eyes. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities
Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Peroxide (CAS 7722-84-1)</td>
<td>PEL</td>
<td>1.4 mg/m³</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Peroxide (CAS 7722-84-1)</td>
<td>TWA</td>
<td>1 ppm</td>
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</tr>
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<tbody>
<tr>
<td>Hydrogen Peroxide (CAS 7722-84-1)</td>
<td>TWA</td>
<td>1 ppm</td>
</tr>
</tbody>
</table>

Biological limit values
No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls
Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

Individual protection measures, such as personal protective equipment

Eye/face protection
Do not get in eyes. Chemical safety goggles when working with concentrate.

Skin protection
Hand protection
Wear protective gloves. Neoprene or butyl rubber gloves are recommended.

Other
Avoid contact with the skin. Wear suitable protective clothing and gloves. Wear suitable protective clothing.

Respiratory protection
Not normally required with adequate ventilation.

Thermal hazards
None known.

General hygiene considerations
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance
Clear, yellow liquid (yellow color fades with age)

Physical state
Liquid.

Form
Liquid.

Color
Colourless to light yellow.

Odor
Citrus odor

Odor threshold
Not Available

pH
3.5 - 4.6
6.5 - 7.5 Diluted 1:25

Melting point/freezing point
Not Available

Initial boiling point and boiling range
206 °F (96.67 °C)

Flash point
> 200.0 °F (> 93.3 °C) Tag Closed Cup

Evaporation rate
< 1 Ethyl ether = 1
10. Stability and reactivity

Reactivity
The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability
Material is stable under normal conditions.

Possibility of hazardous reactions
No dangerous reaction known under conditions of normal use.

Conditions to avoid
Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials
Metals. Strong reducing agents. Alkalies. Combustible material. Heavy Metal Salts

Hazardous decomposition products
No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation
Prolonged inhalation may be harmful.

Skin contact
No adverse effects due to skin contact are expected.

Eye contact
Causes serious eye damage.

Ingestion
Expected to be a low ingestion hazard.

SUPROX
5000 mg/kg

Symptoms related to the physical, chemical and toxicological characteristics
Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Information on toxicological effects

Acute toxicity
Not available.

Skin corrosion/irritation
Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation
Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization
Not a respiratory sensitizer.

Skin sensitization
This product is not expected to cause skin sensitization.

Germ cell mutagenicity
No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity
This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity
Hydrogen Peroxide (CAS 7722-84-1) 3 Not classifiable as to carcinogenicity to humans.
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity
This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure
Not classified.

Specific target organ toxicity - repeated exposure
Not classified.

Aspiration hazard
Prolonged inhalation may be harmful.

Chronic effects
Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability
No data is available on the degradability of this product.

Bioaccumulative potential
No data available.

Mobility in soil
No data available.

Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions
Buyer assumes all risk and liability associated with disposal of this product (original concentration or dilution) in violation of applicable law.

Local disposal regulations
Dispose in accordance with all applicable regulations.

Hazardous waste code
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products
Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). Waste from normal product use may be sewered to a public owned treatment works (POTW) in compliance with applicable Federal, State, and local pretreatment requirements.

Contaminated packaging
Since emptied containers may retain product residue, follow label warnings even after container is emptied. Triple rinse (or equivalent). Then offer clean, dry container for recycling or reconditioning.

14. Transport information

DOT
Not regulated as dangerous goods.

15. Regulatory information

US federal regulations
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.

SARA 304 Emergency release notification
Hydrogen Peroxide (CAS 7722-84-1) 1000 LBS

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No
SARA 302 Extremely hazardous substance

Chemical name | CAS number | Reportable quantity | Threshold planning quantity, lower value | Threshold planning quantity, upper value |
---|---|---|---|---|
Hydrogen Peroxide | 7722-84-1 | No | 1000 lbs |

SARA 311/312 Hazardous chemical

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations
Safe Drinking Water Act (SDWA)
Not regulated.

US state regulations
US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)
Not listed.

US. Massachusetts RTK - Substance List
Hydrogen Peroxide (CAS 7722-84-1)

US. New Jersey Worker and Community Right-to-Know Act
Hydrogen Peroxide (CAS 7722-84-1)

US. Pennsylvania Worker and Community Right-to-Know Law
Hydrogen Peroxide (CAS 7722-84-1)

US. Rhode Island RTK
Hydrogen Peroxide (CAS 7722-84-1)

US. California Proposition 65
California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).
*A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date | 02-24-2015
Version # | 01

Further information
This product meets Green Seal™ Standard GS-37 based on effective performance, concentrated volume, minimized/recycled packaging and protective limits on: VOCs and human & environmental toxicity. Acute toxicity, skin and eye damage met requirements at the as-used dilution, as specified for closed dilution systems. GreenSeal.org.

HMIS® ratings
Health: 3
Flammability: 0
Physical hazard: 1

Disclaimer
No representations or warranties, either express or implied, of merchantability, fitness for a particular purpose, or of any nature are made with respect to the product(s) or information contained in this material safety data sheet. The information and recommendations contained in this Material Safety Data Sheet are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. All information contained herein is presented in good faith and is believed to be appropriate and accurate. The buyer or user assumes all risks associated with the use, misuse or disposal of this product. The buyer or user is responsible to comply with all federal, state or local regulations concerning the use, misuse or disposal of these products.
1. Identification

Product identifier: TOP CLEAN

Other means of identification:
- SDS number: 584N-053A
- Product code: HIL00144

Recommended use: Neutral Cleaner

Recommended restrictions: For Labeled Use Only

Manufacturer/Importer/Supplier/Distributor information

Manufacturer:
- Company name: HILLYARD INDUSTRIES
- Address: 302 North Fourth St.
  St. Joseph, MO 64501

Contact person: Regulatory Affairs
- Telephone number: (816) 233-1321 (Ext. 8285)
- Fax: (816) 383-8485
- E-mail: regulatoryaffairs@hillyard.com
- Emergency telephone #: (800) 424-9300
  (Only in the event of chemical emergency involving a spill, leak, fire, exposure or accident involving chemicals)

2. Hazard(s) identification

Physical hazards: Not classified.

Health hazards: Not classified.

Environmental hazards: Not classified.

OSHA defined hazards: Not classified.

Label elements:
- Hazard symbol: None.
- Signal word: None.
- Hazard statement: The mixture does not meet the criteria for classification.

Precautionary statement:
- Prevention: Wash thoroughly after handling. Avoid contact with eyes. Do not take internally. If prolonged or repeated contact is possible, wear splash goggles and suitable gloves. Use only as directed: Improper dilution can lead to adverse health effects.
- Response: If in eyes, flush with water for 15 minutes. Get medical attention if irritation develops and persists.
- Storage: Store away from incompatible materials.
- Disposal: Buyer assumes all risk and liability associated with disposal of this product (original concentration or dilution) in violation of applicable law. Waste from normal use may be sewered to a public-owned treatment works in compliance with applicable federal, state and local requirements. CONTAINER DISPOSAL: Triple rinse (or equivalent), then offer clean, dry container for recycling or reconditioning.

Hazard(s) not otherwise classified (HNOC): None known.

Supplemental information: None.

3. Composition/information on ingredients

Mixtures

Material name: TOP CLEAN
Chemical name | Common name and synonyms | CAS number | %
---|---|---|---
Alcohols, C9-11, ethoxylated | 68439-46-3 | 3 - < 5
Sodium xylene sulfonate | 1300-72-7 | < 1
FD&C YELLOW #5 | 1934-21-0 | < 0.1
Fragrance | Mixture | < 0.05
Other components below reportable levels | 90 - 100

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation: Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact: Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Continue rinsing.

Ingestion: Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed: Direct contact with eyes may cause temporary irritation.

Indication of immediate medical attention and special treatment needed: Treat symptomatically.

General information: Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures


Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions: Move containers from fire area if you can do so without risk.

Specific methods: Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards: No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Keep unnecessary personnel away.

Methods and materials for containment and cleaning up: This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions: Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling: Avoid prolonged exposure. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities: Store in original tightly closed container.

8. Exposure controls/personal protection

Biological limit values: No biological exposure limits noted for the ingredient(s).
**Appropriate engineering controls**

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

Avoid contact with eyes. Where splashing of concentrate is a concern, use safety goggles or protective glasses with side shield.

**Skin protection**

For prolonged or repeated skin contact use suitable protective gloves.

**Hand protection**

No special protective equipment required.

**Respiratory protection**

No personal respiratory protective equipment normally required. In case of insufficient ventilation, wear suitable respiratory equipment.

**Thermal hazards**

None known.

**General hygiene considerations**

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

### 9. Physical and chemical properties

**Appearance**
Clear, yellow, liquid

**Physical state**
Liquid.

**Form**
Liquid.

**Color**
Yellow

**Odor**
Floral odor

**Odor threshold**
Not available

**pH**
6.5 - 7.5 Concentrate
7.5 - 8.5 1:32 dilution

**Melting point/freezing point**
Not applicable / Not available

**Initial boiling point and boiling range**
212 °F (100 °C) corr.

**Flash point**
> 200.0 Tag Closed Cup

**Evaporation rate**
< 1 Ethyl ether=1

**Flammability (solid, gas)**
Not applicable.

**Upper/lower flammability or explosive limits**

Explosive limit - lower (%)
Not available.

Explosive limit - upper (%)
Not available.

**Vapor pressure**
17.54 mm Hg

**Vapor density**
0.62 Air=1

**Relative density**
1.004 at 77°F

**Solubility(ies)**

Solubility (water) 100 % Complete

**Partition coefficient (n-octanol/water)**
Not available

**Auto-ignition temperature**
Not available.

**Decomposition temperature**
Not available

**Viscosity**
Not available

**Other information**

Density 8.36 lb/gal

Explosive properties Not explosive.

Oxidizing properties Not oxidizing.

Percent volatile 95 - 97 %

VOC 0 %

### 10. Stability and reactivity

**Reactivity**
The product is stable and non-reactive under normal conditions of use, storage and transport.
Material is stable under normal conditions.

No dangerous reaction known under conditions of normal use.

Contact with incompatible materials.

Strong oxidizing agents.

No hazardous decomposition products are known.

### 11. Toxicological information

#### Information on likely routes of exposure

- **Inhalation**: Prolonged inhalation may be harmful.
- **Skin contact**: No adverse effects due to skin contact are expected.
- **Eye contact**: Direct contact with eyes may cause temporary irritation.
- **Ingestion**: Expected to be a low ingestion hazard.

#### Symptoms related to the physical, chemical and toxicological characteristics

Direct contact with eyes may cause temporary irritation.

#### Information on toxicological effects

- **Acute toxicity**: Not available.
- **Skin corrosion/irritation**: Prolonged skin contact may cause temporary irritation.
- **Serious eye damage/eye irritation**: Direct contact with eyes may cause temporary irritation.

##### Respiratory or skin sensitization

- **Respiratory sensitization**: Not a respiratory sensitizer.
- **Skin sensitization**: This product is not expected to cause skin sensitization.

##### Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

- **Carcinogenicity**
  - **IARC Monographs. Overall Evaluation of Carcinogenicity**: Not listed.
  - **US. National Toxicology Program (NTP) Report on Carcinogens**: Not listed.

- **Reproductive toxicity**: This product is not expected to cause reproductive or developmental effects.
- **Specific target organ toxicity - single exposure**: Not classified.
- **Specific target organ toxicity - repeated exposure**: Not classified.
- **Aspiration hazard**: Prolonged inhalation may be harmful.
- **Chronic effects**: Prolonged inhalation may be harmful.
- **Further information**: This product has no known adverse effect on human health.

### 12. Ecological information

**Ecotoxicity**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOP CLEAN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Daphnia 149.9476 mg/l, 48 hours estimated</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Fish 196.7838 mg/l, 96 hours estimated</td>
</tr>
</tbody>
</table>
Components | Species | Test Results
---|---|---
Alcohols, C9-11, ethoxylated (CAS 68439-46-3) |  |  
**Aquatic** |  |  
Crustacea | EC50 | Water flea (Daphnia magna) | 2.9 - 8.5 mg/l, 48 hours  
Fish | LC50 | Fathead minnow (Pimephales promelas) | 6 - 12 mg/l, 96 hours  
FD&C YELLOW #5 (CAS 1934-21-0) |  |  
**Aquatic** |  |  
Crustacea | EC50 | Water flea (Ceriodaphnia dubia) | 4932 - 6602 mg/l, 48 hours  
* Estimates for product may be based on additional component data not shown.

**Persistence and degradability**  
No data is available on the degradability of this product.

**Bioaccumulative potential**  
No data available.

**Mobility in soil**  
No data available.

**Other adverse effects**  
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

**13. Disposal considerations**

**Disposal instructions**  
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Buyer assumes all risk and liability associated with disposal of this product (original concentration or dilution) in violation of applicable law.

**Local disposal regulations**  
Dispose in accordance with all applicable regulations.

**Hazardous waste code**  
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products**  
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). Waste from normal product use may be sewered to a public owned treatment works (POTW) in compliance with applicable Federal, State, and local pretreatment requirements.

**Contaminated packaging**  
Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Triple rinse (or equivalent). Then offer clean, dry container for recycling or reconditioning.

**14. Transport information**

**DOT**  
Not regulated as dangerous goods.

**IATA**  
Not regulated as dangerous goods.

**IMDG**  
Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**  
Not established.

**15. Regulatory information**

**US federal regulations**  
This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**  
Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**  
Not listed.

**SARA 304 Emergency release notification**  
Not regulated.

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance**  
Not listed.
SARA 311/312 Hazardous chemical
   Classified hazard categories
       Serious eye damage or eye irritation
SARA 313 (TRI reporting)
   Not regulated.

Other federal regulations
   Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
       Not regulated.
   Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
       Not regulated.
   Safe Drinking Water Act (SDWA)
       Not regulated.

US state regulations
   California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories
   Country(s) or region          Inventory name                        On inventory (yes/no)*
   Canada                        Domestic Substances List (DSL)       Yes
   Canada                        Non-Domestic Substances List (NDSL)  Yes
   United States & Puerto Rico   Toxic Substances Control Act (TSCA) Inventory Yes

   "A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
   A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision
   Issue date                    12-18-2014
   Revision date                 01-29-2019
   Version #                     04
   HMIS® ratings
       Health: 1
       Flammability: 0
       Physical hazard: 0

   Disclaimer
       No representations or warranties, either express or implied, of merchantability, fitness for a particular purpose, or of any nature are made with respect to the product(s) or information contained in this material safety data sheet. The information and recommendations contained in this Material Safety Data Sheet are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. All information contained herein is presented in good faith and is believed to be appropriate and accurate. The buyer or user assumes all risks associated with the use, misuse or disposal of this product. The buyer or user is responsible to comply with all federal, state or local regulations concerning the use, misuse or disposal of these products.

   Revision information
       Hazard(s) identification: Prevention
       Exposure controls/personal protection: Eye/face protection
       Exposure controls/personal protection: Hand protection
       Physical & Chemical Properties: Multiple Properties
       Toxicological Information: Toxicological Data
1 Identification

Product identifier

Trade name: HYDRO-SHEEN

Product Code: 140179

Manufacturer/Supplier:
Hydro-Chem Systems, Inc.
6605 Broadmoor Ave, SE
Caledonia, MI 49316, U.S.A.
Tel: 1-800-666-1992 / Fax: 616-531-8692
www.hydrochemsystems.com

Information department: Chemical Department
Emergency telephone number:
PERS: 1-800-633-8253 #9120 (Emergency Contact for Hazardous Materials Accidents, Spills, or Leaks Only)

2 Hazard(s) identification

Classification of the substance or mixture

Eye Irrit. 2A H319 Causes serious eye irritation.

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms

Hazard statements
Causes serious eye irritation.

Precautionary statements
Wear eye protection / face protection.
Wash thoroughly after handling.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:

<table>
<thead>
<tr>
<th>Chemical code</th>
<th>Chemical name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>175115-00-0</td>
<td>Amino Functional Siloxanes</td>
<td>≤ 2.5%</td>
</tr>
</tbody>
</table>

(Contd. on page 2)
4 First-aid measures

Description of first aid measures

After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Generally the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
Maintain an ANSI approved eye wash station and safety shower in the immediate vicinity capable of delivering tepid water (60-100 degrees F) for 15 minutes.
After swallowing: If symptoms persist consult doctor.

Information for doctor:
Most important symptoms and effects, both acute and delayed No further relevant information available.
Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

Extinguishing media

Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture No further relevant information available.

Advice for firefighters
Protective equipment: No special measures required.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Not required.
Environmental precautions: Dilute with plenty of water.
Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

Precautions for safe handling No special precautions are necessary if used correctly.
Information about protection against explosions and fires: No special measures required.

Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: Not required.
Further information about storage conditions: Keep receptacle tightly sealed.
Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters
Components with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
Trade name: HYDRO-SHEEN

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls
Personal protective equipment:
General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
Breathing equipment: Not required.
Protection of hands:
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Material of gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies
from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove
material can not be calculated in advance and has therefore to be checked prior to the application.
Penetration time of glove material
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
For the permanent contact gloves made of the following materials are suitable:
Chemical Resistant, neoprene, nitrile, butyl rubber
Eye protection:

Tightly sealed goggles

9 Physical and chemical properties

Information on basic physical and chemical properties
General Information
Appearance:
Form: Liquid
Color: Fluorescent Pink
Odor: Tropical
pH-value at 20 °C (68 °F): 6
Change in condition
Melting point/Melting range: Undetermined.
Boiling point/Boiling range: 100 °C (212 °F)
Flash point: Not Determined.
Flammability (solid, gaseous): Not Determined.
Ignition temperature:
Decomposition temperature: Not determined.
Auto igniting: Product is not selfigniting.
Danger of explosion: Product does not present an explosion hazard.
Explosion limits:
Lower: Not determined.
Safety Data Sheet
acc. to OSHA HCS

Printing date 06/08/2017
Reviewed and Updated on: 02/09/2017

Trade name: HYDRO-SHEEN

Upper: Not determined.

Vapor pressure at 20 °C (68 °F): 23 hPa (17 mm Hg)

Density: Not determined.
Relative density: Not determined.
Vapor density: Not determined.
Evaporation rate: Not determined.

Solubility in / Miscibility with
Water: Fully miscible.

Solvent content:
Organic solvents: 0.0 %
Other information: No further relevant information available.

10 Stability and reactivity

Reactivity: No further relevant information available.
Chemical stability
Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
Possibility of hazardous reactions: No dangerous reactions known.
Conditions to avoid: No further relevant information available.
Incompatible materials: No further relevant information available.
Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

Information on toxicological effects
Acute toxicity:
Primary irritant effect:
on the skin: No irritant effect.
on the eye: Irritating effect.
Sensitization: No sensitizing effects known.
Additional toxicological information:
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

Carcinogenic categories
IARC (International Agency for Research on Cancer)
None of the ingredients is listed.
NTP (National Toxicology Program)
None of the ingredients is listed.
OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients is listed.

12 Ecological information

Toxicity
Aquatic toxicity: No further relevant information available.
Persistence and degradability: No further relevant information available.
Behavior in environmental systems:
Bioaccumulative potential: No further relevant information available.
13 Disposal considerations

Waste treatment methods
Recommendation:
Must not be disposed of together with household garbage. Dispose of in accordance with local and regional regulations.

Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

<table>
<thead>
<tr>
<th>UN-Number</th>
<th>DOT, ADR, ADN, IMDG, IATA</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>DOT, ADR, ADN, IMDG, IATA</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>DOT, ADR, ADN, IMDG, IATA</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Packing group</td>
<td>DOT, ADR, IMDG, IATA</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Environmental hazards:</td>
<td>Not applicable.</td>
<td></td>
</tr>
<tr>
<td>Special precautions for user</td>
<td>Not applicable.</td>
<td></td>
</tr>
<tr>
<td>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</td>
<td>Not applicable.</td>
<td></td>
</tr>
<tr>
<td>UN &quot;Model Regulation&quot;:</td>
<td>Not applicable</td>
<td></td>
</tr>
</tbody>
</table>

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Sara

Section 355 (extremely hazardous substances):
None of the ingredients is listed.

Section 313 (Specific toxic chemical listings):
None of the ingredients is listed.

TSCA (Toxic Substances Control Act):
All components of this product are listed on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30.

(Contd. on page 6)
Proposition 65

Chemicals known to cause cancer:
None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:
None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:
None of the ingredients is listed.

Chemicals known to cause developmental toxicity:
None of the ingredients is listed.

Carcinogenic categories

EPA (Environmental Protection Agency)
None of the ingredients is listed.

TLV (Threshold Limit Value established by ACGIH)
None of the ingredients is listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients is listed.

GHS label elements
The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms

GHS07

Signal word
Warning

Hazard statements
Causes serious eye irritation.

Precautionary statements
Wear eye protection / face protection.
Wash thoroughly after handling.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

DISCLAIMER: IMPORTANT: The information presented herein is believed to be reliable, and relates to the specific material listed and may not be valid for such material combined with other materials outside the scope of intended usage. No warranty of guarantee is made and it remains the user's responsibility to confirm by other investigation as to safe material application. The manufacturer shall not be liable for damage to person or property resulting from the use of this product. It is the customer's responsibility to investigate any potential allergic or health problems of all users.

Department issuing SDS: Chemical Department
Contact: Hydro-Chem Systems, Inc.
Date of preparation / last revision 06/08/2017 / 2
* Data compared to the previous version altered.
SAFETY DATA SHEET

1 - PRODUCT AND COMPANY IDENTIFICATION

Product Name: CLR® CALCIUM, LIME & RUST REMOVER

Restrictions on Use: Incompatible with strong oxidizing agents, metals (except stainless steel, chrome), acids, bases, and bleach.

Product Use: Aqueous Acidic Cleaner for Removal of Calcium, Lime, and Rust from Hard Surfaces
Retail Package: (28 fl. oz., 128 fl. oz.)

Manufacturer: Jelmar, LLC
Address: 5550 W. Touhy Ave.
Skokie, IL 60077 USA
1(847) 675-8400

Emergency Phone Number: 1(800) 323-5497 (USA) 8:30 A.M. – 4:30 P.M. CST Monday – Friday
Emergency 24-hour Contact: Chemtrec 1(800) 424-9300

2 – HAZARDS IDENTIFICATION

COMPLIES WITH 29CFR 1900.1200 DATED MAY 2012

WARNING

ACUTE EYE IRRITATION (Category 2A)
ACUTE DERMAL IRRITATION (Category 4)

HAZARD NOT OTHERWISE CLASSIFIED (HNOC)
Not applicable

OTHER INFORMATION
No information available

DO NOT get in eyes, on skin or clothing.
DO NOT mix with bleach or other household chemicals harmful; fumes may result.
DO NOT ingest.
DO NOT breathe vapor or mist. Use in well ventilated areas. Keep container closed when not in use.

KEEP OUT OF REACH OF CHILDREN

Hazard statement(s)
Causes eye irritation
May cause mild skin irritation.
Precautionary statement(s)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice.
Wash skin thorough after handling.
If skin irritation or rash occurs: Get medical advice/attention.
Do not eat, drink or smoke when handling this product.
Wear protective gloves.
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
IF ON SKIN: Wash with plenty of soap and water. Avoid breathing fumes.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS#</th>
<th>OSHA HAZARD</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Lactic Acid</td>
<td>79-33-4</td>
<td>YES</td>
<td>5.00-18.00</td>
</tr>
<tr>
<td>2. Lauramine Oxide</td>
<td>1643-20-5</td>
<td>YES</td>
<td>1.50-7.50</td>
</tr>
</tbody>
</table>

The exact percentages (concentration) of mixture has been withheld as a trade secret in accordance to paragraph (i) of §1910.1200.

SECTION 4 – FIRST AID MEASURES

**EYE CONTACT:** In case of eye contact, immediately rinse eye thoroughly with plenty of water. Remove contact lenses, and continue rinsing for at least 15 minutes. If irritation persists, get medical attention.

**SKIN CONTACT:** Can be irritating to skin, prolonged contact can be more severe, no adverse effects during normal usage. In case of skin contact, rinse area for at least 15 minutes. Remove contaminated clothing and shoes, wash thoroughly before reuse. If irritation persists get medical attention.

**INHALATION:** Not a significant route of exposure. Remove to fresh air. If breathing is difficult, GET MEDICAL ATTENTION IMMEDIATELY.

**INGESTION:** DO NOT induce vomiting. If fully conscious, drink 16 ounces of water. CALL A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. NEVER give an unconscious person anything to ingest.

SECTION 5 – FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA:** Not flammable. Use appropriate media for area. Use water spray, dry chemical, alcohol-resistant foam or carbon dioxide.

**HAZARDOUS COMBUSTION PRODUCTS:** Carbon Monoxide. Thermal decomposition can lead to irritating gases and vapors.

**FIRE FIGHTING METHODS:** Evacuate area of personnel. Wear protective NIOSH-approved self-contained breathing apparatus. Remain upwind of fire to avoid hazardous vapors and decomposition products. Use water spray to cool fire-exposed containers. Run-off of large quantities of product from fire control may cause pollution. Contact appropriate agencies.

**FIRE AND EXPLOSION HAZARDS:** None known.

SECTION 6 – ACCIDENTAL RELEASES MEASURES

**Steps to be taken in Case Material is Released or Spilled:** Avoid contact with skin and eyes

**Small Spill:** No special clean-up procedure is necessary for small (less than 1 gallon) spills. Flush spill area with water. Wear rubber gloves.

**Large Spill:** Use personal protection recommended in Section 8. Isolate area, and deny entry to unnecessary and unprotected personnel. Dam spill, and absorb with earth, sand or similar material. Place in non-leaking containers. Dispose of collected material according to local, state, and federal regulations. Flush residue with large amount of water. Avoid direct discharge to sewers and surface waters.
SECTION 7– HANDLING AND STORAGE

HANDLING and STORAGE: Avoid contact with eyes, skin or clothing. May be harmful or if swallowed. Use with adequate ventilation. Avoid breathing vapors or mist. Do not eat, drink, or smoke in work area. Wash hand thoroughly after use. Consumer size containers (28, 42 fluid ounces and gallon containers) should be rinsed and recycled. Store in cool well-ventilated area, away from heat. Keep containers tightly closed. Avoid contact with combustible materials, wood, and organic materials. Store in original containers in a secure area away from children and pets.

DO NOT MIX WITH BLEACH, OR ANY OTHER PRODUCTS AS TOXIC FUMES MAY RESULT. KEEP OUT OF REACH OF CHILDREN.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>OSHA</th>
<th>ACGIH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lactic Acid</td>
<td>N.E.</td>
<td>N.E.</td>
</tr>
<tr>
<td>Lauramine Oxide</td>
<td>N.E.</td>
<td>N.E.</td>
</tr>
</tbody>
</table>

VENTILATION REQUIREMENT: Avoid prolonged breathing mists or dusts of this product. Use with adequate ventilation. Do not use in closed or confined spaces.

RESPIRATORY PROTECTION: None required during normal household use. Emergency responders should wear self-contained breathing apparatus (SCBA) to avoid inhalation of product.

EYE PROTECTION: Not required during normal household usage. Do not wear contact lenses. Emergency responders should wear full eye and face protection.

SKIN PROTECTION: Rubber gloves with protective cuff. Emergency responders should wear impermeable gloves.

OTHER PROTECTION: Emergency responders should wear chemical type (impermeable) protective clothing and footwear where direct contact with chemicals in this product is possible.

WORK/HYGIENIC PRACTICES: Wash thoroughly with soap and water after use or handling.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Crystal clear, lime green liquid</td>
<td>Flammability: Not Flammable</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Slightly acidic</td>
<td>Upper/Lower Flammability: N.A.</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>N.D.</td>
<td>Vapor Pressure: N.D.</td>
<td></td>
</tr>
<tr>
<td>pH: @20ºC</td>
<td>2.10-2.30</td>
<td>Vapor Density (mm Hg): N.D.</td>
<td></td>
</tr>
<tr>
<td>Melting Point</td>
<td>N.D.</td>
<td>Relative Density @20ºC: 1.040 – 1.060</td>
<td></td>
</tr>
<tr>
<td>Freezing Point</td>
<td>N.D.</td>
<td>Solubility in water: 100%</td>
<td></td>
</tr>
<tr>
<td>Boiling Point</td>
<td>99ºC / 210ºF</td>
<td>Partition Coefficient; n-octanol/water</td>
<td></td>
</tr>
<tr>
<td>Boiling Point Range</td>
<td>N.A.</td>
<td>Auto Ignition Temperature: N.A.</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>None</td>
<td>Decomposition Temperature: N.A.</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>N.D.</td>
<td>Viscosity: N.D.</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 10 – STABILITY AND REACTIVITY

REACTIVITY: N.A.

CHEMICAL STABILITY: Stable under normal storage conditions.

POSSIBILITY OF HAZARDOUS REACTIONS: N. D.

CONDITIONS TO AVOID: Avoid elevated temperatures.

INCOMPATIBLE MATERIALS: Strong oxidizing agents, metals (except stainless steel and chrome), bleach, acids, and bases.
HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition can lead to release of irritating gases, vapors and carbon oxides. In the event of fire: see Section 5.

SECTION 11 – TOXICOLOGICAL INFORMATION

Routes of Exposure Eyes, Skin, Inhalation, Ingestion.

Eyes Irritant: avoid eye contact. Effects may vary depending on length of exposure, solution concentration

Skin Mild Irritant. Prolonged contact may cause dermatitis, and itching.

Inhalation No adverse effects expected under typical use conditions.

Ingestion Oral burns, vomiting, and gastrointestinal disturbance.

LD₅₀ ACUTE EYE IRRITATION: GHS Toxicity Category 2A
LD₅₀ ACUTE DERMAL IRRITATION - RABBITS: GHS Toxicity Category 4 – Mild Skin Irritation
LD₅₀ ACUTE ORAL TOXICITY – RATS: GHS Toxicity >5,000 mg/kg
LD₅₀ ACUTE DERMAL TOXICITY - RABBITS: GHS Toxicity >5,000 mg/kg
LD₅₀ ACUTE INHALATION TOXICITY – RATS: GHS Toxicity Category 4

This product does not contain any substances that are considered carcinogenic by the National Toxicology Program (NTP) Report on Carcinogens and have not been found to be potential carcinogens in the International Agency for Research on Cancer (IARC) Monographs or found to be potential carcinogens by OSHA.

Reproductive Toxicity: N.A.
Specific Target Organ Toxicity – Single Exposure: N.A.
Specific Organ Toxicity – Repeated Dose: N. A.

SECTION 12- ECOLOGICAL INFORMATION

L- (+)-LACTIC ACID:

Ecotoxicity

Toxicity to Algae: EC50/Algae >2.8 g/L 72h Pseudokirchnerella subcapitata.
EC50/Algae 3.5 g/L 70h Pseudokirchnerella subcapitata.

Toxicity to Fish: LC50: 130 mg/L 96h Pnrorhynchus mykiss
LC50: 320 mg/L 96h Danio rerio

Toxicity to Micro-organisms: LC50>100 mg/L 3h

Toxicity to daphnia and other aquatic vertebrates: EC50 130 mg/L 48h Daphnia magna
EC50 250 mg/L 48h Daphnia magna

Persistence / degradability
Readily biodegradable.

**Bioaccumulative Potential:** Does not bioaccumulate.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Log Pow</th>
<th>Bioconcentration factor (BCF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>L-(+)-Lactic Acid</td>
<td>-0.62</td>
<td></td>
</tr>
</tbody>
</table>

**Mobility in soil**

No information available.

**PBT and vPvB assessment**

This substance is not considered to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB).

**Other Adverse Effects**

No information available.

**LAURAMINE OXIDE:**

**Ecotoxicity:** Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Algae</td>
<td>EC50</td>
<td>Algae</td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Daphnia</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Fish</td>
</tr>
</tbody>
</table>

**Persistence and degradability:** Expected to be readily biodegradable.

**Bioaccumulative potential:** No data available.

**Mobility in soil:** No data available.

---

**SECTION 13 – DISPOSAL CONSIDERATIONS**

**DISPOSAL METHOD:** Rinse empty containers and recycle. Dispose of unused product in a permitted hazardous waste management facility following all local, state, and federal regulations.

Follow label warnings, since containers may retain some residue of the product. Processing, use or contamination of this product may change the waste management options. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. State and local disposal regulations may differ from federal disposal regulations.

---

**SECTION 14 - TRANSPORTATION INFORMATION**

**UN Number:** N.A.

**UN Proper Shipping Name:** N.A.

**DOT (Department of Transportation Proper Shipping Name):** Not regulated by DOT.

**Packaging Group:** N.A.

**TDG Classification:** Not Regulated

**IMDG Classification:** Not Regulated

**IATA Classification:** Passenger – Not Regulated
SAFETY DATA SHEET

WHIMS (Canada): This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by CPR.

SECTION 15 – REGULATORY INFORMATION

FEDERAL REGULATIONS:
TSCA INVENTORY STATUS: All components of this product are listed on the TSCA Inventory or are exempt from TSCA Inventory requirements.

SARA TITLLE III SECTION 311/312 CATEGORY:
IMMEDIATE (ACUTE) HEALTH HAZARAD: YES
DELAYED (CHRONIC) HEALTH HAZARD: NO
FIRE HAZARD: NO
SUDDEN RELEASE OF PRESSURE: NO
REACTIVE HAZARD: NO

SARA SECTIONS 302/304/313/HAP: NO

INTERNATIONAL CHEMICAL INVENTORY STATUS:
EUROPEAN UNION (EINECS) YES
JAPAN (METI) YES
AUSTRALIA (ACIS) YES
KOREA (KECL) YES
CANADA (DSL) YES
CANADA (NDSL) NO
PHILIPPINES YES

STATES RIGHT TO KNOW: California, New Jersey, Pennsylvania, Minnesota, Massachusetts, and Wisconsin. Complies with listed States Right to Know Acts.

The following statement is made in order to comply with the California State Drinking Water Act. California Proposition 65: This product does not contain any chemicals known to the State of California to cause cancer and/or to cause birth defects and other reproductive harm.

SECTION 16 – OTHER INFORMATION

Precautions to be taken in Handling and Storing: Avoid exposure to excess heat, and prevent from freezing.

NFPA: 1, 0, 0. None

Total VOC (wt. %): 0% - does not include any CARB applicable exemptions (Volatile Organic Compounds)/California Air Resources board

CLR CHEMICAL FATE INFORMATION: 28-day biodegradation. The matter is readily biodegradable. OECD 301D

Other Precautions: None required.
NEW LOGO

Although the information and recommendations set forth herein are presented in good faith and believed to be correct as of the date hereof, JELMAR offers no representations as to the completeness or accuracy thereof. Information is provided upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will JELMAR be responsible for damages of any nature whatsoever resulting from use of or reliance upon said information.

NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION HEREIN REFERS.
SAFETY DATA SHEET
Lysol Brand All Purpose Cleaner - All Scents

1. Product and company identification

| Product name | : Lysol Brand II Kills 99.9% of Viruses & Bacteria** All Purpose Cleaner Complete Clean |
| Distributed by | : Reckitt Benckiser LLC.  
Morris Corporate Center IV  
399 Interpace Parkway (P.O. Box 225)  
Parsippany, New Jersey 07054-0225  
+1 973 404 2600  
Reckitt Benckiser (Canada) Inc.  
1680 Tech Avenue, Unit #2  
Mississauga, Ontario L4W 5S9  
CANADA  
Telephone: +1 905 283 7000 |
| Emergency telephone number (Medical) | : 1-800-338-6167 |
| Emergency telephone number (Transport) | : 1-800-424-9300 (U.S. & Canada) CHEMTREC  
Outside U.S. and Canada (North America), call Chemtrec:703-527-3887 |
| Website | : http://www.rbnainfo.com |
| Synonym | : Lysol Brand II Kills 99.9% of Viruses & Bacteria** All Purpose Cleaner Complete Clean  
•Lemon Breeze Scent  
•Fresh Mountain Scent  
•Cherry Blossom & Pomegranate Scent  
•Green Apple Scent  
•Orange Scent  
•Citrus Scent  
•Country Scent |
| Product use | : Multipurpose Cleaner |

This SDS is designed for workplace employees, emergency personnel and for other conditions and situations where there is greater potential for large-scale or prolonged exposure, in accordance with the requirements of USDOL Occupational Safety and Health Administration.

This SDS is not applicable for consumer use of our products. For consumer use, all precautionary and first aid language is provided on the product label in accordance with the applicable government regulations, and shown in Section 15 of this SDS.

SDS # : D8212215 v6.0
Formulation #: : - 1955-003 / 8173996 (Lemon)  
- 1967-019A / 8200249 (Fresh Energy)  
- 1660-185 / 8200251 (Orange)  
- 1660-184 / 8200252 (Green Apple)  
- 1967-019B / 8200253 (Citrus)  
- e0062-125 / 8200254 (Country Side)  
- e0062-099 / 8200255 (Lemon)  
- e0062-100 / 8200256 (Fresh Energy)  
- e0062-101 / 8200257 (Orange)

Code # : D8212215  
SDS # : D8212215 v6.0  
Date of issue : 25/10/2016  
1/12
1. Product and company identification

- e0062-102 / 8200258 (Green Apple)
- e0062-103 / 8200259 (Cherry Blossom & Pomegranate)
- e0062-154 / 8200261 (Country Side)

EPA ID No.: 777-66
UPC Code / Sizes: 22 oz and 32 oz HDPE Trigger bottle / 1 gallon and 144 oz HDPE bottle

2. Hazards identification

Classification of the substance or mixture:
- EYE IRRITATION - Category 2B
- SKIN SENSITIZATION - Category 1

GHS label elements
Hazard pictograms: ⚠️

Signal word: Warning
Hazard statements:
- Causes eye irritation.
- May cause an allergic skin reaction.

Precautionary statements
General: Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
Prevention: Wear protective gloves. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.
Response: IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Storage: Not applicable.
Disposal: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements:
Hazard not otherwise classified: None known.

3. Composition/information on ingredients

Substance/mixture: Mixture

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>%</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>dodecyl(dimethylamine oxide</td>
<td>1 - 2.5</td>
<td>1643-20-5</td>
</tr>
<tr>
<td>Quaternary ammonium compounds, benzyl-C12-16-alkyl(dimethyl, chlorides</td>
<td>&lt; 0.25</td>
<td>68424-85-1</td>
</tr>
</tbody>
</table>

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Code #: D8212215 SDS #: D82122215 v6.0 Date of issue: 25/10/2016
4. First aid measures

**Description of necessary first aid measures**

**Eye contact**: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.

**Inhalation**: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Skin contact**: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion**: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Notes to physician**: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Specific treatments**: No specific treatment.

---

**Most important symptoms/effects, acute and delayed**

**Potential acute health effects**

**Eye contact**: Causes eye irritation.

**Inhalation**: No known significant effects or critical hazards.

**Skin contact**: May cause an allergic skin reaction.

**Ingestion**: No known significant effects or critical hazards.

**Over-exposure signs/symptoms**

**Eye contact**: Adverse symptoms may include the following: irritation, watering, redness.

**Inhalation**: No specific data.

**Skin contact**: Adverse symptoms may include the following: irritation, redness.

**Ingestion**: No specific data.

**Indication of immediate medical attention and special treatment needed, if necessary**

**Code #**: D8212215  
**SDS #**: D8212215 v6.0  
**Date of issue**: 25/10/2016
4. First aid measures

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

5. Fire-fighting measures

**Extinguishing media**
- Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media: None known.

**Specific hazards arising from the chemical**
- Hazardous thermal decomposition products: In a fire or if heated, a pressure increase will occur and the container may burst. Decomposition products may include the following materials:
  - Carbon dioxide
  - Carbon monoxide
  - Nitrogen oxides

**Special protective actions for fire-fighters**: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**
- For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

**Methods and materials for containment and cleaning up**
- Small spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
6. Accidental release measures

Large spill
Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Large spill:

7. Handling and storage

Precautions for safe handling

Protective measures
Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for safe storage, including any incompatibilities
Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Control

Occupational exposure limits
Not applicable.

Appropriate engineering controls
Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls
Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures
Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection
Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
8. Exposure controls/personal protection

**Hand protection**: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection**: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection**: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection**: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

9. Physical and chemical properties

**Appearance**

**Physical state**: Liquid. [Clear.]

**Color**: turquoise

**Odor**

**Odor threshold**: Not available.

**pH**: 10.5 to 11.3 [Conc. (% w/w): 100%]

**Melting point**: Not available.

**Boiling point**: Not available.

**Flash point**: Closed cup: >93.3°C (>199.9°F)

**Evaporation rate**: Not available.

**Flammability (solid, gas)**: Not available.

**Lower and upper explosive (flammable) limits**: Not available.

**Vapor pressure**: Not available.

**Vapor density**: Not available.

**Relative density**: 0.98 to 1.01

**Solubility**: Easily soluble in the following materials: cold water and hot water.

**Partition coefficient: n-octanol/water**: Not available.

**Auto-ignition temperature**: Not available.

**Decomposition temperature**: Not available.

**Viscosity**: Not available.

**Flow time (ISO 2431)**: Not available.
10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: The product is stable.

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid: No specific data.

Incompatible materials: Do not mix with household chemicals.

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides *Lysol All Purpose Cleaner Trigger</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>344 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LC50 Inhalation Vapor</td>
<td>Rat</td>
<td>&gt;2.23 mg/l</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>&gt;5050 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>&gt;5000 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Conclusion/Summary: Not classified Harmful

*Information is based on toxicity test result of a similar product.

Irritation/Corrosion

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides dodecyldimethylamine oxide *Lysol All Purpose Cleaner Trigger</td>
<td>Skin - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>25 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>1 Percent</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Human</td>
<td>-</td>
<td>48 hours 3.7 Percent</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 2 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Cornea opacity</td>
<td>Rabbit</td>
<td>&gt;1</td>
<td>-</td>
<td>14 days</td>
</tr>
<tr>
<td></td>
<td>Skin - Edema</td>
<td>Rabbit</td>
<td>0</td>
<td>4 hours</td>
<td>14 days</td>
</tr>
</tbody>
</table>

Conclusion/Summary: Non-irritant to skin. *Information is based on toxicity test result of a similar product.

Skin: Irritating to eyes. *Information is based on toxicity test result of a similar product.

Sensitization

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Route of exposure</th>
<th>Species</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Lysol All Purpose Cleaner Trigger</td>
<td>skin</td>
<td>Mouse</td>
<td>Sensitizing</td>
</tr>
</tbody>
</table>

Conclusion/Summary: Skin sensitizer *Information is based on toxicity test result of a similar product.
11. Toxicological information

**Mutagenicity**
Not available.

**Carcinogenicity**
Not available.

**Reproductive toxicity**
Not available.

**Teratogenicity**
Not available.

**Specific target organ toxicity (single exposure)**
Not available.

**Specific target organ toxicity (repeated exposure)**
Not available.

**Aspiration hazard**
Not available.

Information on the likely routes of exposure

**Potential acute health effects**

Eye contact : Causes eye irritation.

Inhalation : No known significant effects or critical hazards.

Skin contact : May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
                   irritation
                   watering
                   redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
                   irritation
                   redness

Ingestion : No specific data.

**Delayed and immediate effects and also chronic effects from short and long term exposure**

**Short term exposure**

Potential immediate effects : Not available.

Potential delayed effects : Not available.

**Long term exposure**

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects
11. Toxicological information

Not available.

**General**: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

**Carcinogenicity**: No known significant effects or critical hazards.

**Mutagenicity**: No known significant effects or critical hazards.

**Teratogenicity**: No known significant effects or critical hazards.

**Developmental effects**: No known significant effects or critical hazards.

**Fertility effects**: No known significant effects or critical hazards.

12. Ecological information

**Toxicity**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides</td>
<td>Acute EC50 0.016 mg/l</td>
<td>Daphnia</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 64 ppb Fresh water</td>
<td>Fish - Oncorhynchus mykiss</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

**Persistence and degradability**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Aquatic half-life</th>
<th>Photolysis</th>
<th>Biodegradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
</tbody>
</table>

**Bioaccumulative potential**

Not available.

**Mobility in soil**

**Soil/water partition coefficient (K<sub>oc</sub>)**: Not available.

**Other adverse effects**: No known significant effects or critical hazards.
13. Disposal considerations

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

Not a DOT controlled material (United States). Not a TDG-controlled material. This preparation is not classified as dangerous according to international transport regulations (ADR/RID, IMDG or ICAO/IATA).

15. Regulatory information

U.S. Federal regulations: TSCA 4(a) proposed test rules: Quaternary ammonium compounds, benzyl-C12-16-alkylimidethyl, chlorides
TSCA 8(a) PAIR: 1-phenoxypropan-2-ol; decanal; nonanal; octanal; 2-methylundecanal
TSCA 8(a) CDR Exempt/Partial exemption: Not determined
United States inventory (TSCA 8b): All components are listed or exempted.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs): Not listed
Clean Air Act Section 602 Class I Substances: Not listed
Clean Air Act Section 602 Class II Substances: Not listed
DEA List I Chemicals (Precursor Chemicals): Not listed
DEA List II Chemicals (Essential Chemicals): Not listed
SARA 302/304
Composition/information on ingredients: No products were found.
SARA 304 RQ: Not applicable.
SARA 311/312
Classification: Immediate (acute) health hazard
Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>Fire hazard</th>
<th>Sudden release of pressure</th>
<th>Reactive</th>
<th>Immediate (acute) health hazard</th>
<th>Delayed (chronic) health hazard</th>
</tr>
</thead>
</table>
15. Regulatory information

State regulations
Massachusetts : None of the components are listed.
New York : None of the components are listed.
New Jersey : None of the components are listed.
Pennsylvania : None of the components are listed.

Canada
WHMIS (Canada) : Class D-2B: Material causing other toxic effects (Toxic).
Canadian lists
Canadian NPRI : None of the components are listed.
CEPA Toxic substances : None of the components are listed.
Canada inventory : All components are listed or exempted.

Label elements
Signal word: WARNING
Hazard statements : Causes substantial but temporary eye injury
Precautionary measures : Keep out of reach of children.
Do not get in eyes, on skin, or on clothing.
Wash thoroughly with soap and water after handling and before eating, drinking,
chewing gum, using tobacco or using the toilet.
Avoid breathing dust/fume/gas/mist/vapors/spray.

Skin sensitizer: : Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals

16. Other information

Hazardous Material Information System (U.S.A.)

Health 1
Flammability 0
Physical hazards 0
Personal protection B

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

According to the National Fire Protection Association (NFPA), the material has a Health rating of 1, a Flammability rating of 0, and an Instability/Reactivity rating of 0. The Special category is not applicable.
16. Other information

Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Key to abbreviations

ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
UN = United Nations

Date of issue : 25/10/2016
Date of previous issue : 05/06/2015.
Version : 6
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United Kingdom
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F +44 (0)1482 582532

Revision comments : Updated formatting of variants for regulatory

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

RB is a member of the CSPA Product Care Product Stewardship Program.
ALBUTEROL SULFATE EXTENDED-RELEASE TABLETS

SAFETY DATA SHEET

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

Product Identifier
Product name: Albuterol Sulfate Extended-Release Tablets

Intended Use of the Product
Use of the substance/mixture: Pharmaceutical. Use only as directed. Refer to product insert for usage instructions and product information.

Name, Address, and Telephone of the Responsible Party
Supplier:
Mylan N.V.
Building 4
Trident Place
Mosquito Way
Hatfield
Hertfordshire
AL10 9UL
United Kingdom
www.mylan.com
+44 (0)1707 853000

Emergency Telephone Number
Emergency number: For Hazardous Materials Incident
Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC (24 Hours)
Worldwide +1 703-741-5970

For adverse health events call:
+1 877-446-3679

2. HAZARDS IDENTIFICATION

Patients/Consumers: Please refer to the product information insert or product label for appropriate consumer-specific information about this product when used according to the physician’s directions. Pharmaceutical Agent – Handling of this product in its final form presents minimal occupational exposure risk.

This product is a drug, as defined by the US Food, Drug, and Cosmetic Act (21 U.S.C. 301 et seq.) and by Canada’s Food and Drugs Act. It is in solid, final form for direct administration to the patient. Therefore, it is exempt from the US 2012 Hazard Communication Standard, as defined in the 29 CFR 1910.1200(b)(5)(iii) and in Canada’s Hazardous Products Act.

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a drug, as defined by the US Food, Drug, and Cosmetic Act (21 U.S.C. 301 et seq.) and by Canada’s Food and Drugs Act. It is in solid, final form for direct administration to the patient. Therefore, it is exempt from the US 2012 Hazard Communication Standard, as defined in the 29 CFR 1910.1200(b)(5)(iii) and in Canada’s Hazardous Products Act.

4. FIRST AID MEASURES

Description of First Aid Measures
General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: The risk of inhalation exposure is negligible when product is in its final packaged form. If exposed and become symptomatic, move to fresh air and get medical attention if symptoms persist.
Skin Contact: Basic hygiene and appropriate precautions should prevent skin contact. If skin contact occurs, wash affected area with soap and water for at least 15 minutes. Should skin irritation, allergic reaction, or rash occur, remove contaminated clothing (if required) and seek medical advice.

Eye Contact: The risk of eye exposure is negligible when product is in its final packaged form. If eye contact occurs, flush immediately with water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

Ingestion: Ingestion is not an anticipated route of exposure. If accidental ingestion occurs, flush mouth out with water and get medical attention.

Most Important Symptoms and Effects Both Acute and Delayed

General: Please refer to the package insert for more detailed information.

Inhalation: None expected under normal conditions of use.

Skin Contact: May cause an allergic reaction in sensitive individuals.

Eye Contact: May cause minor eye irritation.

Chronic symptoms: Suspected of damaging fertility and the unborn child. May cause an allergic skin reaction.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention.

5. FIREFIGHTING MEASURES

Extinguishing Media

Suitable extinguishing media: Not flammable. Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media: None known.

Special Hazards Arising From the Substance or Mixture

Fire hazard: Not flammable

Explosion hazard: Product itself is not explosive but if dust is generated, dust clouds suspended in air can be explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

Advice for Firefighters

Precautionary measures fire: Exercise caution when fighting any chemical fire.

Firefighting instructions: Use water spray or fog for cooling exposed containers.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO₂).

Other information: Refer to Section 9 for flammability properties.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General measures: Avoid all contact with skin, eyes, or clothing. Avoid generating dust.

For Non-Emergency Personnel

Protective equipment: Use appropriate personal protection equipment (PPE).

Emergency procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective equipment: Equip cleanup crew with proper protection.

Environmental Precautions

Prevent entry to sewers and public waters.

Methods and Material for Containment and Cleaning Up

Methods for cleaning up: For small quantities associated with normal therapeutic use, collect spillage and transfer to a closed waste container for disposal. For large or bulk quantities, after absorption with inert material, collect spillage by sweeping up spilled material and place in a labeled, sealed container for proper disposal.

Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Patients/Consumers: Patients should adhere to the instructions provided within the product information insert or product label for appropriate consumer-specific information about this product when used according to the physician’s directions.

Hygiene measures: This SDS is for a pharmaceutical agent - Handling of this product in its final form presents minimal occupational exposure risk. In an occupational setting, handle in accordance with good industrial hygiene and safety procedures. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Use appropriate personal protective equipment when handling and observe good personal hygiene measures after handling.

Conditions for Safe Storage, Including Any Incompatibilities

Storage conditions: Store in a dry, cool and well-ventilated place. Protect from heat and direct sunlight.

Specific End Use(s)

Pharmaceutical. Refer to product insert for usage instructions and product information.
8. **EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control Parameters** Not applicable

**Exposure Controls**

Appropriate engineering controls: Not generally required. Site-specific risk assessments should be conducted to determine the appropriate exposure control measures. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.

**Personal protective equipment:** Not generally required. The use of personal protective equipment may be necessary as conditions warrant.

**Hand protection:** Wear protective gloves made from PVC, neoprene, nitrile, vinyl, or PVC/NBR.

**Eye protection:** In laboratory, medical or industrial settings, or operations in which airborne particulates will be generated, safety glasses with side shields are recommended.

**Skin and body protection:** In laboratory, medical or industrial settings, impervious disposable gloves and protective clothing are recommended if skin contact with drug product is possible.

**Respiratory protection:** When manufacturing or handling product in large quantities and dusts or particulates may be generated, maintain airborne concentrations below recommended limits. Workplace risk assessments should be completed before specifying and implementing respirator usage. NIOSH/MSHA approved respirators for protection should be used if respirators are found to be necessary.

9. **PHYSICAL AND CHEMICAL PROPERTIES**

**Information on Basic Physical and Chemical Properties**

- **Physical state**: Solid
- **Appearance**: Film-coated, round, unscored tablets
- **Odor and Odor Threshold**: Not available
- **pH**: Not available
- **Relative evaporation rate (butyl acetate=1)**: Not available
- **Melting/Freezing point**: Not available
- **Boiling point**: Not available
- **Flash point**: Not available
- **Auto-ignition temperature**: Not available
- **Decomposition Temperature**: Not available
- **Flammability (solid, gas)**: Not available
- **Upper/Lower flammable limit**: Not available
- **Vapor pressure**: Not available
- **Relative vapor density at 20 °C**: Not available
- **Relative density/Specific gravity**: Not available
- **Solubility**: Not available
- **Log Pow/Kow**: Not available
- **Viscosity (kinematic, dynamic)**: Not available
- **Explosion data**: Not available

10. **STABILITY AND REACTIVITY**

- **Reactivity**: Hazardous reactions will not occur under normal conditions.
- **Chemical Stability**: Stable under normal conditions.
- **Possibility of Hazardous Reactions**: Hazardous polymerization will not occur.
- **Conditions to Avoid**: Direct sunlight. Extremely high or low temperatures. Avoid creating or spreading dust.
- **Hazardous Decomposition Products**: Carbon oxides (CO, CO₂).

11. **TOXICOLOGICAL INFORMATION**

**Information on Toxicological Effects - Product**

- **Acute toxicity**: Not classified
- **LD50 and LC50 Data**: Not available
- **Respiratory or skin sensitization**: May cause an allergic skin reaction.
- **Skin Corrosion/Irritation**: Not classified
- **Eye Damage/Irritation**: Not classified
- **Germ cell mutagenicity**: Not classified
- **Teratogenicity**: Not available
- **Carcinogenicity**: Not classified
- **Specific target organ toxicity (repeated exposure)**: Not classified
- **Reproductive toxicity**: Suspected of damaging fertility or the unborn child.
Specific target organ toxicity (single exposure): Not classified
Aspiration hazard: Not classified
Information on Toxicological Effects - Ingredient(s)
LD50 and LC50 Data: Not applicable

12. ECOLOGICAL INFORMATION

Toxicity Not available
Persistence and Degradability Not available
Bioaccumulative Potential

13. DISPOSAL CONSIDERATIONS

Sewage disposal recommendations: Do not dispose of waste into sewer.
Waste disposal recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

14. TRANSPORT INFORMATION

In Accordance With ICAO/IATA/DOT/TDG
UN Number Not regulated for transport
UN Proper Shipping Name Not regulated for transport

15. REGULATORY INFORMATION

US Federal Regulations Not applicable
US State Regulations Not applicable
Canadian Regulations

Albuterol Sulfate Extended-Release Tablets
WHMIS Classification Uncontrolled product according to WHMIS classification criteria.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by CPR.

16. OTHER INFORMATION

Indication of changes: 24 May 2016 – Updated Section 1 information.
Data sources: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.
Other information: This document has been prepared in accordance with standards for workplace safety. The precautionary statements and warnings included might not apply in all cases. Your needs may vary depending on the potential for exposure in your workplace.

Party Responsible For The Preparation Of This Document:
Mylan Global Environmental, Health, and Safety Department
Phone Number: 304-599-2595

This SDS has been prepared for occupational exposure and intended to address some end-user concerns; however, patients/consumers are also strongly encouraged to review the product information insert or product label for consumer-specific information about this product. Patients/Consumers: Refer to the package insert or product label for appropriate consumer-specific information about this product when used according to manufacturer’s directions. To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for completeness of the information herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.
SAFETY DATA SHEET

SECTION I - IDENTIFICATION

Material Name
NASCO COUNTRY SCHOOL TEMPERA

Company Information
Handy Art Inc.
365 Sunnyside Drive
Milton, WI 53563
Phone 1-608-868-6873
Fax 1-608-868-6233
Email handyart@handyart.com

For emergencies call 608-868-6873
For health emergencies call the Poison Control Center 1-800-222-1222

SECTION II - HAZARDS IDENTIFICATION

Classification in accordance with paragraph (d) of 29 CFR 1910.1200.

There are no GHS label elements.

PRIMARY ROUTES OF ENTRY: INHALATION, INGESTION, EYE, SKIN

EFFECTS AND SYMPTOMS OF ACUTE EXPOSURE: NONE EXPECTED

EFFECTS AND SYMPTOMS OF CHRONIC EXPOSURE: NONE EXPECTED

CARCINOGEN LISTING: NTP: NO IARC: NO OSHA: NO

SEE SECTION III FOR COMPONENTS AFFECTED

MEDICAL CONDITIONS USUALLY AGGRAVATED BY OVER EXPOSURE TO THIS PRODUCT: NONE

SECTION III - COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Ingredients</th>
<th>CAS/EC #</th>
<th>PEL/TLV (MG/M#)</th>
<th>Max % Weight</th>
<th>NTP</th>
<th>IARC</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION IV - FIRST AID MEASURES

FIRST AID MEASURES: None required. No acute health effects expected.

SECTION V - FIRE FIGHTING MEASURES

FLASH POINT (METHOD): N/A
EXPLOSION LIMITS IN AIR (% by VOLUME): NOT EXPLOSIVE

AUTOIGNITION TEMPERATURE: N/A
SECTION VI - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE A MATERIAL IS SPILLED: Clean up in accordance with all applicable regulations. Absorb spillage with non-combustible, absorbent material. For waste disposal, see Section XIII.

SECTION VII - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN DURING STORAGE AND HANDLING: Good industrial hygiene practice requires that exposure be maintained below the TLV. This is preferably achieved through the provision of adequate ventilation. When exposure cannot be adequately controlled in this way, personal respiratory protection should be employed.

SECTION VIII - EXPOSURE CONTROLS / PERSONAL PROTECTION

RESPIRATORY PROTECTION AND SPECIAL VENTILATION REQUIREMENTS: NONE REQUIRED
OTHER PROTECTIVE EQUIPMENT (GLOVES, GOGGLES, ETC): NONE REQUIRED
WORK/HYGIENE PRACTICES: NONE REQUIRED
ENGINEERING CONTROLS: NONE REQUIRED

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: N/A
VAPOR PRESSURE: N/A
SPECIFIC VAPOR DENSITY (AIR=1): N/A
SOLUBILITY IN WATER: N/A
MELTING POINT: N/A
SPECIFIC GRAVITY: N/A
REACTIVITY IN WATER: NON-REACTIVE

SECTION X - STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION PRODUCTS: NONE
STABILITY: STABLE
CONDITIONS TO AVOID: NONE
INCOMPATIBILITY (MATERIALS TO AVOID): NONE
HAZARDOUS DECOMPOSITION PRODUCTS: NONE

SECTION XI - TOXICOLOGICAL INFORMATION

ACUTE EFFECTS ASSOCIATED WITH USE OF THIS MATERIAL: NONE Expected
The summed LD50 is 24816 mg/kg.
The summed LC50 is 84660 mg/cubic meter.
This product is not considered to be a known or suspected human carcinogen by NTP, IARC or OSHA (see section III)

SECTION XII - ECOLOGICAL INFORMATION

NO HARMFUL EFFECTS KNOWN OTHER THAN THOSE ASSOCIATED WITH SUSPENDED INERT SOLIDS IN WATER

SECTION XIII - DISPOSAL CONSIDERATIONS

RCRA HAZARD CLASS (40 CFR 261): THIS PRODUCT IS NOT CLASSIFIED AS A HAZARDOUS WASTE
WASTE DISPOSAL METHOD: DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.
SECTION XIV - TRANSPORTATION INFORMATION


SECTION XV - REGULATORY INFORMATION

CONTENTS OF THIS SDS COMPLY WITH OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200
EPA SARA TITLE III CHEMICAL LISTINGS
NONE

SECTION 302.4 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355):
NONE

SECTION 313 TOXIC CHEMICALS (40 CFR 372):
NONE

INTERNATIONAL REGULATIONS

CANADIAN WHMIS: THIS PRODUCT IS A CONTROLLED PRODUCT UNDER CANADA'S WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM. IT CONTAINS THE FOLLOWING TOXIC OR HIGHLY TOXIC MATERIALS:
FERRIC OXIDE
MICA
PROPYLENE GLYCOL

SUPPLEMENTAL STATE COMPLIANCE INFORMATION:

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) LISTED UNDER NEW JERSEY'S RIGHT TO KNOW PROGRAM
MICA
PIGMENT RED 101
PROPYLENE GLYCOL

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) REQUIRING NOTIFICATION TO THE STATE OF WASHINGTON UNDER THEIR CHILDREN'S SAFE PRODUCTS ACT:
NONYL PHENOL ETHOXYLATE

Under CPSC's consumer product regulations (16CFR1500.3 and 150014), this product has the following required acute and chronic hazard labeling:
NONE

SECTION XVI - OTHER INFORMATION

LAST REVISION DATE: 08/28/2015

Prepared by Duke OEM Toxicology
COLOR INFORMATION

This SDS applies to the following colors which are associated with hazardous and/or non-hazardous ingredients:

<table>
<thead>
<tr>
<th>Product Color</th>
<th>SKU</th>
<th>Hazardous Ingredient</th>
</tr>
</thead>
<tbody>
<tr>
<td>000 PEACH</td>
<td></td>
<td>(NONE)</td>
</tr>
<tr>
<td>005 WHITE</td>
<td></td>
<td>(NONE)</td>
</tr>
<tr>
<td>010 YELLOW</td>
<td></td>
<td>(NONE)</td>
</tr>
<tr>
<td>015 ORANGE</td>
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<td>(NONE)</td>
</tr>
<tr>
<td>020 RED</td>
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<td>(NONE)</td>
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<tr>
<td>025 MAGENTA</td>
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<td>(NONE)</td>
</tr>
<tr>
<td>030 BLUE</td>
<td></td>
<td>(NONE)</td>
</tr>
<tr>
<td>035 TURQUOISE</td>
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<td>(NONE)</td>
</tr>
<tr>
<td>040 VIOLET</td>
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<td>(NONE)</td>
</tr>
<tr>
<td>045 GREEN</td>
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<td>(NONE)</td>
</tr>
<tr>
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<td>(NONE)</td>
</tr>
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<td>(NONE)</td>
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<tr>
<td>060 GRAY</td>
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<td>(NONE)</td>
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<td>100 MAHOGANY</td>
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<td>(NONE)</td>
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<td>(NONE)</td>
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<td>115 OLIVE</td>
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<td>(NONE)</td>
</tr>
<tr>
<td>120 SALMON</td>
<td></td>
<td>(NONE)</td>
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<tr>
<td>125 NUTMEG</td>
<td></td>
<td>(NONE)</td>
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<td>150 FL YELLOW</td>
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<td>162 GOLD</td>
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<td>163 TREASURE GOLD</td>
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<tr>
<td>164 COPPER</td>
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<td>(NONE)</td>
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<tr>
<td>166 SILVER</td>
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<td>(NONE)</td>
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<tr>
<td>SPARKLE PEACH</td>
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<td>(NONE)</td>
</tr>
<tr>
<td>SPARKLE WHITE</td>
<td></td>
<td>(NONE)</td>
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<tr>
<td>SPARKLE YELLOW</td>
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<td>(NONE)</td>
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<td>SPARKLE ORANGE</td>
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<td>SPARKLE MAGENTA</td>
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<td>(NONE)</td>
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<tr>
<td>SPARKLE GREEN</td>
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<td>(NONE)</td>
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<tr>
<td>SPARKLE BROWN</td>
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<td>(NONE)</td>
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<tr>
<td>BRONZE</td>
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<td>(NONE)</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET

+Optimize Thick Hand Sanitizer

Section 1. Identification

GHS product identifier : +Optimize Thick Hand Sanitizer
Other means of identification : Not available.
Product code : 4022054/4022052
Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against
Not applicable.

Supplier's details : Keystone Research & Pharmaceutical
480 South Democrat Rd.
Gibbstown, NJ 08027
856-663-4700

Emergency telephone number (with hours of operation) : (800) 535-5053

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 3
SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2A
Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 68.2%
Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 1.2%

GHS label elements

Hazard pictograms :

Warning

Hazard statements : Flammable liquid and vapor.
Causes serious eye irritation.
Causes skin irritation.

Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention : Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Wash hands thoroughly after handling.

Date of issue/Date of revision : 8/31/2020
Date of previous issue : 7/20/2020
Version : 0.03
Section 2. Hazards identification

Response:
- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage:
Store in a well-ventilated place. Keep cool.

Disposal:
Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified:
None known.

Section 3. Composition/information on ingredients

Substance/mixture:
Mixture

Other means of identification:
Not available.

CAS number/other identifiers:
CAS number:
Not applicable.

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>CAS number</th>
<th>EC number</th>
<th>INCI Name</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanol</td>
<td>64-17-5</td>
<td>200-578-6</td>
<td>ALCOHOL</td>
<td>≥60 - ≤75</td>
</tr>
<tr>
<td>glycerol</td>
<td>56-81-5</td>
<td>200-289-5</td>
<td>GLYCERIN</td>
<td>≤3</td>
</tr>
</tbody>
</table>

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures:

Eye contact:
Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation:
Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact:
Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion:
Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person.
Section 4. First aid measures

If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

| Eye contact     | Causes serious eye irritation. |
| Inhalation      | No known significant effects or critical hazards. |
| Skin contact    | Causes skin irritation. |
| Ingestion       | No known significant effects or critical hazards. |

Over-exposure signs/symptoms

| Eye contact     | Adverse symptoms may include the following:  
|                 | pain or irritation  
|                 | watering  
|                 | redness  
| Inhalation      | No specific data. |
| Skin contact    | Adverse symptoms may include the following:  
|                 | redness  
|                 | irritation  
| Ingestion       | No specific data. |

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments: No specific treatment.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

| Suitable extinguishing media | Use dry chemical, CO₂, water spray (fog) or foam. |
| Unsuitable extinguishing media | Do not use water jet. |

Specific hazards arising from the chemical: Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

Hazardous thermal decomposition products: Decomposition products may include the following materials:  
| carbon dioxide  
| carbon monoxide  

Special protective actions for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities:
Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanol</td>
<td>ACGIH TLV (United States, 3/2019). STEL: 1000 ppm 15 minutes. OSHA PEL 1989 (United States, 3/1989). TWA: 1000 ppm 8 hours. TWA: 1900 mg/m³ 8 hours. NIOSH REL (United States, 10/2016). TWA: 1000 ppm 10 hours. TWA: 1900 mg/m³ 10 hours. OSHA PEL (United States, 5/2018). TWA: 1000 ppm 8 hours. TWA: 1900 mg/m³ 8 hours. OSHA PEL 1989 (United States, 3/1989). TWA: 5 mg/m³ 8 hours. Form: Respirable fraction TWA: 10 mg/m³ 8 hours. Form: Total dust OSHA PEL (United States, 5/2018). TWA: 5 mg/m³ 8 hours. Form: Respirable fraction TWA: 15 mg/m³ 8 hours. Form: Total dust</td>
</tr>
<tr>
<td>glycerol</td>
<td></td>
</tr>
</tbody>
</table>

Appropriate engineering controls: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection
## Section 8. Exposure controls/personal protection

| Hand protection | Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. |
| Body protection | Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. |
| Other skin protection | Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. |
| Respiratory protection | Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. |

## Section 9. Physical and chemical properties

### Appearance

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Liquid.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Opaque.</td>
</tr>
<tr>
<td>Odor</td>
<td>Alcohol-like.</td>
</tr>
<tr>
<td>pH</td>
<td>Not available.</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flash point</td>
<td>Closed cup: 25°C (77°F)</td>
</tr>
<tr>
<td>Lower and upper explosive (flammable) limits</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not available.</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.9</td>
</tr>
<tr>
<td>Solubility</td>
<td>Not available.</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Not available.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not available.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flow time (ISO 2431)</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

## Section 10. Stability and reactivity

| Reactivity | No specific test data related to reactivity available for this product or its ingredients. |
| Chemical stability | The product is stable. |
| Possibility of hazardous reactions | Under normal conditions of storage and use, hazardous reactions will not occur. |
Section 10. Stability and reactivity

Conditions to avoid: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Incompatible materials: Reactive or incompatible with the following materials: oxidizing materials

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanol</td>
<td>LC50 Inhalation Vapor</td>
<td>Rat</td>
<td>124700 mg/m³</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>7 g/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>12600 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Irritation/Corrosion

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanol</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 mg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>0.066666667 minutes 100 mg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>100 UI</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>500 mg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>400 mg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 20 mg</td>
<td>-</td>
</tr>
<tr>
<td>glycerol</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 mg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 mg</td>
<td>-</td>
</tr>
</tbody>
</table>

Classification

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>OSHA</th>
<th>IARC</th>
<th>NTP</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanol</td>
<td>-</td>
<td>3</td>
<td>-</td>
</tr>
</tbody>
</table>

Information on the likely routes of exposure: Not available.

Potential acute health effects

Eye contact: Causes serious eye irritation.
Inhalation: No known significant effects or critical hazards.
Skin contact: Causes skin irritation.
Ingestion: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics
Section 11. Toxicological information

Eye contact: Adverse symptoms may include the following:
- pain or irritation
- watering
- redness

Inhalation: No specific data.

Skin contact: Adverse symptoms may include the following:
- redness
- irritation

Ingestion: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects: Not available.
Potential delayed effects: Not available.

Long term exposure

Potential immediate effects: Not available.
Potential delayed effects: Not available.

Potential chronic health effects
Not available.

General: No known significant effects or critical hazards.
Carcinogenicity: No known significant effects or critical hazards.
Mutagenicity: No known significant effects or critical hazards.
Teratogenicity: No known significant effects or critical hazards.
Developmental effects: No known significant effects or critical hazards.
Fertility effects: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates
Not available.

Section 12. Ecological information

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanol</td>
<td>Acute EC50 17.921 mg/l Marine water</td>
<td>Algae - Ulva pertusa</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 2000 µg/l Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 25500 µg/l Marine water</td>
<td>Crustaceans - Artemia franciscana - Larvae</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 42000 µg/l Fresh water</td>
<td>Fish - Oncorhynchus mykiss</td>
<td>4 days</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 4.995 mg/l Marine water</td>
<td>Algae - Ulva pertusa</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 100 ul/L Fresh water</td>
<td>Daphnia - Daphnia magna - Neonate</td>
<td>21 days</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 0.375 ul/L Fresh water</td>
<td>Fish - Gambusia holbrooki - Larvae</td>
<td>12 weeks</td>
</tr>
</tbody>
</table>

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Section 12. Ecological information

Persistence and degradability
Not available.

Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP&lt;sub&gt;ow&lt;/sub&gt;</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanol</td>
<td>-0.35</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>glycerol</td>
<td>-1.76</td>
<td>-</td>
<td>low</td>
</tr>
</tbody>
</table>

Mobility in soil

Soil/water partition coefficient (K<sub>oc</sub>): Not available.

Other adverse effects: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

<table>
<thead>
<tr>
<th>DOT Classification</th>
<th>TDG Classification</th>
<th>Mexico Classification</th>
<th>ADR/RID</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
<td>Ethanol Solutions</td>
<td>Ethanol Solutions</td>
<td>Ethanol Solutions</td>
<td>Ethanol Solutions</td>
<td>Ethanol Solutions</td>
</tr>
<tr>
<td>UN proper shipping name</td>
<td>Ethanol Solutions</td>
<td>Ethanol Solutions</td>
<td>Ethanol Solutions</td>
<td>Ethanol Solutions</td>
<td>Ethanol Solutions</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Packing group</td>
<td>III</td>
<td>III</td>
<td>III</td>
<td>III</td>
<td>III</td>
</tr>
</tbody>
</table>

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Section 14. Transport information

<table>
<thead>
<tr>
<th>Environmental hazards</th>
<th>No.</th>
<th>Yes.</th>
<th>Yes.</th>
<th>Yes.</th>
<th>Yes.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Yes.</td>
<td>The environmentally hazardous substance mark is not required.</td>
<td>Yes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>The environmentally hazardous substance mark is not required.</td>
</tr>
</tbody>
</table>

Additional information

TDG Classification: Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3), 2.7 (Marine pollutant mark). The marine pollutant mark is not required when transported by road or rail.

ADR/RID: The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.

IMDG: The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

IATA: The environmentally hazardous substance mark may appear if required by other transportation regulations.

Special precautions for user: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL and the IBC Code: Not available.

Section 15. Regulatory information

U.S. Federal regulations: TSCA 8(a) CDR Exempt/Partial exemption: Not determined

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs): Not listed

Clean Air Act Section 602 Class I Substances: Not listed

Clean Air Act Section 602 Class II Substances: Not listed

DEA List I Chemicals (Precursor Chemicals): Not listed

DEA List II Chemicals (Essential Chemicals): Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ: Not applicable.

SARA 311/312

Classification: FLAMMABLE LIQUIDS - Category 3

SARA 311/312 Classification: SKIN IRRITATION - Category 2

SARA 311/312 Classification: EYE IRRITATION - Category 2A

Composition/information on ingredients

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10/12
Section 15. Regulatory information

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanol</td>
<td>≥60 - ≤75</td>
<td>FLAMMABLE LIQUIDS - Category 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SKIN IRRITATION - Category 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EYE IRRITATION - Category 2A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CARCINOGENICITY - Category 1A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EYE IRRITATION - Category 2A</td>
</tr>
<tr>
<td>glycerol</td>
<td>≤3</td>
<td></td>
</tr>
</tbody>
</table>

State regulations

Massachusetts: The following components are listed: ETHYL ALCOHOL; UNDENATURED ALCOHOL; GLYCYRINE MIST

New York: None of the components are listed.

New Jersey: The following components are listed: ETHYL ALCOHOL; ALCOHOL; GLYCERIN; 1,2, 3-PROPANETRIOL

Pennsylvania: The following components are listed: UNDENATURED ALCOHOL; ETHANOL; 1,2, 3-PROPANETRIOL

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Inventory list

Australia: All components are listed or exempted.

Canada: All components are listed or exempted.

China: All components are listed or exempted.

Europe: Not determined.

Japan: Japan inventory (ENCS): All components are listed or exempted.

Japan inventory (ISHL): Not determined.

Malaysia: Not determined.

New Zealand: All components are listed or exempted.

Philippines: All components are listed or exempted.

Republic of Korea: All components are listed or exempted.

Taiwan: All components are listed or exempted.

Thailand: Not determined.

Turkey: Not determined.

United States: All components are listed or exempted.

Viet Nam: All components are listed or exempted.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

<table>
<thead>
<tr>
<th></th>
<th>2</th>
<th>3</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>Flammability</td>
<td>Physical hazards</td>
<td></td>
</tr>
</tbody>
</table>

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Section 16. Other information

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History

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Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
UN = United Nations

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Information contained within this SDS is only to be distributed as required by law.
Material Safety Data Sheet

**Quick Identifier (In Plant Common Name)**
BRITE STAINLESS STEEL CLEANER & POLISH (WB)

**Manufactured For:**
PRIME SOURCE™
P.O. Box 41911
ST. Louis, MO 63141

**Emergency Telephone No.:**
800-424-9300 24 Hours

Date Prepared: September 22, 2004  Prepared By: Date: 9/23/04

**SECTION 1 - IDENTITY**

**Common Name:** (used on label)
Brite Stainless Steel Cleaner & Polish (WB)

**Chemical Name:** Mixture packaged in pressurized aerosol spray can.

**SECTION 2 - HAZARDOUS INGREDIENTS**

<table>
<thead>
<tr>
<th>Principal Hazardous Component(s)</th>
<th>CAS No.</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propane</td>
<td>74-98-6</td>
<td>Not Est.</td>
<td>1000 ppm</td>
<td></td>
</tr>
<tr>
<td>Butane</td>
<td>106-97-8</td>
<td>Not Est.</td>
<td>800 ppm</td>
<td></td>
</tr>
<tr>
<td>Petroleum Distillate</td>
<td>64742-47-8</td>
<td>Not Est.</td>
<td>Not Est.</td>
<td>100 ppm (mfr.) (525 mg/m³) for 8 hr. TWA (Company Rec.)</td>
</tr>
<tr>
<td>Petroleum Distillate</td>
<td>64741-44-2</td>
<td>Not Est.</td>
<td>400 ppm</td>
<td></td>
</tr>
</tbody>
</table>

*Section 313 Supplier Notification - Indicate hazardous ingredients which are toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

**SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>&gt; 200°F</td>
</tr>
<tr>
<td>Specific Gravity (H₂O=1)</td>
<td>0.91 - .99 g/mL</td>
</tr>
<tr>
<td>Vapor Pressure (Propellant)</td>
<td>N/A</td>
</tr>
<tr>
<td>% - VOC</td>
<td>20%</td>
</tr>
<tr>
<td>Evaporation Rate (BuAc=1)</td>
<td>&lt; 1.00</td>
</tr>
<tr>
<td>pH</td>
<td>7.00 - 7.50</td>
</tr>
<tr>
<td>Appearance and Odor</td>
<td>White, creamy milky opaque emulsion with lemon odor.</td>
</tr>
</tbody>
</table>

**SECTION 4 - FIRE & EXPLOSION DATA**

- **Flammability (per flame projection):** Non-Flammable
- **Flame Projection:** 0”
- **Extinguisher Media:** Alcohol Foam, CO₂, Dry Chemical (B-C), Water
- **Special Fire Fighting Procedures:** Keep containers cool using water spray. Use proper equipment to protect personnel from bursting containers.
- **Unusual Fire and Explosion Hazards:** Contents under pressure. Do not expose to temperatures exceeding 120°F as containers may vent, rupture or burst.

**SECTION 5 - PHYSICAL HAZARDS**

<table>
<thead>
<tr>
<th>Stability</th>
<th>Unstable ☐ Stable ■</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conditions to Avoid</td>
<td>Open Flames; Temp. &gt; 120°F.</td>
</tr>
<tr>
<td>Hazardous Polymerization</td>
<td>May Occur ☐ Will not Occur ■</td>
</tr>
<tr>
<td>Conditions to Avoid</td>
<td>None</td>
</tr>
<tr>
<td>Incompatibility (Materials to Avoid)</td>
<td>Strong oxidizers.</td>
</tr>
<tr>
<td>Hazardous Decomposition Products</td>
<td>CO₂</td>
</tr>
</tbody>
</table>

**Health**
<table>
<thead>
<tr>
<th>HMIS Symbol</th>
<th>HMIS</th>
<th>NFPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>1</td>
<td>Insignificant</td>
</tr>
</tbody>
</table>

**Flammability**
<table>
<thead>
<tr>
<th>HMIS Symbol</th>
<th>HMIS</th>
<th>NFPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability</td>
<td>1</td>
<td>Slight</td>
</tr>
</tbody>
</table>

**Reactivity**
<table>
<thead>
<tr>
<th>HMIS Symbol</th>
<th>HMIS</th>
<th>NFPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactivity</td>
<td>0</td>
<td>None</td>
</tr>
</tbody>
</table>
SECTION 6 - HEALTH HAZARDS

Routes of Entry

<table>
<thead>
<tr>
<th>Inhalation: Yes</th>
<th>Eyes / Skin: Yes</th>
<th>Ingestion: Unlikely</th>
</tr>
</thead>
</table>

Signs and Symptoms of Exposure (Acute & Chronic)

May cause skin and eye irritation.

Medical Conditions Generally Aggravated by Exposure

None Known

Chemical Listed as Carcinogen or Potential Carcinogen

National Toxicology Program

I.A.R.C. Monographs

OSHA

Emergency and First Aid Procedures

1. Inhalation

Remove victim to fresh air. Apply artificial respiration if necessary. Get medical attention.

2. Eyes

Flush eyes with water for at least 15 minutes. Get medical attention if irritation persists.

3. Skin

Wash affected areas with soap and water. Get medical attention if irritation persists.

4. Ingestion

Do not induce vomiting. Get medical attention.

SECTION 7 – SPECIAL PROTECTION INFORMATION

Respiratory Protection (Specify Type)

None required for normal use.

Ventilation Local Exhaust

Maintain adequate ventilation.

Mechanical (General) N/A Special N/A Other N/A

Protective Gloves

Wear gloves if skin contact causes irritation.

Eye Protection

Use when necessary to prevent eye contact.

Other Protective Clothing or Equipment

Wash hands after use.

SECTION 8 – SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be Taken Handling and Storage

Do not store at temperatures above 120°F. Do not puncture or incinerate containers. Keep out of reach of children. Store in accordance with NFPA 30B for Level 1 Aerosols.

Other Precautions

Read label precautions carefully. Follow label directions to avoid injury.

Steps to be Taken in Case Material is Released or Spilled

Soak up spilled liquid with absorbent material. Place in closed container.

Waste Disposal Methods

Dispose of in accordance with local, state, and federal regulations.

Transportation Info

UN 1950 Consumer Commodity ORM-D

We believe all information given is accurate. It is offered in good faith, but without guarantee. Since conditions are beyond our control, user assumes all responsibility and risk.
Dust Mop Treatment

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Dust Mop Treatment
GENERAL USE: For use on floor dust mops to attract and hold dust and grime.
PRODUCT DESCRIPTION: Waterbased Mop Treatment
CHEMICAL FAMILY: Glycol/detergent blend

DISTRIBUTOR
Pro Link, Inc.
500 Chapman Street
Canton, MA 02021
Customer Service: 781-828-9550

24 HR. EMERGENCY TELEPHONE NUMBERS
CHEM-TEL (Medical and Transportation): 800-255-3924
POISON CONTROL CENTER (Medical): 800-222-1222

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS
Health:
   Eye Irritation, Category 2A
   Skin Irritation, Category 3
   Target Organ Toxicity (Repeated exposure - oral), Category 2 (Kidney)
   Acute Toxicity (Oral), Category 4

GHS LABEL
Exclamation mark  Health hazard

SIGNAL WORD: WARNING

HAZARD STATEMENTS
   H319: Causes serious eye irritation.
   H316: Causes mild skin irritation.
   H302: Harmful if swallowed.
   3342E9DB: May cause damage to organs (kidney) through prolonged or repeated exposure if swallowed.

PRECAUTIONARY STATEMENT(S)
Prevention:
   P260: Do not breathe fumes, gas, mist, vapors or spray.
   P264: Wash hands thoroughly after handling.
   P270: Do not eat, drink or smoke when using this product.
   P262: Do not get in eyes, on skin, or on clothing.
   P280: Wear protective gloves/protective clothing/eye protection/face protection.
   P233: Keep container tightly closed.
   P102: Keep out of reach of children.

Response:
   P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
   P337+P313: If eye irritation persists: Get medical advice/attention.
   P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P330: Rinse mouth.
P332+P313: If skin irritation occurs: Get medical advice/attention.
P304+P312: IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.
P309+P311: IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.

Storage:
P404: Store in a closed container.
P405: Store locked up.

Disposal:
P501: Dispose of contents/container according to all local, state and Federal regulations.

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Clear Liquid

IMMEDIATE CONCERNS: Eye & Skin irritant

POTENTIAL HEALTH EFFECTS

EYES: Irritating, and may injure eye tissue if not removed promptly.
SKIN: Skin irritant with prolonged or repeated contact.
SKIN ABSORPTION: None Expected.
INGESTION: Harmful if swallowed.
INHALATION: Mist is irritating to nose, throat and lungs.

REPRODUCTIVE TOXICITY

TERATOGENIC EFFECTS: None known.
CARCINOGENICITY: Not Established
MUTAGENICITY: None known.
MEDICAL CONDITIONS AGGRAVATED: Previous skin conditions such as dermatitis may be aggrevated.

ROUTES OF ENTRY: Breathing of mist or vapors. Ingestion.

CANCER STATEMENT: None

WARNING CAUTION LABELS: Irritant

PHYSICAL HAZARDS: None Expected.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Wt.%</th>
<th>CAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol</td>
<td>25 - 30</td>
<td>107-21-1</td>
</tr>
<tr>
<td>Nonylphenol Ethoxylate</td>
<td>0 - 5</td>
<td>9016-45-9</td>
</tr>
<tr>
<td>Fragrance</td>
<td>0 - 1</td>
<td>N/A</td>
</tr>
<tr>
<td>Water</td>
<td>80 - 85</td>
<td>7732-18-5</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

EYES: Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Seek medical attention immediately.

SKIN: Wash with soap and water. Get medical attention if irritation develops or persists.

INGESTION: DO NOT DELAY. Do not induce vomiting. If victim is alert, rinse mouth and drink 1/2 to 1 glass of water to help dilute the material. Do not give liquids to a drowsy, convulsing, or unconscious person. Transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

INHALATION: Remove victim to fresh air and monitor. Seek medical advise if irritation persists.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Burning sensation with tearing, redness.
SKIN: Prolonged contact will cause irritation marked by redness, burning sensation.
SKIN ABSORPTION: Not Established
INGESTION: Irritation of mouth, throat, along with stomach upset, vomiting.
INHALATION: Irritation of nose, throat and lungs with coughing, sneezing, possible difficulty breathing.
ACUTE TOXICITY: Not Established

NOTES TO PHYSICIAN: Kidney toxicity may be recognized by blood in the urine or increased or decreased urine flow. Other signs and symptoms can include nausea, vomiting, abdominal cramps, diarrhoea, lumbar pain shortly after ingestion, and possibly narcosis and death. Eye irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blurred vision. Skin irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blisters. Respiratory irritation signs and symptoms may include a temporary burning sensation of the nose and throat, coughing, and/or difficulty breathing.

ADDITIONAL INFORMATION: IMMEDIATE TREATMENT IS EXTREMELY IMPORTANT! May cause significant renal, respiratory, and CNS toxicity. May cause significant acidosis. Call a doctor or poison control center for guidance.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: NA = Not Applicable
GENERAL HAZARD: NA = Not Applicable
EXTINGUISHING MEDIA: Not required. Water based material.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Avoid runoff into storm sewers and ditches which lead to waterways.
LARGE SPILL: Avoid walking in material. Prevent product from entering into stream, soil, storm sewer or other bodies of water.
ENVIRONMENTAL PRECAUTIONS
   WATER SPILL: Avoid discharges into open waterways.
   LAND SPILL: Avoid discharge to soil.
GENERAL PROCEDURES: Isolate spill or leak area immediately. Keep unauthorized personnel away. Do not touch or walk through spilled material. Prevent entry into waterways, sewers, or confined areas. Absorb with dry earth, sand or other non-combustible material and transfer to containers.
SPECIAL PROTECTIVE EQUIPMENT: Eye protection, rubber gloves, rubber boots to protect feet.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Do not contaminate water, food, or feed by storage or disposal.
HANDLING: Wear eye protection, rubber gloves when handling concentrate.
STORAGE: Store in area inaccessible to children.
STORAGE TEMPERATURE: Store at ambient temperatures.
STORAGE PRESSURE: Store at ambient atmospheric pressure.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Acute Exposure Limits</th>
<th>Chronic Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ACGIH TLV ppm</td>
<td>mg/m³</td>
</tr>
<tr>
<td>Ethylene Glycol</td>
<td>TWA</td>
<td>100</td>
</tr>
</tbody>
</table>

ENGINEERING CONTROLS: Provide mechanical ventilation when used in confined areas, or areas with poor ventilation.
PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Chemical splash goggles.

**SKIN:** Rubber or other chemical resistant gloves. Rubber boots of used on floors.

**RESPIRATORY:** A respirator is not needed under normal and intended conditions of product use.

**PROTECTIVE CLOTHING:** Chemical resistant outerwear (tyvek) if contact with spray or mist is anticipated.

**WORK HYGIENIC PRACTICES:** Wash with soap and water after handling. Do not eat, drink or smoke while using product.

---

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSICAL STATE</td>
<td>Liquid</td>
</tr>
<tr>
<td>ODOR</td>
<td>Banana</td>
</tr>
<tr>
<td>ODOR THRESHOLD</td>
<td>Not Established</td>
</tr>
<tr>
<td>COLOR</td>
<td>Water Clear</td>
</tr>
<tr>
<td>pH</td>
<td>7.0 to 9.0</td>
</tr>
<tr>
<td>PERCENT VOLATILE</td>
<td>&gt;70</td>
</tr>
<tr>
<td>FLASH POINT AND METHOD</td>
<td>None</td>
</tr>
<tr>
<td>FLAMMABLE LIMITS</td>
<td>N/A</td>
</tr>
<tr>
<td>AUTOIGNITION TEMPERATURE</td>
<td>NA = Not Applicable</td>
</tr>
<tr>
<td>VAPOR PRESSURE</td>
<td>≤ 20 mm Hg at (68°F)</td>
</tr>
<tr>
<td>VAPOR DENSITY</td>
<td>≤ 1 Air = 1</td>
</tr>
<tr>
<td>BOILING POINT</td>
<td>212°F; 100°C</td>
</tr>
<tr>
<td>FREEZING POINT</td>
<td>&lt; 0°C (32°F)</td>
</tr>
<tr>
<td>MELTING POINT</td>
<td>Not Available</td>
</tr>
<tr>
<td>THERMAL DECOMPOSITION</td>
<td>Not Available</td>
</tr>
<tr>
<td>SOLUBILITY IN WATER</td>
<td>Complete</td>
</tr>
<tr>
<td>EVAPORATION RATE</td>
<td>(Water = 1) &lt;1.0</td>
</tr>
<tr>
<td>DENSITY</td>
<td>8.57 at (68°F)</td>
</tr>
<tr>
<td>SPECIFIC GRAVITY</td>
<td>1.027 grams/ml.</td>
</tr>
<tr>
<td>VISCOSITY</td>
<td>Water thin</td>
</tr>
<tr>
<td>(VOC)</td>
<td>None</td>
</tr>
</tbody>
</table>

### 10. STABILITY AND REACTIVITY

**REACTIVITY:** Stable

**HAZARDOUS POLYMERIZATION:** No

**CONDITIONS TO AVOID:** Not Established

**POSSIBILITY OF HAZARDOUS REACTIONS:** None Expected.

**HAZARDOUS DECOMPOSITION PRODUCTS:** None known.

**INCOMPATIBLE MATERIALS:** Strong acids, oxidizers.

---

### 11. TOXICOLOGICAL INFORMATION

**ACUTE**
<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ORAL LD$_{50}$ (rat)</th>
<th>DERMAL LD$_{50}$ (rabbit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol</td>
<td>300 to 2000 mg/kg</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>Nonylphenol Ethoxylate</td>
<td>16000 mg/kg (rat)</td>
<td>4490 mg/kg (rabbit)</td>
</tr>
</tbody>
</table>

**EYES:** Not Established  
**DERMAL LD$_{50}$:** Not Established  
**SKIN ABSORPTION:** None Expected.  
**ORAL LD$_{50}$:** Not Established  
**INHALATION LC$_{50}$:** Not Established  

**EYE EFFECTS:** Moderate to severe eye irritant.  
**SKIN EFFECTS:** Moderate skin irritant.  
**IRRITATION:** Irritant  
**SENSITIZATION:** No known significant effects or critical hazards.  
**GENETIC EFFECTS:** No known significant effects or critical hazards.  
**REPRODUCTIVE EFFECTS:** No known significant effects or critical hazards.  
**TARGET ORGANS:** Can cause kidney damage with prolonged or repeated oral exposure.  
**MUTAGENICITY:** No known significant effects or critical hazards.

### 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL DATA:** Not Established  
**ECOTOXICOLOGICAL INFORMATION:** Not Established  
**AQUATIC TOXICITY (ACUTE):** Not Established  
**CHEMICAL FATE INFORMATION:** Not Established

### 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Any method in accordance with local, state and federal laws. Best method is to recycle or reuse for intended purpose. Small amounts (less than 1 gallon) may be diluted with copious amounts of water and disposed of into sanitary sewer.  
**FOR LARGE SPILLS:** Consult with local and state authorities for large volume disposal.  
**PRODUCT DISPOSAL:** See above.  
**EMPTY CONTAINER:** Rinse container with clear water. Offer container for recycling, or dispose of in trash.  
**RCRA/EPA WASTE INFORMATION:** NA = Not Applicable

### 14. TRANSPORT INFORMATION

**DOT (DEPARTMENT OF TRANSPORTATION)**  
**PROPER SHIPPING NAME:** Cleaning Compound, not regulated.  
**ROAD AND RAIL (ADR/RID)**  
**PROPER SHIPPING NAME:** Cleaning Compound, not regulated.  
**AIR (ICAO/IATA)**  
**SHIPPING NAME:** Cleaning Compound, not regulated.  
**VESSEL (IMO/IMDG)**  
**SHIPPING NAME:** Cleaning Compound, not regulated.

### 15. REGULATORY INFORMATION
UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Health Hazard - Acute; Health Hazard - Chronic

FIRE: No  PRESSURE GENERATING: No  REACTIVITY: No  ACUTE: Yes  CHRONIC: Yes

313 REPORTABLE INGREDIENTS: Ethylene Glycol

EPCRA SECTION 313 SUPPLIER NOTIFICATION

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Wt.%</th>
<th>CAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol</td>
<td>25 - 30</td>
<td>107-21-1</td>
</tr>
</tbody>
</table>

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: NA = Not Applicable

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: Ethylene Glycol

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Wt.%</th>
<th>CERCLA RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol</td>
<td>25 - 30</td>
<td>5,000 lbs.</td>
</tr>
</tbody>
</table>

CERCLA RQ: 5000 lbs.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All ingredients are listed on the TSCA Chemical Inventory.

STATES WITH SPECIAL REQUIREMENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol</td>
<td>Massachusetts Right to Know Substance</td>
</tr>
<tr>
<td></td>
<td>New Jersey Right To Know Substance</td>
</tr>
<tr>
<td></td>
<td>Pennsylvania Right to Know Substance</td>
</tr>
<tr>
<td>Nonylphenol Ethoxylate</td>
<td>Massachusetts Right to Know Substance</td>
</tr>
<tr>
<td></td>
<td>New Jersey Right To Know Substance</td>
</tr>
<tr>
<td></td>
<td>Pennsylvania Right to Know Substance</td>
</tr>
</tbody>
</table>

CALIFORNIA PROPOSITION 65: None

CARCINOGEN: No listed substance

16. OTHER INFORMATION

PREPARED BY: Regulatory Affairs Department  Date Prepared: 05/14/2015

<table>
<thead>
<tr>
<th>HMIS RATING</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HEALTH</td>
<td>2</td>
</tr>
<tr>
<td>FLAMMABILITY</td>
<td>0</td>
</tr>
<tr>
<td>PHYSICAL HAZARD</td>
<td>0</td>
</tr>
<tr>
<td>PERSONAL PROTECTION</td>
<td>B</td>
</tr>
</tbody>
</table>

NFPA CODES

MANUFACTURER DISCLAIMER: This company cannot anticipate all conditions of handling and use of this product. Therefore, this company accepts no responsibility for results obtained by the application of this information, or the safety and suitability of the product either alone or in combination with other products. It is the responsibility of the employer and/or user to provide a safe workplace, using health and safety information contained herein as a guide. This company will accept no liability for damages or losses incurred from the improper handling and use of this product.
ITEM NUMBER: YA006
VERSION 2 EFFECTIVE DATE: 04/12/01 SUPERCEDES: 04/22/98 PREPARED BY: Ron Cepa
Section(s) Revised: HMIS, II, IV, VI, VIII
IDENTITY (As Used On Label and List): FURNITURE POLISH

EMERGENCY MEDICAL Telephone# 1-800-228-5635 (24 Hrs)
Outside of the U.S.A. Call 651-632-9275
PRODUCT HAZARD RATINGS (HMIS): - Health = 1, Fire = 2, Reactivity = 0, Protective Equipment = A
(Rating Legend: 4 = Extreme, 3 = Serious, 2 = Moderate, 1 = Slight, 0 = Minimal)

SECTION I
PRO-LINK TELEPHONE NUMBER FOR INFORMATION: 1-800-74LINKS
DATE PRINTED: 3/1/05
Canton, MA 02021 NAME OF PREPARER: Regulatory Compliance

SECTION II - HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

<table>
<thead>
<tr>
<th>Chemical Names</th>
<th>CAS#</th>
<th>SARA Title III SEC 313</th>
<th>ACGIH TLV-TWA/STEL</th>
<th>OSHA PEL-TWA/STEL</th>
<th>% By Wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquefied petroleum gas mixture</td>
<td>See below</td>
<td>No</td>
<td>--</td>
<td>--</td>
<td>1-5</td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6</td>
<td>No</td>
<td>1000ppm NE</td>
<td>NE</td>
<td>--</td>
</tr>
<tr>
<td>n-Butane</td>
<td>106-97-8</td>
<td>No</td>
<td>600ppm NE</td>
<td>NE</td>
<td>--</td>
</tr>
</tbody>
</table>

Balance of ingredients are non-hazardous or below reportable levels.

SECTION III - PHYSICAL CHARACTERISTICS

Boiling Point: NA Vapor Pressure (psig): 117@130F Specific Gravity (H20=1): <1
Solubility/Water: 10% Vapor Density (AIR=1): >1 Evaporation Rate (Ether=1): <1
Appearance and Odor: Lemon odor, cone spray

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Aerosol Flammability: Product is not required to be labeled as flammable as described in 16 CFR 1500.3 and 1500.45.
Flashpoint: <0F (Propellant); None even until boiling (Concentrate)
Flammable Limits - % Volume In Air (Propellant): LEL: 1.9 UEL: 9.5
Extinguishing Media: Carbon dioxide, foam and/or dry chemical may be used.
Special Fire Fighting Procedures: Containers should be cooled with water to prevent vapor pressure build up.
Use equipment or shielding, as required, to protect personnel from bursting, rupturing or venting containers.
Unusual Fire and Explosion Hazards: At elevated temperatures (over 54C-130F) containers exposed to direct flame or heat contact should be cooled with water to prevent weakening of container structure.

SECTION V - REACTIVITY DATA

Stability: Stable Hazardous Polymerization: NA
Incompatibility (Materials to Avoid): Heat, open flame and oxidizing agents
Hazardous Decomposition Products: Carbon monoxide in small amounts and additional toxic chemicals may be formed in small amounts.
Conditions to Avoid: Do not store above 54C-130F. Keep away from heat, direct sunlight, open flames or sparks. Dropping of containers may cause bursting.
**SECTION VI - HEALTH HAZARD DATA**

Route(s) of Entry - Inhalation: X  Eyes: X  Skin: X  Ingestion:

Signs and Symptoms of Exposure: Inhalation may cause dizziness, drowsiness and throat irritation. Eye contact may be irritating. Skin contact may cause slight redness. Ingestion of aerosols is not a likely route however, product is of low toxicity.

Emergency and First Aid Procedures: Eye Contact: Flush eyes with plenty of water for 15 minutes while holding eyelids open. Get medical attention if irritation persists. Skin Contact: Remove contaminated clothing. Flush skin with water; follow by washing with soap and water. If irritation occurs, get medical attention. Do not reuse clothing until cleaned. Inhalation: Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get medical attention. Ingestion: Get medical attention.

**CARCINOGENICITY:**
No regulated ingredients.

**TOXICITY INFORMATION:**
No data available.

---

**SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE**

Releases or Spilled: Remove all sources of ignition and ventilate area. Soak up spill with an inert absorbent and place into a designated disposal container. Consult local regulatory agency for proper disposition of material.

Waste Disposal Method: Do not puncture or incinerate containers. When contents are depleted continue to depress button until all gas is expelled. Dispose of container in accordance with local, state, and federal regulations.

Handling And Storing: Avoid breathing vapor. Keep away from heat and flame. Use with adequate ventilation. Do not puncture or incinerate containers. Do not expose to direct sunlight or store at temperatures above 130F (54C). Store as Level 1 Aerosol (NFPA 30B).

Other Precautions: Please read and follow the directions on the product label; they are your best guide to using this product in the most effective way, and give the necessary safety precautions to protect your health.

---

**SECTION VIII - EMPLOYEE PROTECTION**

Respiratory Protection (Type): None required if good ventilation is maintained. If exposure exceeds occupational exposure limits (Sec. II), use a NIOSH approved respirator to prevent overexposure.

Ventilation: General ventilation is adequate under normal conditions, mechanical ventilation is optional.

Protective Gloves: Chemical resistant gloves are recommended - consult glove manufacturer to determine the proper type for a specific operation.

Eye Protection: Chemical safety glasses are recommended.

Other Protective Clothing or Equipment: Wear impervious clothing to prevent skin contact.

Work/Hygienic Practices: Ensure strict sanitary conditions are conformed to when working around chemicals. Protective clothing and equipment should be in accordance with 29 CFR 1910.132 and CFR 1910.133.

---

**SECTION IX - OTHER REGULATORY CONTROLS**

Governmental Listings: Ingredients of this product are listed on the EPA/TSCA Inventory of Chemical Substances.

---

**SECTION X - TRANSPORTATION REQUIREMENTS (D.O.T. CLASSIFICATION)**

Shipping Name: Consumer Commodity  Hazard Class: ORM-D

NG-- Negligible  NA-- Not Applicable  NE-- Not Established  UN-- Unavailable  ND-- Not Determined

While the information set forth herein is believed to be accurate as of the date hereof, the Company makes no warranty or guarantee, express or implied, and disclaims all liability arising out of the use of this information.

EFFECTIVE DATE: 04/12/01  SUPERCEDES: 04/22/98  PREPARED BY: Ron Cepa
1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Pro Orange  
GENERAL USE: Ready to use all purpose cleaner  
PRODUCT DESCRIPTION: All Purpose Spray Cleaner  
CHEMICAL FAMILY: Detergent blend  

DISTRIBUTOR:  
Pro Link, Inc.  
500 Chapman Street  
Canton, MA 02021  
Customer Service: 781-828-9550

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS  
This product is not classified as hazardous according to OSHA 29CFR 1910.1200 (HazCom 2012-GHS).

GHS LABEL

HAZARD STATEMENTS

PRECAUTIONARY STATEMENT(S)

Response:  
P314: Get medical advice/attention if you feel unwell.

Storage:  
P404: Store in a closed container.

Disposal:  
P501: Dispose of contents/container according to all local, state and Federal regulations.

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Light amber liquid

IMMEDIATE CONCERNS: No known significant effects or critical hazards.

POTENTIAL HEALTH EFFECTS

EYES: Contact may cause mild eye irritation.

SKIN: No known significant effects or critical hazards.

SKIN ABSORPTION: No known significant effects or critical hazards.

INGESTION: No known significant effects or critical hazards.

INHALATION: No known significant effects or critical hazards.

REPRODUCTIVE TOXICITY

TERATOGENIC EFFECTS: None known.

CARCINOGENICITY: No listed substance

MUTAGENICITY: None known.

ROUTES OF ENTRY: No known significant effects or critical hazards.

CANCER STATEMENT: No listed substance

WARNING CAUTION LABELS: None

PHYSICAL HAZARDS: None Expected.
3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Wt.%</th>
<th>CAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Peroxide</td>
<td>0 - 1</td>
<td>7722-84-1</td>
</tr>
<tr>
<td>d-Limonene</td>
<td>0 - 1</td>
<td>5989-27-5</td>
</tr>
<tr>
<td>Propylene Glycol</td>
<td>0 - 1</td>
<td>57-55-6</td>
</tr>
<tr>
<td>Water</td>
<td>95 - 98</td>
<td>7732-18-5</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

**EYES:** Rinse with plenty of water.

**SKIN:** Rinse with plenty of water.

**INGESTION:** Rinse mouth. Get medical attention if you feel un-well.

**INHALATION:** Seek medical attention if you feel un-well.

**SIGNS AND SYMPTOMS OF OVEREXPOSURE**

**EYES:** Slight discomfort with redness, watering eyes.

**SKIN:** No known significant effects or critical hazards.

**INGESTION:** No known significant effects or critical hazards.

**INHALATION:** No known significant effects or critical hazards.

**ACUTE TOXICITY:** None known.

**CHRONIC EFFECTS:** No known significant effects or critical hazards.

5. FIRE FIGHTING MEASURES

**FLAMMABLE CLASS:** NA = Not Applicable

**EXTINGUISHING MEDIA:** No special requirements.

**EXPLOSION HAZARDS:** None

**FIRE FIGHTING PROCEDURES:** NA = Not Applicable

6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Avoid walking in product. Wipe up or otherwise flush small spills to sanitary sewer.

**LARGE SPILL:** Avoid walking in material. Prevent product from entering into stream, soil, storm sewer or other bodies of water.

**ENVIRONMENTAL PRECAUTIONS**

**WATER SPILL:** No known significant effects or critical hazards.

**LAND SPILL:** No known significant effects or critical hazards.

**AIR SPILL:** NA = Not Applicable

7. HANDLING AND STORAGE

**GENERAL PROCEDURES:** Close container after use.

**HANDLING:** No special requirements.

**STORAGE:** Store in closed container in an area inaccessible to children.

**STORAGE TEMPERATURE:** Store at ambient temperatures.

**STORAGE PRESSURE:** Store at ambient atmospheric pressure.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION
### EXPOSURE GUIDELINES

#### OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ppm</th>
<th>mg/m³</th>
<th>ppm</th>
<th>mg/m³</th>
<th>ppm</th>
<th>mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Peroxide</td>
<td>TWA</td>
<td>1.4</td>
<td>NL</td>
<td>NL</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>STEL</td>
<td></td>
<td></td>
<td></td>
<td>NL</td>
<td>NL</td>
</tr>
<tr>
<td>d-Limonene</td>
<td>TWA</td>
<td>[1]</td>
<td>[1]</td>
<td>[1]</td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

Footnotes:
1. Not Established

#### ENGINEERING CONTROLS:
No special requirements.

#### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Safety glasses with side shields.

**SKIN:** No special requirements.

**RESPIRATORY:** No special requirements.

**PROTECTIVE CLOTHING:** NA = Not Applicable

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Liquid

**ODOR:** Citrus

**ODOR THRESHOLD:** Not Established

**COLOR:** Light amber

**pH:** 4.0 to 7.0

**PERCENT VOLATILE:** >98

**FLASH POINT AND METHOD:** None

**FLAMMABLE LIMITS:** N/A to N/A

**AUTOIGNITION TEMPERATURE:** NA = Not Applicable

**VAPOR PRESSURE:** ~ 20 mm Hg at (68°F)

**VAPOR DENSITY:** 1 Air = 1

**BOILING POINT:** 212°F; 100°C

**FREEZING POINT:** 32°F; 0°C

**SOLUBILITY IN WATER:** Complete

**EVAPORATION RATE:** (Water =1) 1.0

**DENSITY:** 8.34 at 20°C (68°F)

**SPECIFIC GRAVITY:** 1 grams/ml.

**VISCOITY:** Water thin.

(VOC): None

### 10. STABILITY AND REACTIVITY

**REACTIVITY:** Stable

**HAZARDOUS POLYMERIZATION:** Will not occur.

**STABILITY:** Stable under normal storage and use conditions.

**CONDITIONS TO AVOID:** None

**HAZARDOUS DECOMPOSITION PRODUCTS:** None Expected.
INCOMPATIBLE MATERIALS: None known.

11. TOXICOLOGICAL INFORMATION

ACUTE

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ORAL LD$_{50}$ (rat)</th>
<th>DERMAL LD$_{50}$ (rabbit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Peroxide</td>
<td>&gt; 2000 mg/kg</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>d-Limonene</td>
<td>4400 mg/kg (rat)</td>
<td>5000 mg/kg (rabbit)</td>
</tr>
</tbody>
</table>

EYES: Not Established

DERMAL LD$_{50}$: No known significant effects or critical hazards.

SKIN ABSORPTION: No known significant effects or critical hazards.

INHALATION LC$_{50}$: No known significant effects or critical hazards.

EYE EFFECTS: No known significant effects or critical hazards.

SKIN EFFECTS: No known significant effects or critical hazards.

CHRONIC: No known significant effects or critical hazards.

CARCINOGENICITY

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>NTP Status</th>
<th>IARC Status</th>
<th>OSHA Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Peroxide</td>
<td></td>
<td>Group 3 - Not classifiable as to its carcinogenicity to Humans</td>
<td></td>
</tr>
<tr>
<td>d-Limonene</td>
<td>No listed substance</td>
<td>Group 3 - Not classifiable as to its carcinogenicity to Humans</td>
<td>No listed substance</td>
</tr>
</tbody>
</table>

IRRITATION: Not Established

SENSITIZATION: No known significant effects or critical hazards.

NEUROTOXICITY: No known significant effects or critical hazards.

REPRODUCTIVE EFFECTS: No known significant effects or critical hazards.

MUTAGENICITY: No known significant effects or critical hazards.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: No known significant effects or critical hazards.

ECOTOXICOLOGICAL INFORMATION: Not Established

AQUATIC TOXICITY (ACUTE): No known significant effects or critical hazards.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Small amounts (less than 5 gallons) may be disposed of in sanitary sewer. Consult local authorities for additional disposal information.

FOR LARGE SPILLS: Consult with local and state authorities for large volume disposal.

PRODUCT DISPOSAL: See above.

EMPTY CONTAINER: Offer container for recycling, or dispose of in trash.

RCRA/EPA WASTE INFORMATION: NA = Not Applicable
14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Cleaning Compound, not regulated.

U.S. CUSTOMS HARMONIZATION NUMBER: 3402.90.10.00

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: NA = Not Applicable

FIRE: No  PRESSURE GENERATING: No  REACTIVITY: No  ACUTE: No  CHRONIC: No

313 REPORTABLE INGREDIENTS: None

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: NA = Not Applicable

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: NA = Not Applicable

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All ingredients are listed on the TSCA Chemical Inventory.

STATES WITH SPECIAL REQUIREMENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Peroxide</td>
<td>Massachusetts Right to Know Substance</td>
</tr>
<tr>
<td></td>
<td>New Jersey Right To Know Substance</td>
</tr>
<tr>
<td></td>
<td>New York Right to Know Substance</td>
</tr>
<tr>
<td></td>
<td>Pennsylvania Right to Know Substance</td>
</tr>
<tr>
<td>d-Limonene</td>
<td>Pennsylvania Right to Know Substance</td>
</tr>
<tr>
<td></td>
<td>New Jersey Right To Know Substance</td>
</tr>
</tbody>
</table>

CALIFORNIA PROPOSITION 65: No listed substance

CARCINOGEN: No listed substance

16. OTHER INFORMATION

PREPARED BY: Regulatory Affairs Department  Date Prepared: 05/15/2015

HMIS RATING

<table>
<thead>
<tr>
<th></th>
<th>HEALTH</th>
<th>FLAMMABILITY</th>
<th>PHYSICAL HAZARD</th>
<th>PERSONAL PROTECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>A</td>
</tr>
</tbody>
</table>

NFPA CODES

MANUFACTURER DISCLAIMER: This company cannot anticipate all conditions of handling and use of this product. Therefore, this company accepts no responsibility for results obtained by the application of this information, or the safety and suitability of the product either alone or in combination with other products. It is the responsibility of the employer and/or user to provide a safe workplace, using health and safety information contained herein as a guide. This company will accept no liability for damages or losses incurred from the improper handling and use of this product.
1 Identification

- Product identifier
- Trade name: Problem Solver-Baseboard Stripper
- Article number: 239
- Application of the substance / the mixture Stripper
- Details of the supplier of the Safety Data Sheet
  - Manufacturer/Supplier: ITW Pro Brands
  - 805 East Old 56 Highway
  - Olathe, Kansas 66061
  - Phone: 1-800-224-4860
- Emergency telephone number: Infotrac Emergency Hotline: 1-800-535-5053

2 Hazard(s) identification

- Classification of the substance or mixture

  ![GHS04 Gas cylinder]

  Press. Gas H280 Contains gas under pressure; may explode if heated.

  ![GHS07]

  Skin Irrit. 2 H315 Causes skin irritation.
  Eye Irrit. 2A H319 Causes serious eye irritation.

- Label elements
  - GHS label elements
    The product is classified and labeled according to the Globally Harmonized System (GHS).
  - Hazard pictograms

    ![GHS04 GHS07]

- Signal word Warning

- Hazard-determining components of labeling:
  - Potassium hydroxide

- Hazard statements
  - H280 Contains gas under pressure; may explode if heated.
  - H315 Causes skin irritation.
  - H319 Causes serious eye irritation.

- Precautionary statements

  P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
  P251 Pressurized container: Do not pierce or burn, even after use.
  P280 Wear protective gloves / eye protection.

(Contd. on page 2)
Trade name: Problem Solver-Baseboard Stripper

- P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P332+P313 If skin irritation occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P302+P352 If on skin: Wash with plenty of water.
- P410+P403 Protect from sunlight. Store in a well-ventilated place.

- **Hazard description:**
- **WHMIS-symbols:**
  A - Compressed gas
  D2B - Toxic material causing other toxic effects

- **Classification system:**
- **NFPA ratings (scale 0 - 4)**
  Health = 1
  Fire = 1
  Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**
  Health = 1
  Fire = 1
  Reactivity = 0

- **Other hazards**
- **Results of PBT and vPvB assessment**
  - PBT: Not applicable.
  - vPvB: Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Mixture of the substances listed below with nonhazardous additions.

#### Dangerous components:

<table>
<thead>
<tr>
<th>Code</th>
<th>Material</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-28-5</td>
<td>Isobutane</td>
<td>5-10%</td>
</tr>
<tr>
<td></td>
<td>Flame. Gas 1, H220</td>
<td></td>
</tr>
<tr>
<td>111-76-2</td>
<td>2-butoxyethanol</td>
<td>5-10%</td>
</tr>
<tr>
<td></td>
<td>Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Flam. Liquid. 4, H227</td>
<td></td>
</tr>
<tr>
<td>7320-34-5</td>
<td>Tetrapotassium pyrophosphate</td>
<td>1-5%</td>
</tr>
<tr>
<td></td>
<td>Eye Irrit. 2A, H319</td>
<td></td>
</tr>
</tbody>
</table>

(Contd. on page 3)
4 First-aid measures

- **Description of first aid measures**
- **General information:** Take affected persons out into the fresh air.
- **After inhalation:**
  Supply fresh air; consult doctor in case of complaints.
  Provide oxygen treatment if affected person has difficulty breathing.
- **After skin contact:**
  Immediately rinse with water.
  If skin irritation is experienced, consult a doctor.
- **After eye contact:**
  Remove contact lenses if worn.
  Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
  Unlikely route of exposure.
  Rinse out mouth and then drink plenty of water.
  Do not induce vomiting; immediately call for medical help.
- **Most important symptoms and effects, both acute and delayed**
  - Headache
  - Breathing difficulty
  - Dizziness
  - Coughing
  - Nausea
  - Disorientation
- **Danger**
  - Danger of impaired breathing.
  - Irritating to eyes and skin.
- **Indication of any immediate medical attention and special treatment needed**
  - If necessary oxygen respiration treatment.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:** None.
- **Special hazards arising from the substance or mixture**
  Danger of receptacles bursting because of high vapor pressure if heated.
6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
  Ensure adequate ventilation.
  For large spills, wear protective clothing.
  For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.
- **Environmental precautions:**
  Do not allow to enter sewers/ surface or ground water.
  No special measures required.
- **Methods and material for containment and cleaning up:**
  Absorb liquid components with liquid-binding material.
  Pick up mechanically.
  Dispose contaminated material as waste according to item 13.
  Send for recovery or disposal in suitable receptacles.
- **Reference to other sections**
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.

7 Handling and storage

- **Precautions for safe handling**
  Keep away from heat and direct sunlight.
  Use only in well ventilated areas.
  Avoid splashes or spray in enclosed areas.
  Wash hands before breaks and at the end of work.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
  Observe official regulations on storing packagings with pressurized containers.
  Provide ventilation for receptacles.
- **Information about storage in one common storage facility:**
  Store away from foodstuffs.
  Store away from oxidizing agents.
  Do not store together with acids.
- **Further information about storage conditions:**
  Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.
  Protect from frost.
**Trade name:** Problem Solver-Baseboard Stripper

- **Specific end use(s)** No further relevant information available.

---

### 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

- **Control parameters**

#### Components with limit values that require monitoring at the workplace:

**111-76-2 2-butoxyethanol**

<table>
<thead>
<tr>
<th>Component</th>
<th>Long-term value</th>
<th>Skin</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL (USA)</td>
<td>240 mg/m³, 50 ppm</td>
<td></td>
</tr>
<tr>
<td>REL (USA)</td>
<td>24 mg/m³, 5 ppm</td>
<td></td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>97 mg/m³, 20 ppm</td>
<td>BEI</td>
</tr>
<tr>
<td>EL (Canada)</td>
<td>20 ppm</td>
<td></td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>20 ppm</td>
<td>Skin</td>
</tr>
<tr>
<td>LMPE (Mexico)</td>
<td>20 ppm</td>
<td>A3, IBE</td>
</tr>
</tbody>
</table>

**74-98-6 propane**

<table>
<thead>
<tr>
<th>Component</th>
<th>Long-term value</th>
<th>Skin</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL (USA)</td>
<td>1800 mg/m³, 1000 ppm</td>
<td></td>
</tr>
<tr>
<td>REL (USA)</td>
<td>1800 mg/m³, 1000 ppm</td>
<td></td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>refer to Appendix F</td>
<td></td>
</tr>
<tr>
<td>EL (Canada)</td>
<td>1000 ppm</td>
<td></td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>1000 ppm</td>
<td></td>
</tr>
<tr>
<td>LMPE (Mexico)</td>
<td>1000 ppm</td>
<td></td>
</tr>
</tbody>
</table>

**1310-58-3 Potassium hydroxide**

<table>
<thead>
<tr>
<th>Component</th>
<th>Ceiling limit value</th>
<th>Skin</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL (USA)</td>
<td>2 mg/m³</td>
<td></td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>2 mg/m³</td>
<td></td>
</tr>
<tr>
<td>EL (Canada)</td>
<td>2 mg/m³</td>
<td></td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>2 mg/m³</td>
<td></td>
</tr>
<tr>
<td>LMPE (Mexico)</td>
<td>2 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

**102-71-6 2,2',2''-nitrilotriethanol**

<table>
<thead>
<tr>
<th>Component</th>
<th>Long-term value</th>
<th>Skin</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLV (USA)</td>
<td>5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>EL (Canada)</td>
<td>5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>3.1 mg/m³, 0.5 ppm</td>
<td></td>
</tr>
<tr>
<td>LMPE (Mexico)</td>
<td>5 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

**7664-41-7 ammonia, anhydrous**

<table>
<thead>
<tr>
<th>Component</th>
<th>Long-term value</th>
<th>Skin</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL (USA)</td>
<td>35 mg/m³, 50 ppm</td>
<td></td>
</tr>
</tbody>
</table>

(Contd. on page 6)
## Trade name: Problem Solver-Baseboard Stripper

<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Short-term value: 27 mg/m³, 35 ppm</th>
<th>Long-term value: 18 mg/m³, 25 ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL (USA)</td>
<td>Short-term value: 24 mg/m³, 35 ppm</td>
<td>Long-term value: 17 mg/m³, 25 ppm</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Short-term value: 35 ppm</td>
<td>Long-term value: 25 ppm</td>
</tr>
<tr>
<td>EL (Canada)</td>
<td>Short-term value: 24 mg/m³, 35 ppm</td>
<td>Long-term value: 17 mg/m³, 25 ppm</td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>Short-term value: 35 ppm</td>
<td>Long-term value: 25 ppm</td>
</tr>
<tr>
<td>LMPE (Mexico)</td>
<td>Short-term value: 35 ppm</td>
<td>Long-term value: 25 ppm</td>
</tr>
</tbody>
</table>

### Ingredients with biological limit values:

**111-76-2 2-butoxyethanol**

<table>
<thead>
<tr>
<th>BEI (USA)</th>
<th>200 mg/g creatinine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium: urine</td>
<td>Time: end of shift</td>
</tr>
<tr>
<td>Parameter: Butoxyacetic acid with hydrolysis</td>
<td></td>
</tr>
</tbody>
</table>

### Additional information:

The lists that were valid during the creation were used as basis.

### Exposure controls

### Personal protective equipment:

#### General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

- Keep away from foodstuffs, beverages and feed.
- Wash hands before breaks and at the end of work.
- Do not inhale gases / fumes / aerosols.
- Avoid contact with the eyes and skin.

#### Breathing equipment:

- Not required under normal conditions of use.
- For spills, respiratory protection may be advisable.
- Use suitable respiratory protective device in case of insufficient ventilation.

#### Protection of hands:

![Protective gloves]

Wear protective gloves to handle contents of damaged or leaking units.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

#### Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

#### Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 7)
Trade name: Problem Solver-Baseboard Stripper

9 Physical and chemical properties

- Information on basic physical and chemical properties
  - General Information
  - Appearance:
    - Form: Aerosol
    - Color: Cream colored
    - Odor: Pleasant
    - Odor threshold: Not determined.
    - pH-value: > 13.0
  - Change in condition
    - Melting point/Melting range: Not applicable, as aerosol.
    - Boiling point/Boiling range: Not applicable, as aerosol.
  - Flash point: Not applicable, as aerosol.
  - Flammability (solid, gaseous): Not applicable.
  - Auto-ignition temperature: Not determined.
  - Decomposition temperature: Not determined.
  - Auto igniting: Product is not self-igniting.
  - Danger of explosion: Not determined.
  - Explosion limits:
    - Lower: Not determined.
    - Upper: Not determined.
  - Vapor pressure at 21 °C (70 °F): 165 psig
  - Density at 20 °C (68 °F): 1.06 g/cm³ (8.846 lbs/gal)
  - Relative density: Not determined.
  - Vapour density: > 1 (Air=1)
  - Evaporation rate: Not applicable.
  - Solubility in / Miscibility with Water: Soluble.
  - Partition coefficient (n-octanol/water): Not determined.
  - Viscosity:
    - Dynamic: Not determined.

(Contd. of page 6)
10 Stability and reactivity

- Reactivity
- Chemical stability
- Thermal decomposition / conditions to be avoided:
  No decomposition if used and stored according to specifications.
- Possibility of hazardous reactions
  Toxic fumes may be released if heated above the decomposition point.
  Reacts with strong acids and oxidizing agents.
- Conditions to avoid
  Keep away from heat and direct sunlight.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products:
  Carbon monoxide and carbon dioxide
  Phosphorus oxides (e.g. P2O5)

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:
  - LD/LC50 values that are relevant for classification:
    1310-58-3 Potassium hydroxide
    Oral [LD50] 273 mg/kg (rat)

- Primary irritant effect:
  - on the skin: Irritant to skin and mucous membranes.
  - on the eye: Irritating effect.
  - Sensitization: No sensitizing effects known.
- Additional toxicological information:
  The product shows the following dangers according to internally approved calculation methods for preparations:
  Irritant
- Carcinogenic categories
  IARC (International Agency for Research on Cancer) See Section 15.

- NTP (National Toxicology Program)
  None of the ingredients is listed.

- OSHA-Ca (Occupational Safety & Health Administration)
  None of the ingredients is listed.
12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
  - **Remark:** After neutralization a reduction of the harming action may be recognized
  - **Additional ecological information:**
  - **General notes:**
    Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
    Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.
- **Results of PBT and vPvB assessment**
  - **PBT:** Not applicable.
  - **vPvB:** Not applicable.
  - **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
  Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
  Contact waste processors for recycling information.
  The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.
- **Waste disposal key:** EPA RCRA Code (USA) : D002 .
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**
- **DOT, ADR, IMDG, IATA**
- **UN proper shipping name**
  Limited Quantity for packages less than 30 kg (66 lb) and inner packagings less than 1 L (0.3 gal).
- **DOT**
- **ADR**
  Aerosols
  1950 AEROSOLS
### Trade name: Problem Solver-Baseboard Stripper

<table>
<thead>
<tr>
<th>Trade Name</th>
<th>Problem Solver-Baseboard Stripper</th>
</tr>
</thead>
</table>

#### IMDG
- **Class**: 2 Gases
- **Label**: 2.2

#### IATA
- **Class**: 2 Gases
- **Label**: 2.2

#### DOT
- **Class**: 2 Gases
- **Label**: 2.2

#### ADR
- **Class**: 5A Gases
- **Label**: 2.2

#### IMDG
- **Class**: 2 Gases
- **Label**: 2.2

#### IATA
- **Class**: 2.2
- **Label**: 2.2

- **Packing group**
- **DOT, ADR, IMDG, IATA**: Not Regulated
- **Environmental hazards**:
  - **Marine pollutant**: No
  - **Special precautions for user**: Warning: Gases
  - **Danger code (Kemler)**: -
  - **EMS Number**: F-D,S-U
  - **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**: Not applicable.

#### Transport/Additional information:
- **DOT**
  - **Quantity limitations**:
    - On passenger aircraft/rail: 75kg
    - On cargo aircraft only: 150kg

(Contd. of page 9)
Trade name: Problem Solver-Baseboard Stripper

(Contd. of page 10)

- ADR
  - Excepted quantities (EQ)
    - Code: E0
    - Not permitted as Excepted Quantity

- IMDG
  - Limited quantities (LQ)
    - 1L
  - Excepted quantities (EQ)
    - Code: E0
    - Not permitted as Excepted Quantity
  - UN "Model Regulation":
    - UN1950, Aerosols, 2.2

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- SARA
  - Section 355 (extremely hazardous substances):
    - 7664-41-7 ammonia, anhydrous
  - Section 313 (Specific toxic chemical listings):
    - 111-76-2 2-butoxyethanol
  - TSCA (Toxic Substances Control Act):
    - All ingredients are listed.
  - Proposition 65 (California)
    - Chemicals known to cause cancer:
      - Present in trace quantities.
      - 111-42-2 2,2'-iminodiethanol
  - Chemicals known to cause reproductive toxicity for females:
    - None of the ingredients are listed.
  - Chemicals known to cause reproductive toxicity for males:
    - None of the ingredients is listed.
  - Chemicals known to cause developmental toxicity:
    - None of the ingredients is listed.

- Carcinogenic categories

  - EPA (Environmental Protection Agency)
    - 111-76-2 2-butoxyethanol NL
  - IARC (International Agency for Research on Cancer)
    - 111-76-2 2-butoxyethanol 3
    - 102-71-6 2,2',2''-nitrotriethanol 3
  - TLV (Threshold Limit Value established by ACGIH)
    - 111-76-2 2-butoxyethanol A3
  - NIOSH-Ca (National Institute for Occupational Safety and Health)
    - None of the ingredients is listed.
  - State Right to Know Listings
    - Some ingredients listed.
Trade name: Problem Solver-Baseboard Stripper

· Canadian substance listings:
  · Canadian Domestic Substances List (DSL)
    All ingredients are listed.
  · Canadian Ingredient Disclosure list (limit 0.1%)
    None of the ingredients is listed.
  · Canadian Ingredient Disclosure list (limit 1%)
    111-76-2 2-butoxyethanol
    1310-58-3 Potassium hydroxide

· Other regulations, limitations and prohibitive regulations
  This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.
  · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Date of preparation / last revision 11/24/2014 / -

· Abbreviations and acronyms:
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  IMDG: International Maritime Code for Dangerous Goods
  DOT: US Department of Transportation
  IATA: International Air Transport Association
  ACGIH: American Conference of Governmental Industrial Hygienists
  EINECS: European Inventory of Existing Commercial Chemical Substances
  ELINCS: European List of Notified Chemical Substances
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  NFPA: National Fire Protection Association (USA)
  HMIS: Hazardous Materials Identification System (USA)
  WHMIS: Workplace Hazardous Materials Information System (Canada)
  VOC: Volatile Organic Compounds (USA, EU)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent
  Flam. Gas 1: Flammable gases, Hazard Category 1
  Press. Gas: Gases under pressure: Compressed gas
  Flam. Liq. 4: Flammable liquids, Hazard Category 4
  Acute Tox. 4: Acute toxicity, Hazard Category 4
  Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A
  Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
  Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
  Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
  Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

· Sources
  SDS Prepared by:
  ChemTel Inc.
  1305 North Florida Avenue
  Tampa, Florida USA 33602-2902
  Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573
  Website: www.chemtelinc.com
SAFETY DATA SHEET

1. Identification

Product identifier QUICK & CLEAN LUSTRE-MIST FURNITURE POLISH

Other means of identification
- SDS number 584N-108A
- Product code HIL01004

Recommended use Furniture Polish

Recommended restrictions For Labeled Use Only

Protect from Freezing

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name HILLYARD INDUSTRIES

Address 302 North Fourth St.

St. Joseph, MO 64501

Contact person Regulatory Affairs

Telephone number (816) 233-1321 (Ext. 8285)

Fax (816) 383-8485

E-mail regulatoryaffairs@hillyard.com

Emergency telephone # (800) 424-9300

(Only in the event of chemical emergency involving a spill, leak, fire, exposure or accident involving chemicals)

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement The mixture does not meet the criteria for classification.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Disposal Buyer assumes all risk and liability associated with disposal of this product (original concentration or dilution) in violation of applicable law in compliance with applicable federal, state and local requirements.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

The manufacturer lists no ingredients as hazardous according to OSHA 29 CFR 1910.1200.

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.
### 4. First-aid measures

<table>
<thead>
<tr>
<th>Inhalation</th>
<th>Move to fresh air. Call a physician if symptoms develop or persist.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin contact</td>
<td>Wash off with soap and water. Get medical attention if irritation develops and persists.</td>
</tr>
<tr>
<td>Eye contact</td>
<td>Rinse with water. Get medical attention if irritation develops and persists.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Rinse mouth. Get medical attention if symptoms occur.</td>
</tr>
<tr>
<td>Most important symptoms/effects, acute and delayed</td>
<td>Direct contact with eyes may cause temporary irritation.</td>
</tr>
</tbody>
</table>

| Indication of immediate medical attention and special treatment needed | Treat symptomatically. |

| General information | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. |

### 5. Fire-fighting measures

<table>
<thead>
<tr>
<th>Suitable extinguishing media</th>
<th>Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsuitable extinguishing media</td>
<td>Do not use water jet as an extinguisher, as this will spread the fire.</td>
</tr>
<tr>
<td>Specific hazards arising from the chemical</td>
<td>During fire, gases hazardous to health may be formed.</td>
</tr>
<tr>
<td>Special protective equipment and precautions for firefighters</td>
<td>Self-contained breathing apparatus and full protective clothing must be worn in case of fire.</td>
</tr>
<tr>
<td>Fire fighting equipment/instructions</td>
<td>Move containers from fire area if you can do so without risk.</td>
</tr>
</tbody>
</table>

| Specific methods | Use standard firefighting procedures and consider the hazards of other involved materials. |

| General fire hazards | No unusual fire or explosion hazards noted. |

### 6. Accidental release measures

| Personal precautions, protective equipment and emergency procedures | Keep unnecessary personnel away. For personal protection, see section 8 of the SDS. |
| Methods and materials for containment and cleaning up | Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. |

| Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. |
| Environmental precautions | Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. |

| Avoid discharge into drains, water courses or onto the ground. |

### 7. Handling and storage

| Precautions for safe handling | Avoid prolonged exposure. Observe good industrial hygiene practices. |
| Conditions for safe storage, including any incompatibilities | Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). |

### 8. Exposure controls/personal protection

<table>
<thead>
<tr>
<th>Occupational exposure limits</th>
<th>The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological limit values</td>
<td>No biological exposure limits noted for the ingredient(s).</td>
</tr>
<tr>
<td>Appropriate engineering controls</td>
<td>Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.</td>
</tr>
</tbody>
</table>

| Individual protection measures, such as personal protective equipment | |
| Eye/face protection | Avoid contact with eyes. |
| Skin protection | Not normally needed. |
| Hand protection | |

---

Material name: QUICK & CLEAN LUSTRE-MIST FURNITURE POLISH
HIL01004    Version #: 02    Revision date: 09-28-2018    Issue date: 03-25-2015
SDS US
### Respiratory Protection
No personal respiratory protective equipment normally required.

### Thermal Hazards
None known.

### General Hygiene Considerations
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

### 9. Physical and Chemical Properties

**Appearance**
- White, slightly viscous liquid.

**Physical State**
- Liquid.

**Form**
- Liquid.

**Color**
- White

**Odor**
- Lemon odor

**Odor Threshold**
- Not available

**pH**
- 5.5 - 6.5

**Melting Point/Freezing Point**
- Not applicable / Not available

**Initial Boiling Point and Boiling Range**
- 205 °F (96.11 °C)

**Flash Point**
- > 200.0 °F (> 93.3 °C) Tag Closed Cup None to boiling

**Evaporation Rate**
- < 1 (ethyl ether = 1)

**Flammability (Solid, Gas)**
- Not applicable.

**Upper/Lower Flammability or Explosive Limits**
- Explosive limit - lower (%) Not available.
- Explosive limit - upper (%) Not available.

**Vapor Pressure**
- 17.56 mm Hg

**Vapor Density**
- 0.624 Air = 1

**Relative Density**
- 0.996 at 77°F

**Solubility**
- Solubility (water) 100 % Complete

**Partition Coefficient**
- Not available

**Auto-Ignition Temperature**
- Not available

**Decomposition Temperature**
- Not available

**Viscosity**
- Not applicable

**Other Information**
- Density 8.29 lb/gal
- Explosive Properties Not explosive
- Oxidizing Properties Not oxidizing
- Percent Volatile 94 - 95.5 %
- VOC 0 % CARB VOC 0.9 % EPA VOC

### 10. Stability and Reactivity

**Reactivity**
- The product is stable and non-reactive under normal conditions of use, storage and transport.

**Chemical Stability**
- Material is stable under normal conditions.

**Possibility of Hazardous Reactions**
- No dangerous reaction known under conditions of normal use.

**Conditions to Avoid**
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

**Incompatible Materials**
- Strong oxidizing agents.

**Hazardous Decomposition Products**
- No hazardous decomposition products are known.
11. Toxicological information

Information on likely routes of exposure

**Inhalation**  
Prolonged inhalation may be harmful.

**Skin contact**  
No adverse effects due to skin contact are expected.

**Eye contact**  
Direct contact with eyes may cause temporary irritation.

**Ingestion**  
Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

**Acute toxicity**  
Not known.

**Skin corrosion/irritation**  
Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation**  
Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

**Respiratory sensitization**  
Not a respiratory sensitizer.

**Skin sensitization**  
This product is not expected to cause skin sensitization.

**Germ cell mutagenicity**  
No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity**  
Not classifiable as to carcinogenicity to humans.

* IARC Monographs. Overall Evaluation of Carcinogenicity  
  Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)  
Not regulated.

**US. National Toxicology Program (NTP) Report on Carcinogens**  
Not listed.

**Reproductive toxicity**  
This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure**  
Not classified.

**Specific target organ toxicity - repeated exposure**  
Not classified.

**Aspiration hazard**  
Prolonged inhalation may be harmful.

**Chronic effects**  
Prolonged inhalation may be harmful.

**Further information**  
This product has no known adverse effect on human health.

12. Ecological information

**Ecotoxicity**  
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUICK &amp; CLEAN LUSTRE-MIST FURNITURE POLISH</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Daphnia 22419.3535 mg/l, 48 hours estimated</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Fish 13735.6787 mg/l, 96 hours estimated</td>
</tr>
</tbody>
</table>

**Persistence and degradability**  
No data is available on the degradability of this product.

**Bioaccumulative potential**  
No data available.

**Mobility in soil**  
The product contains volatile organic compounds which have a photochemical ozone creation potential.

**Other adverse effects**  
The product contains volatile organic compounds which have a photochemical ozone creation potential.

13. Disposal considerations

**Disposal instructions**  
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Buyer assumes all risk and liability associated with disposal of this product (original concentration or dilution) in violation of applicable law.
Local disposal regulations: Dispose in accordance with all applicable regulations.
Hazardous waste code: The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging: Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Triple rinse (or equivalent). Then offer clean, dry container for recycling or reconditioning.

14. Transport information

DOT: Not regulated as dangerous goods.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not established.

15. Regulatory information

US federal regulations: This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
- SARA 304 Emergency release notification: Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
- SARA 302 Extremely hazardous substance: Not listed.
- SARA 311/312 Hazardous chemical: No
- SARA 313 (TRI reporting): Not regulated.

Other federal regulations
- Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List: Not regulated.
- Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130): Not regulated.

US state regulations
- California Proposition 65: California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date: 03-25-2015
Revision date: 09-28-2018
Version #: 02
HMIS® ratings

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>0</td>
</tr>
<tr>
<td>Flammability</td>
<td>0</td>
</tr>
<tr>
<td>Physical hazard</td>
<td>0</td>
</tr>
</tbody>
</table>

Disclaimer

No representations or warranties, either express or implied, of merchantability, fitness for a particular purpose, or of any nature are made with respect to the product(s) or information contained in this material safety data sheet. The information and recommendations contained in this Material Safety Data Sheet are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. All information contained herein is presented in good faith and is believed to be appropriate and accurate. The buyer or user assumes all risks associated with the use, misuse or disposal of this product. The buyer or user is responsible to comply with all federal, state or local regulations concerning the use, misuse or disposal of these products.

Revision information

This document has undergone significant changes and should be reviewed in its entirety.
Glance RTU Glass & Multi-Surface Cleaner

1. IDENTIFICATION

<table>
<thead>
<tr>
<th>Product name:</th>
<th>Glance RTU Glass &amp; Multi-Surface Cleaner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Code:</td>
<td>04705, 04554</td>
</tr>
<tr>
<td>SDS #:</td>
<td>MS0800662</td>
</tr>
<tr>
<td>Recommended use:</td>
<td>• Glass Cleaner</td>
</tr>
<tr>
<td></td>
<td>• This product is intended to be used neat.</td>
</tr>
<tr>
<td>Uses advised against:</td>
<td>Uses other than those identified are not recommended</td>
</tr>
</tbody>
</table>

Manufacturer, importer, supplier:
US Headquarters
Diversey, Inc.
8310 16th St.
Sturtevant, Wisconsin 53177-1964
Phone: 1-888-352-2249
MSDS Internet Address: www.diversey.com

Canadian Headquarters
Diversey, Inc. - Canada
3755 Laird Road
Mississauga, Ontario L5L 0B3
Phone: 1-800-668-3131

Emergency telephone number: 1-800-851-7145 (U.S.); 1-651-917-6133 (Int'l)

2. HAZARDS IDENTIFICATION

Classification for the undiluted product
This product is not classified as hazardous according to OSHA 29CFR 1910.1200 (HazCom 2012-GHS) and Canadian Hazardous Products Regulations (HPR) (WHMIS 2015-GHS).

Precautionary Statements
None required.

Health hazards not otherwise classified (HHNOC) - Not applicable
Physical hazards not otherwise classified (PHNOC) - Not applicable

Classification for the diluted product @ RTU
This product is intended to be used neat.

Precautionary Statements
See undiluted product information above.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Classified Ingredients
None of the components of this product are classified as hazardous according to OSHA 29CFR 1910.1200 (HazCom 2012-GHS) and Canadian Hazardous Products Regulations (HPR) (WHMIS 2015-GHS).
4. FIRST AID MEASURES

Undiluted Product:

**Eyes:** Rinse with plenty of water. If irritation occurs and persists, get medical attention.

**Skin:** Rinse with plenty of water. If irritation occurs and persists, get medical attention.

**Inhalation:** No specific first aid measures are required.

**Ingestion:** Rinse mouth with water.

**Most Important Symptoms/Effects:** No information available.

**Immediate medical attention and special treatment needed:** Not applicable.

**Aggravated Medical Conditions:** None known.

Diluted Product:

This product is intended to be used neat.

**Eyes:** See undiluted product information above.

**Skin:** See undiluted product information above.

**Inhalation:** See undiluted product information above.

**Ingestion:** See undiluted product information above.

5. FIRE-FIGHTING MEASURES

**Specific methods:** No special methods required

**Suitable extinguishing media:** The product is not flammable. Extinguish fire using agent suitable for surrounding fire.

**Specific hazards:** Not applicable.

**Special protective equipment for firefighters:** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**Extinguishing media which must not be used for safety reasons:** No information available.

6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** No special measures required.

**Environmental precautions and clean-up methods:** Clean-up methods - large spillage. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Use a water rinse for final clean-up.

7. HANDLING AND STORAGE

**Handling:** Handle in accordance with good industrial hygiene and safety practice. FOR COMMERCIAL AND INDUSTRIAL USE ONLY.

**Storage:** Protect from freezing. Keep tightly closed in a dry, cool and well-ventilated place. KEEP OUT OF REACH OF CHILDREN.

**Aerosol Level (if applicable):** Not applicable

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Undiluted Product:**

**Engineering measures to reduce exposure:** No special ventilation requirements

**Personal Protective Equipment**

**Eye protection:** No special requirements under normal use conditions.

**Hand protection:** No special requirements under normal use conditions.

**Skin and body protection:** No special requirements under normal use conditions.

**Respiratory protection:** No special requirements under normal use conditions.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice.

**Diluted Product:**

This product is intended to be used neat.

**Personal Protective Equipment**
### 9. PHYSICAL AND CHEMICAL PROPERTIES:

<table>
<thead>
<tr>
<th>Physical State:</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color:</td>
<td>Clear, Light, Blue</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>No information available</td>
</tr>
<tr>
<td>Odor:</td>
<td>Ammonia</td>
</tr>
<tr>
<td>Odor threshold:</td>
<td>No information available.</td>
</tr>
<tr>
<td>Melting point/range:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Autoignition temperature:</td>
<td>No information available</td>
</tr>
<tr>
<td>Solubility in other solvents:</td>
<td>No information available</td>
</tr>
<tr>
<td>Density:</td>
<td>8.34 lbs/gal 1 Kg/L</td>
</tr>
<tr>
<td>Bulk density:</td>
<td>No information available</td>
</tr>
<tr>
<td>Flash point:</td>
<td>&gt; 200 °F &gt; 93.3 °C</td>
</tr>
<tr>
<td>Dilution Flash Point:</td>
<td>200 °F 93.3 °C</td>
</tr>
<tr>
<td>Elemental Phosphorus:</td>
<td>0.00 % by wt.</td>
</tr>
<tr>
<td>pH:</td>
<td>10.5</td>
</tr>
<tr>
<td>Dilution pH:</td>
<td>10.5 @ RTU</td>
</tr>
<tr>
<td>Metal Corrosion:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Explosion limits:</td>
<td>- upper: Not determined - lower: Not determined</td>
</tr>
</tbody>
</table>

* - Title 17, California Code of Regulations, Division 3, Chapter 1, Subchapter 8.5, Article 2, Consumer Products, Sections 94508

### 10. STABILITY AND REACTIVITY

- **Reactivity:** Not Applicable
- **Stability:** The product is stable
- **Hazardous decomposition products:** None reasonably foreseeable.
- **Materials to avoid:** Do not mix with any other product or chemical unless specified in the use directions.
- **Conditions to avoid:** No information available.

### 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure:**
Eye contact, Skin contact, Inhalation, Ingestion

**Delayed, immediate, or chronic effects and symptoms from short and long-term exposure**
- **Skin contact:** Unlikely to be irritating in normal use.
- **Eye contact:** May be mildly irritating to eyes.
- **Ingestion:** No information available.
- **Inhalation:** No information available.
- **Sensitization:** No known effects.
- **Target Organs (SE):** None known
- **Target Organs (RE):** None known

**Numerical measures of toxicity**
- ATE - Oral (mg/kg): >5000 mg/kg
- ATE - Dermal (mg/kg): >2000 mg/kg

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** No information available.

**Persistence and Degradability:** No information available.

**Bioaccumulation:** No information available.
13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products: This product, as sold, if discarded or disposed, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Dispose in compliance with all Federal, state, provincial, and local laws and regulations.

Contaminated Packaging: Do not re-use empty containers.

RCRA Hazard Class (undiluted product): Not Regulated

14. TRANSPORT INFORMATION

DOT/TDG/IMDG: Proper shipping descriptions can vary by pack size. Please refer to the Diversey HazMat Library, only available through Internet Explorer, http://naextranet.diversey.com/dot/, for up to date shipping information.

DOT (Ground) Bill of Lading Description: CLEANING, WASHING, BUFFING, OR POLISHING COMPOUNDS LIQUID

IMDG (Ocean) Bill of Lading Description: CLEANING, WASHING, BUFFING, OR POLISHING COMPOUNDS LIQUID

15. REGULATORY INFORMATION

International Inventories at CAS# Level
All components of this product are listed on the following inventories: U.S.A. (TSCA), Canada (DSL/NDSL).

U.S. Regulations

California Proposition 65: This product is not subject to the reporting requirements under California's Proposition 65.

RIGHT TO KNOW (RTK)

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>CAS #</th>
<th>MARTK:</th>
<th>NJRTK:</th>
<th>PARTK:</th>
<th>RIRTK:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diethylene glycol butyl ether</td>
<td>112-34-5</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-butoxyethanol</td>
<td>111-76-2</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Sodium lauryl sulfate</td>
<td>151-21-3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonium hydroxide</td>
<td>1336-21-6</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

CERCLA/ SARA

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>CAS #</th>
<th>Weight %</th>
<th>CERCLA/SARA RQ (lbs)</th>
<th>Section 302 TPQ (lbs)</th>
<th>Section 313</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol butyl ether</td>
<td>112-34-5</td>
<td>&gt; 0.1% - &lt; 1%</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>2-butoxyethanol</td>
<td>111-76-2</td>
<td>&gt; 0.1% - &lt; 1%</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Ammonium hydroxide</td>
<td>1336-21-6</td>
<td>&lt; 0.1%</td>
<td>1000</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

CAA HAP

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>CAA HAP</th>
<th>CAA ODS</th>
<th>CWA Priority Pollutants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol butyl ether</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-butoxyethanol</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SARA 311/312 Hazard Categories

Immediate: -
Delayed: -
Fire: -
Reactivity: -
Sudden Release of Pressure: -

Canadian Regulations

WHMIS hazard class: None.

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>CAS #</th>
<th>NPRI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol butyl ether</td>
<td>112-34-5</td>
<td>X</td>
</tr>
<tr>
<td>2-butoxyethanol</td>
<td>111-76-2</td>
<td>X</td>
</tr>
</tbody>
</table>

Glance RTU Glass & Multi-Surface Cleaner
16. OTHER INFORMATION

NFPA (National Fire Protection Association)
Rating Scale: (Low Hazard) 0 - 4 (Extreme Hazard)

Health 0
Flammability 0
Instability 0

Version Number: 2
Preparation date: 2015-04-21

Reason for revision: Not applicable
Prepared by: NAPRAC
Additional advice: • Does not contain an added fragrance

Notice to Reader: This document has been prepared using data from sources considered technically reliable. It does not constitute a warranty, express or implied, as to the accuracy of the information contained within. Actual conditions of use and handling are beyond seller's control. User is responsible to evaluate all available information when using product for any particular use and to comply with all Federal, State, Provincial and Local laws and regulations.
1 – PRODUCT IDENTIFICATION

PRODUCT NAME: ................. Lime Scale Remover
PRODUCT TYPE: ................. Acidic Liquid Cleaning Compound
PRODUCT NUMBER: ............. L2125XXX (Last 3 characters vary with the packaging)
CONTROL NUMBER: ............. L2125XXX

COMPANY: ....................... Simoniz USA, Inc.
201 Boston Turnpike
Bolton, CT 06043
1-800-227-5536
www.simoniz.com

EMERGENCY PHONE: ............ (800) 255-3924 (CHEM-TEL)

2 – HAZARDS IDENTIFICATION

CLASSIFICATION OF SUBSTANCE/MIXTURE:..... Skin Corrosion (1A)   Serious Eye Damage  (1)

SYMBOLES:.........................

SIGNAL WORD:..................... DANGER!
HAZARD STATEMENT:............ Causes severe skin burns and eye damage   Causes serious eye damage

PRECAUTIONARY STATEMENTS:
PREVENTION: ................. Do not breathe dust/fume/gas/mist/vapours/spray   Wash hands thoroughly after handling   Wear protective gloves/protective clothing/eye protection/face protection.
RESPONSE: ...................... IF SWALLOWED: Rinse mouth. Do NOT induce vomiting   IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing   Rinse skin with water/shower   Wash contaminated clothing before reuse   IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing   Immediately call a POISON CENTER or doctor/physician   Specific treatment (see First Aid Section on this label)   IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

STORAGE:......................... Store locked up.
DISPOSAL: ...................... Dispose of container and contents in accordance with local regulations.
Safety Data Sheet

3 – COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>INGREDIENT</th>
<th>C.A.S. NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
</tr>
<tr>
<td>Phosphoric Acid</td>
<td>7664-38-2</td>
</tr>
<tr>
<td>Sulfamic Acid</td>
<td>5329-14-6</td>
</tr>
</tbody>
</table>

Percentages of ingredients are being withheld as trade secret information. This information will be disclosed as necessary to authorized individuals.

4 – FIRST-AID MEASURES

BREATHING (INHALATION):... If victim shows signs of discomfort or irritation, remove to fresh air. If symptoms persist, get immediate medical attention.

SWALLOWING (INGESTION):... DO NOT INDUCE VOMITING! Drink a large quantity of water, followed by either milk or a minimum of 2 teaspoons of milk of magnesia. Do not attempt to give liquids to an unconscious person. Get immediate medical attention!

EYES:.........................Flush eyes with a large quantity of fresh water for at least 15 minutes. Apply ice compresses and GET IMMEDIATE EMERGENCY MEDICAL ATTENTION by an eye specialist. It may be necessary to take victim to a hospital emergency room.

SKIN (DERMAL): ................Immediately flush from skin and clothing with large amounts of fresh water. Get immediate medical attention. Rewash contaminated clothing before wearing.

5 – FIRE-FIGHTING MEASURES

FLASHPOINT:....................This product is non-flammable.

EXTINGUISHING MEDIA:.........This product is non-flammable. Use extinguishing media suitable for materials already burning.

SPECIAL FIRE FIGHTING PROCEDURES: ............Firefighters working in areas where this product is present should be equipped with an approved, fully enclosed SCBA.

UNUSUAL FIRE AND EXPLOSION HAZARDS:.......None known.

6 – ACCIDENTAL RELEASE MEASURES

SPILL PROCEDURES:............Dike to prevent spillage into streams or sewer systems. Consult local, state and federal authorities.

WASTE DISPOSAL:...............As recommended by local, state and federal authorities.
7 – HANDLING and STORAGE

STORAGE: Do not store in metal containers. Store at ambient temperatures. Keep from freezing. DO NOT TRANSFER TO UNMARKED CONTAINERS. KEEP AWAY FROM CHILDREN.

HANDLING: Under normal use according to label instructions, special protection should not be necessary. Wear eye protection if product is likely to splash. Do not place this product in an unmarked container! Keep away from children! Spilled material is slippery.

8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

RESPIRATORY PROTECTION: If necessary, use an OSHA approved respirator for acid gases.

PROTECTIVE CLOTHING: Nitrile, vinyl or neoprene gloves. Splash goggles and face shield. Protective outerwear and boots.

ADDITIONAL MEASURES: Under normal use according to label instructions, special protection should not be necessary. Wear eye protection if product is likely to splash. Do not place this product in an unmarked container! Keep away from children! Spilled material is slippery.

<table>
<thead>
<tr>
<th>INGREDIENT</th>
<th>C.A.S. NUMBER</th>
<th>PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>No limits established</td>
</tr>
<tr>
<td>Phosphoric Acid</td>
<td>7664-38-2</td>
<td>1mg/m3TLV, 3mg/m3STEL</td>
</tr>
<tr>
<td>Sulfamic Acid</td>
<td>5329-14-6</td>
<td>No limits established</td>
</tr>
</tbody>
</table>

9 – PHYSICAL / CHEMICAL PROPERTIES

APPEARANCE & ODOR: Pink transparent liquid. No significant odor.

ODOR THRESHOLD: N/A

pH: 1.5

MELTING POINT: 210 degrees F.

FREEZING POINT: N/A

BOILING POINT: 210 degrees F.

BOILING POINT RANGE: N/A

FLASHPOINT: This product is non-flammable.

EVAPORATION RATE: N/A

FLAMMABILITY (solid/gas): N/A

EXPLOSION LIMITS: N/A

VAPOR PRESSURE: N/A

VAPOR DENSITY (AIR=1): N/A

SPECIFIC GRAVITY: 1.21

SOLUBILITY IN WATER: Completely soluble.

PARTITION COEFFICIENT: N/A

AUTO-IGNITION TEMPERATURE: N/A

DECOMPOSITION TEMPERATURE: N/A
Safety Data Sheet

VISCOSITY: ...................... Water thin

10 – STABILITY and REACTIVITY

STABILITY: ...................... Stable under normal conditions.
HAZARDOUS DECOMP.: ...... This product not known to polymerize.
INCOMPATIBILITY: ............ Ferrous metals, aluminum, zinc, magnesium and any other acid
sensitive materials.

11 – TOXICOLOGICAL INFORMATION

ROUTE(S) OF ENTRY: .......... Inhalation, skin absorption, or ingestion.
LISTED CARCINOGEN: ........ None over 0.1%.
MEDICAL CONDITION AGGRAVATED: ........ None known.
INHALATION: ........................ Not likely to be inhaled in hazardous amounts. Avoid exposure to
mists or vapors. Maintain adequate ventilation in the work area.
INGESTION: .......................... This material can cause burns and serious damage to throat,
esophagus and stomach.
EYES: ................................ Can cause serious burns and/or blindness.
SKIN (DERMAL): .................... This product may cause burns or irritation if not removed from
the skin.
ACUTE TOXICITY* (ORAL):...... .......................... >5000 mg/kg
ACUTE TOXICITY* (DERMAL): ... .......................... >5000 mg/kg
ACUTE TOXICITY* (INHALATION): .......................... >20,000 ppm V (Gas), >20 mg/l (Vapor), >5
mg/l (Dust)

* Determined using the additivity formula for mixtures (GHS Purple Book, 3.1.3.6)

12 – ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE AND DISTRIBUTION: N/A

13 – DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: .............. As recommended by local, state and federal authorities.

14 – TRANSPORTATION INFORMATION

PROPER SHIPPING NAME: ...... Compounds, Cleaning, Liquid (contains phosphoric acid)
HAZARD CLASS: ................. 8
UN/NA NUMBER: .................. NA 1760
PACKAGING GROUP: ............. III
Contents of this MSDS comply with the OSHA Hazard Communication Standard 29CFR 1910.1200

16 – OTHER INFORMATION

NFPA HEALTH: .................... 2  
NFPA FLAMMABILITY: ........... 0  
NFPA REACTIVITY: ............... 0  
NFPA OTHER: ..................... Acid  

ADDITIONAL: ..................... The information contained in this SDS is based on the data available to us from sources we believe to be reliable. No warranty or guaranty expressed or implied is made regarding the accuracy of this data or the results obtained from the reliance on this data. The manufacturer assumes no responsibility for injury from the use of this product. Be safe-read this product safety information and pass it on to all persons who may be exposed to this product. Federal law requires it. This product and/or all of its components are either included on or exempt from the TSCA Inventory of Chemical Substances.

REVISION DATE: ................... 04/14/15
1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier
Product Name: DUST MOP / DUST CLOTH TREATMENT (AEROSOL)
Product Number: 6099
Recommended Use: Cleaning agent
Uses Advised Against: For Industrial and Institutional Use Only

Manufacturer/Supplier: Spartan Chemical Company, Inc.
1110 Spartan Drive
Maumee, Ohio 43537 USA
800-537-8990 (Business hours)
www.spartanchemical.com

24 Hour Emergency Phone Numbers:
Medical Emergency/Information: 888-314-6171
Transportation/Spill/Leak: CHEMTREC 800-424-9300

2. HAZARDS IDENTIFICATION

GHS Classification
Flammable Aerosols Category 1
Gases Under Pressure Liquefied gas

GHS Label Elements
Signal Word: Danger
Symbols: 

Hazard Statements:
Extremely flammable gas
Contains gas under pressure; may explode if heated

Precautionary Statements:
Prevention:
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Do not spray on an open flame or other ignition source
Pressurized container: Do not pierce or burn, even after use
Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal

Response:
-Specific Treatment: See Safety Data Sheet Section 4: "FIRST AID MEASURES" for additional information.

Storage:
Protect from sunlight. Do not expose to temperatures exceeding 122°F (50°C) Store in a well-ventilated place

Disposal:
Not Applicable

Hazards Not Otherwise Classified: Not Applicable
Other Information:
- May be harmful if swallowed.
- May cause skin irritation.
- May cause eye irritation.
- Inhalation of vapors or mist may cause respiratory irritation.
- Keep out of reach of children.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>40-70</td>
</tr>
<tr>
<td>C13-14 Alkane</td>
<td>64742-47-8</td>
<td>5-10</td>
</tr>
<tr>
<td>Mineral Oil</td>
<td>8042-47-5</td>
<td>5-10</td>
</tr>
<tr>
<td>Butane</td>
<td>106-97-8</td>
<td>3-7</td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6</td>
<td>1-5</td>
</tr>
<tr>
<td>Polyglyceryl-3 Oleate</td>
<td>9007-48-1</td>
<td>1-5</td>
</tr>
<tr>
<td>Sodium Benzoate</td>
<td>532-32-1</td>
<td>0.1-1</td>
</tr>
<tr>
<td>Fragrance</td>
<td>PROPRIETARY</td>
<td>0.1-1</td>
</tr>
<tr>
<td>Diethyl Phthalate</td>
<td>84-66-2</td>
<td>&lt;0.1</td>
</tr>
</tbody>
</table>

Specific chemical identity and/or exact percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

- Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
- Skin Contact: Wash with soap and water. If skin irritation occurs: Get medical attention.
- Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison control center or physician if you feel unwell.
- Ingestion: Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if you feel unwell.

Note to Physicians: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Water spray (fog), Foam
Specific Hazards Arising from the Chemical: Extremely flammable aerosol. Exposure to high temperature may cause containers to burst. Bursting aerosol containers may be propelled from fire at high speed.
Hazardous Combustion Products: May include Carbon monoxide Carbon dioxide and other toxic gases or vapors.
Protective Equipment and Precautions for Firefighters: Wear MSHA/NIOSH approved self-contained breathing apparatus (SCBA) and full protective gear. Water may be used to cool closed containers to prevent pressure build-up and possible auto ignition or explosion when exposed to extreme heat. In the event of fire and/or explosion do not breathe fumes.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.
Environmental Precautions: Do not rinse spill onto the ground, into storm sewers or bodies of water.
Methods for Clean-Up: Prevent further leakage or spillage if safe to do so. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

7. HANDLING AND STORAGE
Advice on Safe Handling: Handle in accordance with good industrial hygiene and safety practice. Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Wash thoroughly after handling.

Storage Conditions: NFPA 30B Level 1 Aerosol. Do not store in direct sunlight or above 122 °F / 50 °C. Exposure to high temperature may cause containers to burst. Keep out of the reach of children.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### Occupational Exposure Limits:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane</td>
<td>STEL: 1000 ppm (vacated) TWA: 800 ppm</td>
<td>TWA: 800 ppm (vacated) TWA: 1900 mg/m³</td>
<td>TWA: 800 ppm TWA: 1900 mg/m³</td>
</tr>
<tr>
<td>Propane</td>
<td>See Appendix F: Minimal Oxygen Content</td>
<td>TWA: 1000 ppm TWA: 1800 mg/m³ (vacated) TWA: 1000 ppm (vacated) TWA: 1800 mg/m³</td>
<td>IDLH: 2100 ppm TWA: 1000 ppm TWA: 1800 mg/m³</td>
</tr>
<tr>
<td>Diethyl Phthalate</td>
<td>TWA: 5 mg/m³</td>
<td>(vacated) TWA: 5 mg/m³</td>
<td>TWA: 5 mg/m³</td>
</tr>
</tbody>
</table>

#### Engineering Controls:
Provide good general ventilation.
If work practices generate dust, fumes, gas, vapors or mists which expose workers to chemicals above the occupational exposure limits, local exhaust ventilation or other engineering controls should be considered.

#### Personal Protective Equipment

**Eye/Face Protection:** Not required with expected use.
**Skin and Body Protection:** Not required with expected use.
**Respiratory Protection:** Not required with expected use.
If occupational exposure limits are exceeded or respiratory irritation occurs, use of a NIOSH/MSHA approved respirator suitable for the use-conditions and chemicals in Section 3 should be considered.

**General Hygiene Considerations:** Wash hands and any exposed skin thoroughly after handling. See 29 CFR 1910.132-138 for further guidance.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Appearance/Physical State:</th>
<th>Aerosol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color:</td>
<td>White emulsion</td>
</tr>
<tr>
<td>Odor:</td>
<td>Bland</td>
</tr>
<tr>
<td>pH:</td>
<td>8.0-9.0</td>
</tr>
<tr>
<td>Melting Point / Freezing Point:</td>
<td>No information available.</td>
</tr>
<tr>
<td>Boiling Point / Boiling Range:</td>
<td>132 °C / 270 °F (Product without propellant) Estimated</td>
</tr>
<tr>
<td>Flash Point:</td>
<td>&lt; -58 °C / &lt; -72 °F (Propellant-estimated)</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available.</td>
</tr>
<tr>
<td>Upper Flammability Limit:</td>
<td>No information available.</td>
</tr>
<tr>
<td>Lower Flammability Limit:</td>
<td>No information available.</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>No information available.</td>
</tr>
<tr>
<td>Vapor Density:</td>
<td>No information available.</td>
</tr>
<tr>
<td>Specific Gravity:</td>
<td>0.95 (Product without propellant)</td>
</tr>
<tr>
<td>Solubility(ies):</td>
<td>No information available.</td>
</tr>
<tr>
<td>Partition Coefficient:</td>
<td>No information available.</td>
</tr>
<tr>
<td>Autoignition Temperature:</td>
<td>No information available.</td>
</tr>
<tr>
<td>Decomposition Temperature:</td>
<td>No information available.</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>No information available.</td>
</tr>
</tbody>
</table>

### 10. STABILITY AND REACTIVITY

**Reactivity:** This material is considered to be non-reactive under normal conditions of use.
**Chemical Stability:** Stable under normal conditions.
11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Eyes, Skin, Ingestion, Inhalation.

Symptoms of Exposure:
- Eye Contact: Pain and redness.
- Skin Contact: Drying of the skin.
- Inhalation: Nasal discomfort and coughing.
- Ingestion: Pain, nausea, vomiting and diarrhea.

Immediate, Delayed, Chronic Effects
Product Information: Data not available or insufficient for classification.

Target Organ Effects: Central nervous system.

Numerical Measures of Toxicity
The following acute toxicity estimates (ATE) are calculated based on the GHS document.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>&gt; 90 mL/kg (Rat)</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>C13-14 Alkane</td>
<td>&gt; 5000 mg/kg (Rat)</td>
<td>&gt; 2000 mg/kg (Rabbit)</td>
<td>&gt; 5.2 mg/L (Rat) 4 h</td>
</tr>
<tr>
<td>Mineral Oil</td>
<td>&gt; 5000 mg/kg (Rat)</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Butane</td>
<td>Not Available</td>
<td>Not Available</td>
<td>= 658 g/m³ (Rat) 4 h</td>
</tr>
<tr>
<td>Propane</td>
<td>Not Available</td>
<td>Not Available</td>
<td>= 658 mg/L (Rat) 4 h</td>
</tr>
<tr>
<td>Sodium Benzoate</td>
<td>= 4070 mg/kg (Rat)</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Diethyl Phthalate</td>
<td>= 8600 mg/kg (Rat)</td>
<td>&gt; 11200 mg/kg (Rat)</td>
<td>&gt; 4.64 mg/L (Rat) 6 h</td>
</tr>
</tbody>
</table>

Carcinogenicity: No components present at 0.1% or greater are listed as to being carcinogens by ACGIH, IARC, NTP or OSHA.

12. ECOLOGICAL INFORMATION

Ecotoxicity

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/Aquatic Plants</th>
<th>Fish</th>
<th>Toxicity to Microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>C13-14 Alkane</td>
<td>Not Available</td>
<td>45: 96 h Pimephales promelas mg/L LC50</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>64742-47-8</td>
<td></td>
<td>flow-through 2.2: 96 h</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lepomis macrochirus mg/L LC50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>static 2.4: 96 h</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mineral Oil</td>
<td>Not Available</td>
<td>10000: 96 h Lepomis macrochirus mg/L LC50</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>8042-47-5</td>
<td></td>
<td>LC50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium Benzoate</td>
<td>Not Available</td>
<td>420 - 558: 96 h Pimephales promelas mg/L LC50</td>
<td>Not Available</td>
<td>650: 48 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>532-32-1</td>
<td></td>
<td>flow-through 100: 96 h</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pimephales promelas mg/L LC50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Diethyl Phthalate  
84-66-2

23: 72 h Desmodesmus subspicatus mg/L EC50 23: 72 h Desmodesmus subspicatus mg/L EC50 static 21: 96 h Desmodesmus subspicatus mg/L EC50 21: 96 h Desmodesmus subspicatus mg/L EC50 static 42 - 255: 72 h Pseudokirchneriella subcapitata mg/L EC50 2.11 - 4.29: 96 h Pseudokirchneriella subcapitata mg/L EC50 static

17: 96 h Pimephales promelas mg/L LC50 flow-through 16.8: 96 h Pimephales promelas mg/L LC50 static 22: 96 h Lepomis macrochirus mg/L LC50 flow-through 16.7: 96 h Lepomis macrochirus mg/L LC50 static 12: 96 h Oncorhynchus mykiss mg/L LC50 flow-through

Not Available

36 - 74: 48 h Daphnia magna mg/L EC50 86: 48 h Daphnia magna mg/L EC50 Static

Persistence and Degradability: No information available.
Bioaccumulation: No information available.
Other Adverse Effects: No information available.

13. DISPOSAL CONSIDERATIONS

Disposal of Wastes: Dispose of in accordance with federal, state and local regulations.
Contaminated Packaging: Pressurized container: Do not pierce or burn, even after use. Dispose of in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

DOT: UN1950
Proper Shipping Name: Aerosols
Hazard Class: 2.1
Special Provisions: This product meets the exception requirements of section 49 CFR 173.306 as a limited quantity and may be shipped as a limited quantity.

IMDG: UN1950
Proper Shipping Name: Aerosols
Hazard Class: 2.1
Additional information: Limited Quantity

15. REGULATORY INFORMATION

TSCA Status: (Toxic Substance Control Act Section 8(b) Inventory)
All chemical substances in this product are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

SARA 313
This product does not contain listed substances above the “de minimus” level

SARA 311/312 Hazard Categories
Acute Health Hazard: Yes
Chronic Health Hazard: No
Fire Hazard: No
Sudden release of pressure hazard: Yes
Reactive Hazard: No

California Proposition 65
This product is not subject to warning requirements under California Proposition 65.

16. OTHER INFORMATION
Disclaimers:
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the
date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage,
transportation, disposal and release and is not to be considered a warranty or quality specification. The information
relates only to the specific material designated and may not be valid for such material used in combination with any other
materials or in any process, unless specified in the text.

End of Safety Data Sheet
# 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier**
**Product Name:** SHINELINE EMULSIFIER PLUS
**Product Number:** 0084
**Recommended Use:** Stripping solution
**Uses Advised Against:** For Industrial and Institutional Use Only

**Manufacturer/Supplier:**
Spartan Chemical Company, Inc.
1110 Spartan Drive
Maumee, Ohio 43537 USA
800-537-8990 (Business hours)
www.spartanchemical.com

**24 Hour Emergency Phone Numbers:**
**Medical Emergency/Information:** 888-314-6171
**Transportation/Spill/Leak:** CHEMTREC 800-424-9300

# 2. HAZARDS IDENTIFICATION

**GHS Classification**
- Acute Toxicity - Oral: Category 4
- Acute toxicity - Inhalation (Dusts/Mists): Category 4
- Skin Corrosion/Irritation: Category 1, Sub-category B
- Serious Eye Damage/Eye Irritation: Category 1
- Corrosive to Metals: Category 1

**GHS Label Elements**
**Signal Word:** Danger
**Symbols:**

**Hazard Statements:**
- Harmful if swallowed.
- Harmful if inhaled.
- Causes severe skin burns and serious eye damage.
- May be corrosive to metals.

**Precautionary Statements:**
**Prevention:**
- Wash hands and any exposed skin thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Do not breathe mist, vapors or spray.
- Wear protective gloves. Wear eye/face protection. Wear protective clothing.
- Keep in original or other corrosion resistant container.

**Response:**
- **IMMEDIATELY CALL A POISON CENTER OR PHYSICIAN.**
  - **Eyes**
    - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - **Skin**
    - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse.
-Inhalation: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
-Ingestion: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
-Specific Treatment: See Safety Data Sheet Section 4: "FIRST AID MEASURES" for additional information.

Spill: Absorb spillage to prevent material damage.
Storage: Store locked up. Store in corrosion resistant container.
Disposal: Dispose of contents and container in accordance with local, state and federal regulations.

Hazards Not Otherwise Classified: Not Applicable

Other Information:
- Corrosive.
- Harmful or fatal if swallowed.
- Harmful contact may not cause immediate pain.
- Take off and destroy contaminated shoes.
- Keep out of reach of children.
- NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>30-60</td>
</tr>
<tr>
<td>Butoxyethanol</td>
<td>111-76-2</td>
<td>10-30</td>
</tr>
<tr>
<td>Ethanolamine</td>
<td>141-43-5</td>
<td>1-5</td>
</tr>
<tr>
<td>Sodium Xylenesulfonate</td>
<td>1300-72-7</td>
<td>1-5</td>
</tr>
<tr>
<td>Sodium Hydroxide</td>
<td>1310-73-2</td>
<td>1-5</td>
</tr>
<tr>
<td>C9-11 Alkyl Glucoside</td>
<td>132778-08-6</td>
<td>1-5</td>
</tr>
<tr>
<td>Benzyl Benzoate</td>
<td>120-51-4</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Fragrance</td>
<td>PROPRIETARY</td>
<td>&lt;0.1</td>
</tr>
</tbody>
</table>

Specific chemical identity and/or exact percentage of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

- **Eye Contact:** Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IMMEDIATELY CALL A POISON CENTER OR PHYSICIAN.
- **Skin Contact:** Take off immediately all contaminated clothing and shoes. Rinse with water or shower for at least 15 minutes. IMMEDIATELY CALL A POISON CENTER OR PHYSICIAN. Wash contaminated clothing before reuse. Discard or destroy contaminated shoes.
- **Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. IMMEDIATELY CALL A POISON CENTER OR PHYSICIAN.
- **Ingestion:** Rinse mouth. Do NOT induce vomiting. IMMEDIATELY CALL A POISON CENTER OR PHYSICIAN. Never give anything by mouth to an unconscious person.

**Note to Physicians:** NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

### 5. FIRE-FIGHTING MEASURES

- **Suitable Extinguishing Media:** Product does not support combustion, Use extinguishing agent suitable for type of surrounding fire
- **Specific Hazards Arising from the Chemical:** Dried product is capable of burning. Combustion products are toxic.
- **Hazardous Combustion Products:** May include Carbon monoxide Carbon dioxide and other toxic gases or vapors.
- **Protective Equipment and Precautions for Firefighters:** Wear MSHA/NIOSH approved self-contained breathing apparatus (SCBA) and full protective gear. Cool fire-exposed containers with water spray.
6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.
Environmental Precautions: Do not rinse spill onto the ground, into storm sewers or bodies of water.
Methods for Clean-Up: Prevent further leakage or spillage if safe to do so. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

7. HANDLING AND STORAGE

Advice on Safe Handling: Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling.
Storage Conditions: Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep from freezing.
Suggested Shelf Life: Minimum of 2 years from date of manufacture.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butoxyethanol</td>
<td>TWA: 20 ppm</td>
<td>TWA: 50 ppm</td>
<td>IDLH: 700 ppm</td>
</tr>
<tr>
<td>111-76-2</td>
<td>TWA: 25 ppm (vacated)</td>
<td>TWA: 120 mg/m³ (vacated)</td>
<td>TWA: 5 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA: 240 mg/m³</td>
<td>S* TWA: 25 ppm</td>
<td>TWA: 24 mg/m³</td>
</tr>
<tr>
<td></td>
<td>(vacated)</td>
<td>S* TWA: 8 mg/m³</td>
<td>(vacated) S*</td>
</tr>
<tr>
<td></td>
<td>(vacated)</td>
<td>IDLH: 700 ppm</td>
<td>IDLH: 24 mg/m³</td>
</tr>
<tr>
<td>Ethanolamine</td>
<td>STEL: 6 ppm</td>
<td>TWA: 3 ppm</td>
<td>S* IDLH: 30 ppm</td>
</tr>
<tr>
<td>141-43-5</td>
<td>TWA: 3 ppm</td>
<td>TWA: 6 mg/m³</td>
<td>TWA: 3 ppm</td>
</tr>
<tr>
<td></td>
<td>(vacated)</td>
<td>(vacated) TWA: 3 ppm</td>
<td>TWA: 8 mg/m³</td>
</tr>
<tr>
<td></td>
<td>(vacated)</td>
<td>(vacated) TWA: 8 mg/m³</td>
<td>STEL: 6 ppm</td>
</tr>
<tr>
<td></td>
<td>(vacated)</td>
<td>(vacated) STEL: 6 ppm</td>
<td>STEL: 15 mg/m³</td>
</tr>
<tr>
<td></td>
<td>(vacated)</td>
<td>(vacated) STEL: 15 mg/m³</td>
<td>S* S* S* S*</td>
</tr>
<tr>
<td>Sodium Hydroxide</td>
<td>Ceiling: 2 mg/m³</td>
<td>TWA: 2 mg/m³</td>
<td>IDLH: 10 mg/m³</td>
</tr>
<tr>
<td>1310-73-2</td>
<td>(vacated) Ceiling: 2 mg/m³</td>
<td>TWA: 2 mg/m³</td>
<td>Ceiling: 2 mg/m³</td>
</tr>
</tbody>
</table>

Engineering Controls: Provide good general ventilation. If work practices generate dust, fumes, gas, vapors or mists which expose workers to chemicals above the occupational exposure limits, local exhaust ventilation or other engineering controls should be considered. Eye wash stations and shower facilities should be readily accessible in areas where the product is handled.

Personal Protective Equipment
Eye/Face Protection: Wear splash goggles. For severe use-conditions, wear a face shield over the goggles.
Skin and Body Protection: Wear rubber or other chemical-resistant gloves and solvent / alkali resistant boots. The use of other protective equipment should be considered in order to prevent or minimize contact with this product.
Respiratory Protection: Not required with expected use. If occupational exposure limits are exceeded or respiratory irritation occurs, use of a NIOSH/MSHA approved respirator suitable for the use-conditions and chemicals in Section 3 should be considered.
10. STABILITY AND REACTIVITY

Reactivity: This material is considered to be non-reactive under normal conditions of use.
Chemical Stability: Stable under normal conditions.
Possibility of Hazardous Reactions: Contact with aluminum or other reactive metals may release hydrogen gas.
Conditions to Avoid: Extremes of temperature and direct sunlight.
Hazardous Decomposition Products: May include carbon monoxide, carbon dioxide (CO2) and other toxic gases or vapors.

11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Eyes, Skin, Ingestion, Inhalation.
Symptoms of Exposure:
- Eye Contact: Pain, redness, swelling of the conjunctiva and tissue damage. Eye contact may cause permanent damage.
- Skin Contact: Pain, redness, blistering and possible chemical burn.
- Inhalation: Irritation or damage to the mucus membranes of the respiratory tract. Nasal discomfort and coughing.
- Ingestion: Damage or chemical burns to mouth, throat and stomach. Pain, nausea, vomiting and diarrhea.

Immedicate, Delayed, Chronic Effects: Data not available or insufficient for classification.

Numerical Measures of Toxicity
The following acute toxicity estimates (ATE) are calculated based on the GHS document.

<table>
<thead>
<tr>
<th>Component</th>
<th>ATE (oral) (mg/kg)</th>
<th>ATE (dermal) (mg/kg)</th>
<th>ATE (inhalation-dust/mist) (mg/l)</th>
<th>ATE (inhalation-vapor) (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>1478</td>
<td>3227</td>
<td>4.8</td>
<td>7.9</td>
</tr>
</tbody>
</table>

Component Acute Toxicity Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>&gt; 90 mL/kg (Rat)</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>7732-18-5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Carcinogenicity: No components present at 0.1% or greater are listed as to being carcinogens by ACGIH, IARC, NTP or OSHA.

12. ECOLOGICAL INFORMATION

Ecotoxicity

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/Aquatic Plants</th>
<th>Fish</th>
<th>Toxicity to Microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butoxyethanol 111-76-2</td>
<td>Not Available</td>
<td>1490: 96 h Lepomis macrochirus mg/L LC50 static 2950: 96 h Lepomis macrochirus mg/L LC50</td>
<td>Not Available</td>
<td>1000: 48 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>Ethanolamine 141-43-5</td>
<td>15: 72 h Desmodesmus subspicatus mg/L EC50</td>
<td>227: 96 h Pimephales promelas mg/L LC50 flow-through 3684: 96 h Brachydanio rerio mg/L LC50 static 300 - 1000: 96 h Lepomis macrochirus mg/L LC50 static 200: 96 h Oncorhynchus mykiss mg/L LC50 static 65: 48 h Daphnia magna mg/L EC50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium Hydroxide 1310-73-2</td>
<td>Not Available</td>
<td>45.4: 96 h Oncorhynchus mykiss mg/L LC50 static</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

Persistence and Degradability: No information available.
Bioaccumulation: No information available.
Other Adverse Effects: No information available.

13. DISPOSAL CONSIDERATIONS

Disposal of Wastes: This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).
Contaminated Packaging: Dispose of in accordance with federal, state and local regulations.
US EPA Waste Number: D002

14. TRANSPORT INFORMATION

DOT:
UN/ID No: UN 1760
Proper Shipping Name: Corrosive liquids, n.o.s., (contains sodium hydroxide)
Hazard Class: 8
Packing Group: II
Special Provisions: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Check with a trained hazardous materials transportation expert for information specific to your situation.

IMDG:
UN/ID No: UN 1760
Proper Shipping Name: Corrosive liquids, n.o.s., (contains sodium hydroxide)
Hazard Class: 8
Packing Group: II

15. REGULATORY INFORMATION

TSCA Status: (Toxic Substance Control Act Section 8(b) Inventory)
All chemical substances in this product are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

SARA 313
This product contains the following listed substances:
Butoxyethanol
CAS No 111-76-2 applies to R-(OCH2CH2)n-OR', where n = 1, 2, or 3, R=Alkyl C7 or less, or R = Phenyl or Alkyl substituted phenyl, R' = H or Alkyl C7 or less, or OR' consisting of Carboxylic acid ester, Sulfate, Phosphate, Nitrate, or Sulfonate
Chemical Category N230

SARA 311/312 Hazard Categories

<table>
<thead>
<tr>
<th></th>
<th>Acute Health Hazard:</th>
<th>Chronic Health Hazard:</th>
<th>Fire Hazard:</th>
<th>Sudden release of pressure hazard:</th>
<th>Reactive Hazard:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

California Proposition 65
This product is not subject to warning requirements under California Proposition 65.

16. OTHER INFORMATION

NFPA
Health Hazards: 3
Flammability: 0
Instability: 0
Special: N/A

HMIS
Health Hazards: 3*
Flammability: 0
Physical Hazards: 0

Revision Date: 22-Oct-2019
Reasons for Revision: Section, 2, 3, 8, and, 11

Disclaimer:
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet
1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier
Product Name: SUNNY-SIDE
Product Number: 4045C
Recommended Use: Floor Finish
Uses Advised Against: For Industrial and Institutional Use Only

Manufacturer/Supplier:
Spartan Chemical Company, Inc.  
1110 Spartan Drive  
Maumee, Ohio 43537 USA  
800-537-8990 (Business hours)  
www.spartanchemical.com

Medical Emergency/Information: 888-314-6171 (24 Hour)

2. HAZARDS IDENTIFICATION

GHS Classification
Not Classified

GHS Label Elements
Signal Word: No signal word
Symbols: None
Hazard Statements: No hazard statements
Precautionary Statements:
Prevention: Not Applicable
Response: See Safety Data Sheet Section 4: "FIRST AID MEASURES" for additional information.

Storage: Not Applicable
Disposal: Not Applicable

Hazards Not Otherwise Classified: Not Applicable

Other Information:
• May cause skin irritation.
• May cause eye irritation.
• May be harmful if swallowed.
• Inhalation of vapors or mist may cause respiratory irritation.
• Keep out of reach of children.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>water</td>
<td>7732-18-5</td>
<td>75.0-77.5</td>
</tr>
<tr>
<td>acrylate copolymer</td>
<td>63744-68-3</td>
<td>12.5-15.0</td>
</tr>
<tr>
<td>diethylene glycol monoethyl ether</td>
<td>111-90-0</td>
<td>2.5-5.0</td>
</tr>
<tr>
<td>modified rosin ester</td>
<td>68152-55-6</td>
<td>1.0-2.5</td>
</tr>
<tr>
<td>tributoxyethyl phosphate</td>
<td>78-51-3</td>
<td>1.0-2.5</td>
</tr>
</tbody>
</table>
4. FIRST AID MEASURES

- **Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

- **Skin Contact:** Wash with soap and water. If skin irritation occurs: Get medical attention.

- **Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison control center or physician if you feel unwell.

- **Ingestion:** Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if you feel unwell.

**Note to Physicians:** Treat symptomatically.

5. FIRE-FIGHTING MEASURES

- **Suitable Extinguishing Media:** Product does not support combustion, Use extinguishing agent suitable for type of surrounding fire

- **Specific Hazards Arising from the Chemical:** Dried product is capable of burning. Combustion products are toxic.

- **Hazardous Combustion Products:** May include Carbon monoxide Carbon dioxide and other toxic gases or vapors.

- **Protective Equipment and Precautions for Firefighters:** Wear MSHA/NIOSH approved self-contained breathing apparatus (SCBA) and full protective gear. Cool fire-exposed containers with water spray.

6. ACCIDENTAL RELEASE MEASURES

- **Personal Precautions:** Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

- **Environmental Precautions:** Do not rinse spill onto the ground, into storm sewers or bodies of water.

- **Methods for Clean-Up:** Prevent further leakage or spillage if safe to do so. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

7. HANDLING AND STORAGE

- **Advice on Safe Handling:** Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling.

- **Storage Conditions:** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep from freezing.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- **Occupational Exposure Limits:** None established.

- **Engineering Controls:** Provide good general ventilation.

- **Personal Protective Equipment**
  - **Eye/Face Protection:** Not required with expected use.
  - **Skin and Body Protection:** Not required with expected use.
  - **Respiratory Protection:** Not required with expected use.

- **General Hygiene Considerations:** Wash hands and any exposed skin thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

- **Appearance/Physical State:** Liquid

- **Color:** White emulsion

- **Odor:** Slight ammonia odor

- **pH:** 8.7-9.1

- **Melting Point / Freezing Point:** No information available.
Boiling Point / Boiling Range: 100 °C / 212 °F
Flash Point: > 99 °C / > 210 °F ASTM D56
Evaporation Rate: < 1 (Butyl acetate = 1)
Flammability (solid, gas): No information available.
Upper Flammability Limit: No information available.
Lower Flammability Limit: No information available.
Vapor Pressure: No information available.
Vapor Density: No information available.
Specific Gravity: 1.03
Solubility(ies): Miscible in water
Partition Coefficient: No information available.
Autoignition Temperature: No information available.
Decomposition Temperature: No information available.
Viscosity: No information available.

10. STABILITY AND REACTIVITY

Reactivity: This material is considered to be non-reactive under normal conditions of use.
Chemical Stability: Stable under normal conditions.
Possibility of Hazardous Reactions: Not expected to occur with normal handling and storage.
Conditions to Avoid: Extremes of temperature and direct sunlight.
Hazardous Decomposition: May include carbon monoxide, carbon dioxide (CO2) and other toxic gases or vapors.

11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Eyes, Skin, Ingestion, Inhalation.
Symptoms of Exposure:
- Eye Contact: Pain and redness.
- Skin Contact: Drying of the skin.
- Inhalation: Nasal discomfort and coughing.
- Ingestion: Pain, nausea, vomiting and diarrhea.
Immediate, Delayed, Chronic Effects
Product Information: Data not available or insufficient for classification.

Numerical Measures of Toxicity
The following acute toxicity estimates (ATE) are calculated based on the GHS document.

ATEmix (oral): 23153 mg/kg
ATEmix (dermal): 40524 mg/kg
ATEmix (inhalation-dust/mist): 45.9 mg/l

Component Acute Toxicity Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>water</td>
<td>&gt; 90 mL/kg (Rat)</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>diethylene glycol monoethyl ether</td>
<td>1920 mg/kg (Rat)</td>
<td>= 4200 µL/kg (Rabbit) = 6 mL/kg (Rat)</td>
<td>&gt; 5240 mg/m³ (Rat) 4 h</td>
</tr>
<tr>
<td>111-90-0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tributoxyethyl phosphate</td>
<td>3000 mg/kg (Rat)</td>
<td>&gt; 5000 mg/kg (Rabbit)</td>
<td>&gt; 6.4 mg/L (Rat) 4 h</td>
</tr>
<tr>
<td>78-51-3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Carcinogenicity: No components present at 0.1% or greater are listed as to being carcinogens by ACGIH, IARC, NTP or OSHA.

12. ECOLOGICAL INFORMATION

Ecotoxicity

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/Aquatic Plants</th>
<th>Fish</th>
<th>Toxicity to Microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
diethylene glycol monoethyl ether
111-90-0
Not Available
11400 - 15700: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 11600 - 16700: 96 h Pimephales promelas mg/L LC50 flow-through 10000: 96 h Lepomis macrochirus mg/L LC50 static 19100 - 23900: 96 h Lepomis macrochirus mg/L LC50 flow-through 13400: 96 h Salmo gairdneri mg/L LC50 flow-through
Not Available
3940 - 4670: 48 h Daphnia magna mg/L EC50

tributoxyethyl phosphate
78-51-3
Not Available
10.4 - 12.0: 96 h Pimephales promelas mg/L LC50 flow-through
Not Available
Not Available

Persistence and Degradability: No information available.
Bioaccumulation: No information available.
Other Adverse Effects: No information available.

13. DISPOSAL CONSIDERATIONS

Disposal of Wastes: Dispose of in accordance with federal, state and local regulations.
Contaminated Packaging: Dispose of in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

TDG / DOT: Not Regulated
Proper Shipping Name: Non-Hazardous Products
Special Provisions: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Check with a trained hazardous materials transportation expert for information specific to your situation.

IMDG: Not Regulated
Proper Shipping Name: Non-Hazardous Products

15. REGULATORY INFORMATION

DSL / NDSL Status: (Domestic Substances List / Non-Domestic Substances List)
The chemical substances in this product are included on or exempt from listing on the Canadian DSL / NDSL.

TSCA Status: (Toxic Substance Control Act Section 8(b) Inventory)
All chemical substances in this product are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

SARA 313
This product contains the following listed substances:
diethylene glycol monoethyl ether
CAS No. 111-90-0 applies to R-(OCH2CH2)n-OR’, where n = 1, 2, or 3, R=Alkyl C7 or less, or R = Phenyl or Alkyl substituted phenyl, R' = H or Alkyl C7 or less, or OR' consisting of Carboxylic acid ester, Sulfate, Phosphate, Nitrate, or Sulfonate, Chemical Category N230

SARA 311/312 Hazard Categories
Acute Health Hazard: Yes
Chronic Health Hazard: No
Fire Hazard: No
Sudden release of pressure hazard: No
Reactive Hazard: No

16. OTHER INFORMATION
End of Safety Data Sheet
1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name: TOUGH DUTY
Product Number: 2040, 2041
Recommended Use: Cleaning agent
Uses Advised Against: For Industrial and Institutional Use Only

Manufacturer/Supplier: Spartan Chemical Company, Inc.
1110 Spartan Drive
Maumee, Ohio 43537 USA
800-537-8990 (Business hours)
www.spartanchemical.com

24 Hour Emergency Phone Numbers:
Medical Emergency/Information: 888-314-6171
Transportation/Spill/Leak: CHEMTREC 800-424-9300

2. HAZARDS IDENTIFICATION

GHS Classification
Skin Corrosion/Irritation: Category 2
Serious Eye Damage/Eye Irritation: Category 2B

GHS Label Elements
Signal Word: Warning
Symbols:

Hazard Statements: Causes skin irritation.
Causes eye irritation.

Precautionary Statements:
Prevention: Wash hands and any exposed skin thoroughly after handling.
Wear protective gloves

Response:
-Eyes IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
-Skin IF ON SKIN: Wash with plenty of soap and water If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash before reuse
-Specific Treatment: See Safety Data Sheet Section 4: "FIRST AID MEASURES" for additional information.

Storage: Not Applicable
Disposal: Not Applicable

Hazards Not Otherwise Classified: Not Applicable
Other Information:
- May be harmful if swallowed.
- Inhalation of vapors or mist may cause respiratory irritation.
- Keep out of reach of children.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>60-100</td>
</tr>
<tr>
<td>Butoxydiglycol</td>
<td>112-34-5</td>
<td>1-5</td>
</tr>
<tr>
<td>Undeceth-3</td>
<td>34398-01-1</td>
<td>1-5</td>
</tr>
<tr>
<td>Poly(oxy-1,2-ethanediyl) a,a-[[3-(decyloxy)propyl[methyliminio]di-2,1-ethane diyl]bis[w-hydroxy-,branched,chlorides</td>
<td>68478-94-4</td>
<td>0.1-1</td>
</tr>
<tr>
<td>Fragrance</td>
<td>PROPRIETARY</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Potassium Hydroxide</td>
<td>1310-58-3</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Cyclamen Aldehyde</td>
<td>103-95-7</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Phenethyl Alcohol</td>
<td>60-12-8</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Geraniol</td>
<td>106-24-1</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Citronellol</td>
<td>106-22-9</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Acid Red 52</td>
<td>3520-42-1</td>
<td>&lt;0.1</td>
</tr>
</tbody>
</table>

Specific chemical identity and/or exact percentage of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

**-Eye Contact:** Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

**-Skin Contact:** Wash with plenty of soap and water Take off contaminated clothing and wash before reuse. If skin irritation occurs: Get medical attention.

**-Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison control center or physician if you feel unwell.

**-Ingestion:** Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if you feel unwell.

**Note to Physicians:** Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media:** Product does not support combustion, Use extinguishing agent suitable for type of surrounding fire.

**Specific Hazards Arising from the Chemical:** Dried product is capable of burning. Combustion products are toxic.

**Hazardous Combustion Products:** May include Carbon monoxide Carbon dioxide and other toxic gases or vapors.

**Protective Equipment and Precautions for Firefighters:** Wear MSHA/NIOSH approved self-contained breathing apparatus (SCBA) and full protective gear. Cool fire-exposed containers with water spray.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

**Environmental Precautions:** Do not rinse spill onto the ground, into storm sewers or bodies of water.

**Methods for Clean-Up:** Prevent further leakage or spillage if safe to do so. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

### 7. HANDLING AND STORAGE
Advice on Safe Handling: Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling.

Storage Conditions: Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers.

Suggested Shelf Life: Minimum of 2 years from date of manufacture.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butoxydiglycol</td>
<td>TWA: 10 ppm inhalable fraction and vapor</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potassium Hydroxide</td>
<td>Ceiling: 2 mg/m³</td>
<td>(vacated) Ceiling: 2 mg/m³</td>
<td>Ceiling: 2 mg/m³</td>
</tr>
</tbody>
</table>

Engineering Controls: Provide good general ventilation. If work practices generate dust, fumes, gas, vapors or mists which expose workers to chemicals above the occupational exposure limits, local exhaust ventilation or other engineering controls should be considered.

Personal Protective Equipment

Eye/Face Protection: Wear splash goggles.

Skin and Body Protection: Wear rubber or other chemical-resistant gloves.

Respiratory Protection: Not required with expected use. If occupational exposure limits are exceeded or respiratory irritation occurs, use of a NIOSH/MSHA approved respirator suitable for the use-conditions and chemicals in Section 3 should be considered.


9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance/Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Pink</td>
</tr>
<tr>
<td>Odor</td>
<td>Floral fragrance</td>
</tr>
<tr>
<td>pH</td>
<td>11.5-12.2</td>
</tr>
<tr>
<td>Melting Point / Freezing Point</td>
<td>No information available.</td>
</tr>
<tr>
<td>Boiling Point / Boiling Range</td>
<td>100 °C / 212 °F</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt; 100 °C / &gt; 212 °F ASTM D56</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>&lt; 1 (Butyl acetate = 1)</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available.</td>
</tr>
<tr>
<td>Upper Flammability Limit</td>
<td>No information available.</td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>No information available.</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No information available.</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No information available.</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.03</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Soluble in water</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>No information available.</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>No information available.</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No information available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No information available.</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity: This material is considered to be non-reactive under normal conditions of use.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: Not expected to occur with normal handling and storage.

Conditions to Avoid: Exposure to air or moisture over prolonged periods.

11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure:
- Eyes, Skin, Ingestion, Inhalation.

Symptoms of Exposure:
- Eye Contact: Pain, redness and swelling of the conjunctiva.
- Skin Contact: Pain, redness and cracking of the skin.
- Inhalation: Nasal discomfort and coughing.
- Ingestion: Pain, nausea, vomiting and diarrhea.

Immediate, Delayed, Chronic Effects

Product Information:
Data not available or insufficient for classification.

Numerical Measures of Toxicity
The following acute toxicity estimates (ATE) are calculated based on the GHS document.

ATE mix (oral): 26794 mg/kg
ATE mix (dermal): 68147 mg/kg

Component Acute Toxicity Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>&gt; 90 mL/kg (Rat)</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Butoxydiglycol</td>
<td>5660 mg/kg (Rat)</td>
<td>2700 mg/kg (Rabbit)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Potassium Hydroxide</td>
<td>284 mg/kg (Rat)</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Cyclamen Aldehyde</td>
<td>3810 mg/kg (Rat)</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Phenethyl Alcohol</td>
<td>1609 mg/kg (Rat)</td>
<td>2535 mg/kg (Rabbit)</td>
<td>&gt; 4.63 mg/L (Rat) 4 h</td>
</tr>
<tr>
<td>Geraniol</td>
<td>3600 mg/kg (Rat)</td>
<td>&gt; 5 g/kg (Rabbit)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Citronellol</td>
<td>3450 mg/kg (Rat)</td>
<td>2650 mg/kg (Rabbit)</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

Carcinogenicity: No components present at 0.1% or greater are listed as to being carcinogens by ACGIH, IARC, NTP or OSHA.

12. ECOLOGICAL INFORMATION

Ecotoxicity

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/Aquatic Plants</th>
<th>Fish</th>
<th>Toxicity to Microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butoxydiglycol</td>
<td>100: 96 h Desmodesmus subspicatus mg/L EC50</td>
<td>1300: 96 h Lepomis macrochirus mg/L LC50 static</td>
<td>Not Available</td>
<td>100: 48 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>Phenethyl Alcohol</td>
<td>490: 72 h Desmodesmus subspicatus mg/L EC50</td>
<td>Not Available</td>
<td>Not Available</td>
<td>287.17: 48 h Daphnia magna mg/L EC50</td>
</tr>
</tbody>
</table>

Persistence and Degradability: No information available.
Bioaccumulation: No information available.
Other Adverse Effects: No information available.

13. DISPOSAL CONSIDERATIONS

Disposal of Wastes: Dispose of in accordance with federal, state and local regulations.
Contaminated Packaging: Dispose of in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION
15. REGULATORY INFORMATION

TSCA Status: (Toxic Substance Control Act Section 8(b) Inventory)
All chemical substances in this product are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

SARA 313
This product contains the following listed substances:
Butoxydiglycol
CAS No 112-34-5 applies to R-(OCH2CH2)n-OR', where n = 1, 2, or 3, R=Alkyl C7 or less, or R = Phenyl or Alkyl substituted phenyl, R’ = H or Alkyl C7 or less, or OR' consisting of Carboxylic acid ester, Sulfate, Phosphate, Nitrate, or SulfonateChemical Category N230

SARA 311/312 Hazard Categories
Acute Health Hazard:    Yes
Chronic Health Hazard: No
Fire Hazard: No
Sudden release of pressure hazard: No
Reactive Hazard: No

California Proposition 65
This product is not subject to warning requirements under California Proposition 65.

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards: 1</th>
<th>Flammability: 0</th>
<th>Instability: 0</th>
<th>Special: N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMIS</td>
<td>Health Hazards: 1</td>
<td>Flammability: 0</td>
<td>Physical Hazards: 0</td>
<td></td>
</tr>
</tbody>
</table>

Revision Date: 25-Oct-2019
Reasons for Revision: Section, 3, 8, 11, and, 12

Disclaimer:
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet
PRODUCT: 11111-X204 CHEWING GUM REMOVER 235G

Section 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER ........................................ K-G SPRAY-PAK INC.
8001 KEELE STREET P.O. BOX 89
ONTARIO
CANADA

PRODUCT NAME........................................ 11111-X204 CHEWING GUM REMOVER 235G

CHEMICAL FAMILY...................................... NOT APPLICABLE.

MOLECULAR WEIGHT................................ NOT APPLICABLE.

TRADE NAMES & SYNONYMS

RECOMMENDED PRODUCT USES............ CLEANER.

FORMULA/LAB BOOK #............................... 9850-08-003.

Section 02: HAZARDS IDENTIFICATION

HAZARD CLASSIFICATION............................ NOT ASSESSED.

SIGNAL WORD............................................ NOT ASSESSED.

HAZARD STATEMENTS.............................. NOT ASSESSED.

PRECAUTIONARY STATEMENTS.............. NOT ASSESSED.

OTHER HAZARDS........................................ NOT ASSESSED.

Section 03: COMPOSITION/INFORMATION INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Ingredients</th>
<th>CAS #</th>
<th>Wt. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISOBUTANE</td>
<td>75-28-5</td>
<td>80-85</td>
</tr>
<tr>
<td>PROPANE</td>
<td>74-98-6</td>
<td>10-20</td>
</tr>
</tbody>
</table>

Section 04: FIRST AID MEASURES

EMERGENCY FIRST AID PROCEDURE .... IN CASE OF EYE CONTACT, FLUSH IMMEDIATELY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND GET MEDICAL ATTENTION. FOR SKIN, WASH THOROUGHLY WITH SOAP AND WATER. IF AFFECTED BY INHALATION OF VAPOUR OR SPRAY MIST, REMOVE TO FRESH AIR. IF SWALLOWED; DO NOT INDUCE VOMITING, GET MEDICAL ATTENTION.

Section 05: FIRE FIGHTING MEASURES

FLAMMABILITY................................. EXTREMELY FLAMMABLE.

IF YES, UNDER WHICH CONDITIONS?....... EXCESSIVE HEAT, SPARKS AND OPEN FLAME.

SPECIAL PROCEDURES......................... WATER FROM FOGGING NOZZLES MAY BE USED TO COOL CLOSED CONTAINERS TO PREVENT BUILD-UP IF EXPOSED TO EXTREME TEMPERATURES. FULL PROTECTIVE EQUIPMENT INCLUDING SELF CONTAINED BREATHING APPARATUS SHOULD BE WORN IN A FIRE INVOLVING THIS MATERIAL.

EXPLOSION DATA
SENSITIVITY TO STATIC DISCHARGE........ NOT APPLICABLE.
SENSITIVITY TO IMPACT...................... NOT APPLICABLE.

EXTINGUISHING MEDIA....................... WATER, CARBON DIOXIDE, DRY CHEMICAL, FOAM.

HAZARDOUS COMBUSTION PRODUCTS........ HYDROCARBON FUMES AND SMOKE. CARBON MONOXIDE WHERE COMBUSTION IS INCOMPLETE.

AEROSOL FLAME PROJECTION CLASSIFIED AS: >100cm.
FLASHBACK....................................... YES.
Section 06: ACCIDENTAL RELEASE MEASURES

LEAK/SPILL.......................................................... REMOVE ALL SOURCES OF IGNITION. USE AN INERT ABSORBENT MATERIAL, AND NON-SPARKING TOOLS. VENTILATE AREA. PREVENT FROM ENTERING A WATERCOURSE.

Section 07: HANDLING AND STORAGE

STORAGE NEEDS.................................................. KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAMES.
ENGINEERING CONTROLS........................................... VENTILATION - LOCAL (MECHANICAL IF USED INDOORS ON A CONTINUOUS BASIS).
HANDLING PROCEDURES AND .................................. STORE IN A COOL, WELL VENTILATED AREA NOT TO EXCEED 50 DEG C.
EQUIPMENT
SYNERGISTIC MATERIALS........................................... NONE KNOWN.

Section 08: EXPOSURE CONTROLS/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLOVES/ TYPE</td>
<td>WEAR CHEMICAL RESISTANT GLOVES.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RESPIRATORY/TYPE</td>
<td>IF USED INDOORS ON A CONTINUOUS BASIS, USE OF A CARTRIDGE TYPE RESPIRATOR (NIOSH/MSHATC 23C OR EQUIVALENT) IS RECOMMENDED.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EYE/TYPE</td>
<td>SAFETY GLASSES.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FOOTWEAR/TYPE</td>
<td>NOT NORMALLY REQUIRED.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OTHER/TYPE</td>
<td>NOT REQUIRED.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXPOSURE LIMIT OF MATERIAL</td>
<td>SEE SECTION 2.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE................................................ AEROSOL.
APPEARANCE.................................................. COLOURLESS.
ODOR....HYDROCARBON.
ODOR THRESHOLD........................................... NOT AVAILABLE.
pH.............................................................. NOT APPLICABLE.
FREEZING POINT: (°C)................................. NOT AVAILABLE.
FLASH POINT (°C), TAG CLOSED CUP............ -42.1 to -0.5.
EVAPORATION RATE.................GAS.
n-BUTYL ACETATE = 1
UPPER FLAMMABLE LIMIT.........9.5. (% BY VOLUME)
LOWER FLAMMABLE LIMIT........1.8. (% BY VOLUME)
VAPOUR PRESSURE(PSIG)-AEROSOL......70 - 80. @ 20 C
VAPOUR DENSITY (AIR=1)...............GREATER THAN 1. (BY WEIGHT)
SPECIFIC GRAVITY (AEROSOL).........0.54.
SPECIFIC GRAVITY (LIQUID)...........0.54.
SOLUBILITY IN WATER g/L (20°C).....NOT AVAILABLE.
COEFFICIENT OF WATER/ OIL DIST...NOT AVAILABLE.
AUTO IGNITION TEMPERATURE (°C)......NOT AVAILABLE.
AEROSOL PERCENT VOLATILE........100. (BY WEIGHT).

Section 10: STABILITY AND REACTIVITY

HAZARDOUS PRODUCTS OF DECOMPOSITION.................................. HYDROCARBON FUMES AND SMOKE. CARBON MONOXIDE WHERE COMBUSTION IS INCOMPLETE.
CHEMICAL STABILITY:
YES........................................UNDER NORMAL CONDITIONS.
NO, WHICH CONDITIONS?..........NOT APPLICABLE.
COMPATIBILITY WITH OTHER SUBSTANCES:
NO, WHICH ONES?..................STRONG OXIDIZING AGENTS.
REACTIVITY CONDITIONS?...........NOT APPLICABLE.
HAZARDOUS POLYMERIZATION............WILL NOT OCCUR.
Section 11: TOXICOLOGICAL INFORMATION

**Ingredients**

<table>
<thead>
<tr>
<th></th>
<th>LC50-inh, rat</th>
<th>LD50-Oral, rat</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISOBUTANE</td>
<td>142,500 ppm (4h) INHAL - RAT</td>
<td>NOT APPLICABLE</td>
</tr>
<tr>
<td>PROPANE</td>
<td>NOT AVAILABLE</td>
<td>&gt;5000 mg/kg DERMAL-RABBITS</td>
</tr>
</tbody>
</table>

**ROUTE OF ENTRY:**

- **INHALATION:** PROPELLANT IS A SIMPLE ASPHYXIANT.
- **INGESTION:** MAY CAUSE HEADACHE, Nausea, VOMITING AND WEAKNESS.
- **EYE CONTACT:** MAY CAUSE IRRITATION.
- **SKIN CONTACT:** MAY CAUSE FROSTBITE.
- **SKIN ABSORPTION:** NO DATA AVAILABLE FOR THIS PRODUCT MIXTURE.

**EFFECTS OF ACUTE EXPOSURE:**

- DIZZINESS, NAUSEA, IRRITATION TO SKIN & EYES.

**EFFECTS OF CHRONIC EXPOSURE:**

- IRRITANCY OF MATERIAL.

**CARCINOGENICITY OF MATERIAL:**

- THE INGREDIENTS OF THIS PRODUCT ARE NOT LISTED AS CARCINOGENS BY NTP, (NATIONAL TOXICOLOGY PROGRAM), NOT REGULATED AS CARCINOGENS BY OSHA, (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION), AND HAVE NOT BEEN EVALUATED BY IARC,(INTERNATIONAL AGENCY FOR RESEARCH ON CANCER), NOR BY ACGIH (AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS).

**MUTAGENICITY:**

- NO INFORMATION IS AVAILABLE AND NO ADVERSE MUTAGENIC EFFECTS ARE ANTICIPATED.

**TERATOGENICITY:**

- NO INFORMATION IS AVAILABLE AND NO ADVERSE TERATOGENIC EFFECTS ARE ANTICIPATED.

**REPRODUCTIVE EFFECTS:**

- NO INFORMATION IS AVAILABLE AND NO ADVERSE REPRODUCTIVE EFFECTS ARE ANTICIPATED.

**SENSITIZING CAPABILITY OF MATERIAL:**

- UNKNOWN.

Section 12: ECOLOGICAL CONSIDERATIONS

**ENVIRONMENTAL:** NOT AVAILABLE.

Section 13: DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL:** DO NOT PUNCTURE OR INCINERATE CONTAINERS, EVEN WHEN EMPTY. DISPOSE OF IN ACCORDANCE WITH LOCAL, PROVINCIAL AND FEDERAL REGULATIONS.

Section 14: TRANSPORTATION INFORMATION

**T.D.G. CLASSIFICATION:** CONSUMER COMMODITY (AEROSOLS, UN1950, CLASS 2.1).

**D.O.T. CLASSIFICATION:** CONSUMER COMMODITY, ORM-D.

Section 15: REGULATORY INFORMATION

**CANADIAN REGULATIONS:**

- **WHMIS CLASSIFICATION:** A,B5.
- **CNFC SECTION 3.3.5:** LEVEL 3.
- **CEPA (Canadian Enviromental Protection Act)**

**U.S. REGULATIONS:**

- **HMIS RATING HEALTH:** 1 SLIGHT HAZARD.
- **HMIS RATING FLAMMABILITY:** 4 SEVERE HAZARD.
- **HMIS RATING REACTIVITY:** 1 SLIGHT HAZARD.
- **HMIS RATING PERSONAL PROTECTION:** B.
- **NFPA CODE 30B:** LEVEL 3.
- **SARA 313 INFORMATION:** NO INFORMATION AVAILABLE FOR THIS PRODUCT MIXTURE.

**SARA 302 INFORMATION:**

- **INVENTORY:** NO INFORMATION AVAILABLE FOR THIS PRODUCT MIXTURE.

**CALIFORNIA PROPOSITION 65:**

- **THE FOLLOWING STATEMENT IS MADE IN ORDER TO COMPLY WITH THE CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986:**

- **WARNING:** THIS PRODUCT DOES NOT INTENTIONALLY CONTAIN ANY CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

- **CAS #:** CHEMICAL NAME: N/A.
Section 15: REGULATORY INFORMATION

TSCA (Toxic Substances Control Act) .......... ALL COMPONENT OF THIS PRODUCT ARE LISTED ON THE TSCA INVENTORY. ANY IMPURITIES PRESENT IN THIS PRODUCT ARE EXEMPT FROM LISTING.
AEROSOL PERCENT VOC (w/w) .............. 100.

Section 16: OTHER INFORMATION

NOTICE FROM K-G SPRAY-PAK INC .......... THE INFORMATION ON THIS MATERIAL SAFETY DATA SHEET IS PROVIDED BY K-G SPRAY-PAK INC. FREE OF CHARGE. WHILE BELIEVED TO BE RELIABLE, IT IS INTENDED FOR USE BY SKILLED PERSONS AT THEIR OWN RISK. K-G SPRAY-PAK INC. ASSUMES NO RESPONSIBILITY FOR EVENTS RESULTING OR DAMAGES INCURRED FROM ITS USE. THE INFORMATION ON THIS MATERIAL SAFETY DATA SHEET RELATES ONLY TO THE SPECIFIC MATERIAL DESIGNATED HEREIN AND DOES NOT RELATE TO USE IN COMBINATION WITH ANY OTHER MATERIAL OR IN ANY PROCESS.

PREPARED BY ............................................ Regulatory Affairs
PREPARATION DATE ............................ Jan21/14
1 - Chemical Product and Company Identification

<table>
<thead>
<tr>
<th>Manufacturer: WD-40 Company</th>
<th>Chemical Name: Organic Mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address: 9715 Businesspark Ave</td>
<td>Trade Name: WD-40 Aerosol</td>
</tr>
<tr>
<td>San Diego, CA, USA</td>
<td>Product Use: Lubricant, Penetrant, Drives Out</td>
</tr>
<tr>
<td>Post code: 92131</td>
<td>Moisture, Removes and Protects Surfaces</td>
</tr>
<tr>
<td>Telephone: +1-800-448-9340</td>
<td>From Corrosion</td>
</tr>
<tr>
<td>+1-858-251-5600</td>
<td>SDS Date Of Preparation: April 12, 2018</td>
</tr>
</tbody>
</table>

24 Hour Emergency Phone Number:
1-888-324-7596 (PROSAR)
Chemical Spills:
1-800-424-9300 (Chemtrec)
1-703-527-3887 (International Calls)

2 - Hazards Identification

GHS Classification:
- Flammable Aerosol Category 1
- Aspiration Toxicity Category 1

DANGER!
H222 Extremely Flammable Aerosol.
H229 Pressurized container: may burst if heated.
H304 May be fatal if swallowed and enters airways.

Prevention
P210 Keep away from heat, sparks, open flames, and hot surfaces. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.

Response
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P331 Do NOT induce vomiting.

Storage
P405 Store locked up.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Disposal
P501 Dispose of contents and container in accordance with local and national regulations.

3 - Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS #</th>
<th>Weight Percent</th>
<th>GHS Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated light</td>
<td>64742-47-8</td>
<td>50-70</td>
<td>Flammable Liquid Category 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aspiration Toxicity Category 1</td>
</tr>
<tr>
<td>Non-Hazardous Ingredients</td>
<td>Mixture</td>
<td>30-50</td>
<td>Not Hazardous</td>
</tr>
<tr>
<td>Carbon Dioxide</td>
<td>124-38-9</td>
<td>2-3</td>
<td>Gas Under Pressure</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Compressed Gas</td>
</tr>
</tbody>
</table>
4 – First Aid Measures

**Ingestion (Swallowed):** Aspiration Hazard. DO NOT induce vomiting. Call physician, poison control center or the WD-40 Safety Hotline at 1-888-324-7596 immediately. 24 hours Hotline of Emergency Service for Chemical Incident in China: 0532-83889090.

**Eye Contact:** Flush thoroughly with water. Remove contact lenses if present after the first 5 minutes and continue flushing for several more minutes. Get medical attention if irritation persists.

**Skin Contact:** Wash with soap and water. If irritation develops and persists, get medical attention.

**Inhalation (Breathing):** If irritation is experienced, move to fresh air. Get medical attention if irritation or other symptoms develop and persist.

**Most Important Symptoms (acute and delayed):** May cause eye irritation. Skin contact may cause drying of the skin. Inhalation of mists may cause coughing, headache and dizziness. Harmful or fatal if swallowed. If swallowed, may be aspirated and cause lung damage.

**Indication of Immediate Medical Attention or Special Treatment:** Immediate medical attention is required for ingestion.

5 – Fire Fighting Measures

**Extinguishing Media:** Use water fog, dry chemical, carbon dioxide or foam. Do not use water jet or flooding amounts of water. Burning product will float on the surface and spread fire.

**Special Fire Fighting Procedures:** Firefighters should always wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire-exposed containers with water. Use shielding to protect against bursting containers.

**Unusual Fire and Explosion Hazards:** Contents under pressure. Extremely flammable aerosol. Keep away from ignition sources and open flames. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force. Vapors can cause a flash fire. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back. A vapor and air mixture can create an explosion hazard in confined spaces.

6 – Accidental Release Measures

**Personal Precautions, Protective Equipment and Emergency Procedures:** Eliminate all sources of ignition and ventilate area. Wear appropriate protective clothing (see Section 8).

**Environmental Precautions:** Report spills to authorities as required.

**Methods and Materials for Containment/Cleanup:** Leaking cans should be placed in a plastic bag or open pail until the pressure has dissipated. Contain and collect liquid with an inert absorbent and place in a container for disposal. Clean spill area thoroughly. Report spills to authorities as required.

7 – Handling and Storage

**Precautions for Safe Handling:** Avoid contact with eyes. Avoid prolonged contact with skin. Avoid breathing vapors or aerosols. Use only with adequate ventilation. Keep away from heat, sparks, pilot lights, hot surfaces and open flames. Unplug electrical tools, motors and appliances before spraying or bringing the can near any source of electricity. Electricity can burn a hole in the can and cause contents to burst into flames. To avoid serious burn injury, do not let the can touch battery terminals, electrical connections on motors or appliances or any other source of electricity. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep out of the reach of children. Do not puncture, crush or incinerate containers, even when empty.

**Conditions for Safe Storage, including any incompatibilities:** Store in a cool, well-ventilated area, away from incompatible materials. Do not store in direct sunlight or above 120°F. Store away from oxidizers.

8 – Exposure Controls/Personal Protection

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Occupational Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated light</td>
<td>1200 mg/m3 TWA (manufacturer recommended)</td>
</tr>
<tr>
<td>Non-Hazardous Ingredients</td>
<td>None Established</td>
</tr>
<tr>
<td>Carbon Dioxide</td>
<td>5000 ppm TWA, 30,000 ppm STEL ACGIH TLV 9000 mg/m3 TWA, 18000 mg/m3 STEL PC OEL</td>
</tr>
</tbody>
</table>
The Following Controls are Recommended for Normal Consumer Use of this Product

Engineering Controls: Use in a well-ventilated area.

Personal Protection:
Eye Protection: Avoid eye contact. Always spray away from your face.
Skin Protection: Avoid prolonged skin contact. Chemical resistant gloves recommended for operations where skin contact is likely.
Respiratory Protection: None needed for normal use with adequate ventilation.

For Bulk Processing or Workplace Use the Following Controls are Recommended

Engineering Controls: Use adequate general and local exhaust ventilation to maintain exposure levels below that occupational exposure limits.

Personal Protection:
Eye Protection: Safety goggles recommended where eye contact is possible.
Skin Protection: Wear chemical resistant gloves.
Respiratory Protection: None required if ventilation is adequate. If the occupational exposure limits are exceeded, wear a NIOSH approved respirator. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2 and good Industrial Hygiene practice.

Work/Hygiene Practices: Wash with soap and water after handling.

9 – Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance:</td>
<td>Light amber liquid</td>
</tr>
<tr>
<td>Flammable Limits:</td>
<td>LEL: 0.6%  UEL: 5.0%</td>
</tr>
<tr>
<td>Odor:</td>
<td>Mild petroleum odor</td>
</tr>
<tr>
<td>Odor Threshold:</td>
<td>Not established</td>
</tr>
<tr>
<td>pH:</td>
<td>Not established</td>
</tr>
<tr>
<td>Melting/Freezing Point:</td>
<td>Not established</td>
</tr>
<tr>
<td>Boiling Point/Range:</td>
<td>147-663°C</td>
</tr>
<tr>
<td>Flash Point:</td>
<td>175°F (79.5°C)</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>Not established</td>
</tr>
<tr>
<td>Flammability (solid, gas):</td>
<td>Flammable Aerosol</td>
</tr>
<tr>
<td>VOC:</td>
<td>533 grams/liter (65%)</td>
</tr>
<tr>
<td>Odor:</td>
<td>0.023 kPa @ 20°C</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>6.2</td>
</tr>
<tr>
<td>Vapor Density:</td>
<td>Not established</td>
</tr>
<tr>
<td>Relative Density:</td>
<td>Not established</td>
</tr>
<tr>
<td>Solubility(ies):</td>
<td>Insoluble in water</td>
</tr>
<tr>
<td>Auto ignition Temperature:</td>
<td>239°C</td>
</tr>
<tr>
<td>Decomposition Temperature:</td>
<td>Not established</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>3.72 mm2/sec@40°C</td>
</tr>
<tr>
<td>Pour Point:</td>
<td>-42°C</td>
</tr>
<tr>
<td>Partition Coefficient; n-octanol/water:</td>
<td>Not established</td>
</tr>
</tbody>
</table>

10 – Stability and Reactivity

Reactivity: Not reactive under normal conditions
Chemical Stability: Stable
Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
Conditions to Avoid: Avoid heat, sparks, flames and other sources of ignition. Do not puncture or incinerate containers.
Incompatible Materials: Strong oxidizing agents.
Hazardous Decomposition Products: Carbon monoxide and carbon dioxide.

11 – Toxicological Information

Symptoms of Overexposure:
Inhalation: High concentrations may cause nasal and respiratory irritation and central nervous system effects such as headache, dizziness and nausea. Intentional abuse may be harmful or fatal.
Skin Contact: Prolonged and/or repeated contact may produce mild irritation and defatting with possible dermatitis.
Eye Contact: Contact may be irritating to eyes. May cause redness and tearing.
Ingestion: This product has low oral toxicity. Swallowing may cause gastrointestinal irritation, nausea, vomiting and diarrhea. This product is an aspiration hazard. If swallowed, can enter the lungs and may cause chemical pneumonitis, severe lung damage and death.
Chronic Effects: None expected.
Carcinogen Status: None of the components are listed as a carcinogen or suspect carcinogen by IARC, NTP, ACGIH or OSHA.
Reproductive Toxicity: None of the components is considered a reproductive hazard.

Numerical Measures of Toxicity:
Acute Toxicity Estimates: Oral > 5,000 mg/kg; Dermal > 2,000 mg/kg based on an assessment of the ingredients. This product is not classified as toxic by established criteria. It is an aspiration hazard.

12 – Ecological Information
Ecotoxicity: No specific aquatic toxicity data is currently available; however components of this product are not expected to be harmful to aquatic organisms. If applied to leaves may kill grasses and small plants by interfering with respiration and transpiration. This product is not toxic to fish but may coat gill structures resulting in suffocation.
Persistency and Degradability: Components are expected to be biodegradable.
Bioaccumulative Potential: Bioaccumulation is not expected based on an assessment of the ingredients.
Mobility in Soil: No data available.
Other Adverse Effects: None Known

13 - Disposal Considerations
Aerosol containers should not be punctured, compacted in home trash compactors or incinerated. Empty containers may be disposed of through normal waste management options. Dispose of all waste product, absorbents, and other materials in accordance with applicable Federal, state and local regulations.

14 – Transportation Information
IMDG Shipping Description: UN1950, Aerosols, 2.1, LTD QTY
ICAO Shipping Description: UN1950, Aerosols, flammable, 2.1

NOTE: WD-40 Company does not test aerosol cans to assure that they meet the pressure and other requirements for transport by air. We do not recommend that our aerosol products be transported by air.

15 – Regulatory Information

China Regulations on the Control over Safety of Dangerous Chemicals: All ingredients in this product are listed in IECSC (Inventory of Existing Chemical Substances in China 2010).

16 – Other Information
Indication of changes; version 1.1 Amended by GBT16483-2008;
Training instructions: Not applicable
Further information: The information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.
Notice to Reader: Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Revision Date: April 12, 2018 Supersedes: December 27, 2017
Prepared by: Industrial Health & Safety Consultants, Inc. Shelton, CT, USA
SAFETY DATA SHEET
Zinsser B-I-N® Primer Sealer

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME: Zinsser B-I-N® Primer Sealer
PRODUCT NO.: ZN7020001
APPLICATION: A brush-/roller-/spray-applied single-component, solvent-borne coating. Intended for use as a primer/coating for stained walls and ceilings.
SUPPLIER: William Zinsser (UK) Ltd
Portobello Industrial Estate
Birtley
County Durham
England
DH3 2RE
+44(0)191 4106611
+44(0)191 4920125
enquiries@tor-coatings.com
CONTACT PERSON: ian.mccormack@tor-coatings.com
EMERGENCY TELEPHONE: +44(0)1865 407333 (NCEC)

2 HAZARDS IDENTIFICATION

Highly flammable
CLASSIFICATION (1999/45): F;R11.
ENVIRONMENT
The product is not expected to be hazardous to the environment.
PHYSICAL AND CHEMICAL HAZARDS
The product is highly flammable, and explosive vapours/air mixtures may be formed even at normal room temperatures.
HUMAN HEALTH
In high concentrations, vapours and spray mists are narcotic and may cause headache, fatigue, dizziness and nausea. Acts as a defatting agent on skin. May cause cracking of skin, and eczema.

3 COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Name</th>
<th>EC No.</th>
<th>CAS-No.</th>
<th>Content %</th>
<th>Classification (67/548/EEC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHANOL</td>
<td>200-578-6</td>
<td>64-17-5</td>
<td>25-50%</td>
<td>F;R11</td>
</tr>
<tr>
<td>METHANOL</td>
<td>200-659-6</td>
<td>67-56-1</td>
<td>1.0-2.5%</td>
<td>F;R11 T;R23/24/25,R39/23/24/25</td>
</tr>
</tbody>
</table>

The Full Text for all R-Phrases is Displayed in Section 16

4 FIRST-AID MEASURES

GENERAL INFORMATION
General first aid, rest, warmth and fresh air. Do not give victim anything to drink if they are unconscious. Get medical attention if any discomfort continues.

INHALATION
Place unconscious person on the side in the recovery position and ensure breathing can take place. If respiratory problems, artificial respiration/oxygen. Get medical attention if any discomfort continues.

INGESTION
Immediately rinse mouth and drink plenty of water or milk. Keep person under observation. Do not induce vomiting. If vomiting occurs, keep head low. Transport immediately to hospital and bring along these instructions.

SKIN CONTACT
Use appropriate hand lotion to prevent defatting and cracking of skin. Immediately remove contaminated clothing. Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water.

EYE CONTACT
Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Get medical attention promptly if symptoms occur after washing.

5 FIRE-FIGHTING MEASURES
Zinsser B-I-N® Primer Sealer

EXTINGUISHING MEDIA
Fire can be extinguished using: Water spray, fog or mist. Foam, carbon dioxide or dry powder. Dry chemicals, sand, dolomite etc. Do not use water jet as an extinguisher, as this will spread the fire.

SPECIAL FIRE FIGHTING PROCEDURES
Use pressurised air mask if product is involved in a fire. Cool containers exposed to flames with water until well after the fire is out. Keep run-off water out of sewers and water sources. Dike for water control.

UNUSUAL FIRE & EXPLOSION HAZARDS
Fire causes formation of toxic gases.

PROTECTIVE MEASURES IN FIRE
Self contained breathing apparatus and full protective clothing must be worn in case of fire.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS
Wear protective clothing as described in Section 8 of this safety data sheet.

ENVIRONMENTAL PRECAUTIONS
Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

SPILL CLEAN UP METHODS
Keep combustibles away from spilled material. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb in vermiculite, dry sand or earth and place into containers. Wash thoroughly after dealing with a spillage.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS
Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. Vapours are heavier than air and may spread near ground to sources of ignition.

STORAGE PRECAUTIONS
Flammable/combustible - Keep away from oxidisers, heat and flames. Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container. Avoid contact with oxidising agents.

STORAGE CLASS
Flammable liquid storage.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Name</th>
<th>STD</th>
<th>TWA - 8 Hrs</th>
<th>STEL - 15 Min</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHANOL</td>
<td>WEL</td>
<td>1000 ppm</td>
<td>1920 mg/m³</td>
<td></td>
</tr>
<tr>
<td>METHANOL</td>
<td>WEL</td>
<td>200 ppm(Sk)</td>
<td>266 mg/m³(Sk)</td>
<td>250 ppm(Sk) 333 mg/m³(Sk)</td>
</tr>
</tbody>
</table>

WEL = Workplace Exposure Limit.

INGREDIENT COMMENTS
WEL = Workplace Exposure Limits

PROTECTIVE EQUIPMENT

PROCESS CONDITIONS
Provide eyewash station.

ENGINEERING MEASURES
Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. All handling to take place in well-ventilated area.

RESPIRATORY EQUIPMENT
Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours. At work in confined or poorly ventilated spaces, respiratory protection with air supply must be used. Wear mask supplied with: Gas cartridge suitable for organic substances.

HAND PROTECTION
For prolonged or repeated skin contact use suitable protective gloves. Use protective gloves made of: Neoprene. Nitrile. Rubber (natural, latex).

EYE PROTECTION
Wear splash-proof eye goggles to prevent any possibility of eye contact.

OTHER PROTECTION
Wear appropriate clothing to prevent any possibility of skin contact.
HYGIENE MEASURES
DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE Liquid
COLOUR White.
ODOUR Odour of alcohol.
SOLUBILITY Partially miscible with water.
RELATIVE DENSITY 1.22 Approx. @20°C.
VAPOUR DENSITY (air=1) Heavier than air
FLASH POINT (°C) 12°C. CC (Closed cup).
FLAMMABILITY LIMIT - LOWER(%) 3.5
FLAMMABILITY LIMIT - UPPER(%) 19.0
VOLATILE ORGANIC COMPOUND (VOC) Cat A/I : <500 g/l (EU Limit 500 g/l)

10 STABILITY AND REACTIVITY

STABILITY
No particular stability concerns.
CONDITIONS TO AVOID
Avoid heat, flames and other sources of ignition. Avoid contact with strong oxidisers.
HAZARDOUS DECOMPOSITION PRODUCTS
Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

11 TOXICOLOGICAL INFORMATION

GENERAL INFORMATION
Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

INHALATION
In high concentrations, vapours may irritate throat and respiratory system and cause coughing. In high concentrations, vapours are narcotic and may cause headache, fatigue, dizziness and nausea.

INGESTION
Gastrointestinal symptoms, including upset stomach.

SKIN CONTACT
Acts as a defatting agent on skin. May cause cracking of skin, and eczema. Irritating to skin.

EYE CONTACT
Irritation of eyes and mucous membranes.

Name METHANOL
Toxic Dose 1 - LD 50 5600 mg/kg (oral rat)
Toxic Conc. - LC 50 64000 ppm/4h (inh-rat)
Toxicological information
This material is toxic.
Other Health Effects
Carcinogen Category 3.

Name ETHANOL
Toxic Dose 1 - LD 50 7060 mg/kg (oral rat)
Toxic Conc. - LC 50 20000 ppm/4h (inh-rat)

12 ECOLOGICAL INFORMATION

ECOTOXICITY
The product is not expected to be hazardous to the environment.
Zinsser B-I-N® Primer Sealer

Name: METHANOL

Ecotoxicity
Not regarded as dangerous for the environment. The product must not be allowed to enter drains or water courses. Dangerous to aquatic life in high concentrations.
LC 50, 96 Hrs, Fish mg/l >10000
EC 50, 48 Hrs, Daphnia, mg/l >10000

Mobility
The product is soluble in water.

Bioaccumulative potential
The product is not bioaccumulating.

Degradability
The product is readily biodegradable.

Name: ETHANOL

Ecotoxicity
Not considered dangerous to aquatic organisms. The product must not be allowed to enter drains or water courses.
LC 50, 96 Hrs, Fish mg/l 13000 - 16000
EC 50, 48 Hrs, Daphnia, mg/l 5680 - 7710

Mobility
The product is soluble in water. The product contains organic solvents which will evaporate easily from all surfaces.

Bioaccumulative potential
The product does not contain any substances expected to be bioaccumulating.

Degradability
The product is readily biodegradable.

13 DISPOSAL CONSIDERATIONS

GENERAL INFORMATION
Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.

DISPOSAL METHODS
Dispose of waste and residues in accordance with local authority requirements. Make sure containers are empty before discarding (explosion risk). Absorb in vermiculite or dry sand and dispose of at a licenced hazardous waste collection point.

14 TRANSPORT INFORMATION

PROPER SHIPPING NAME PAINT
ENVIRONMENTALLY HAZARDOUS SUBSTANCE/MARINE POLLUTANT UN NO. ROAD 1263
ADR CLASS NO. 3
ADR CLASS Class 3: Flammable liquids.
ADR PACK GROUP III
TUNNEL RESTRICTION CODE (D/E)
HAZARD No. (ADR) 33
ADR LABEL NO. 3
HAZCHEM CODE •3YE
UN NO. SEA 1263
IMDG CLASS 3
IMDG PACK GR. III
EMS F-E, S-E
UN NO. AIR 1263
AIR CLASS 3
AIR PACK GR. III

15 REGULATORY INFORMATION
Zinsser B-I-N® Primer Sealer

LABELLING

Highly flammable

RISK PHRASES

R11 Highly flammable

SAFETY PHRASES

S2 Keep out of the reach of children.
S9 Keep container in a well-ventilated place.
S16 Keep away from sources of ignition - No smoking.
S46 If swallowed, seek medical advice immediately and show this container or label.
S51 Use only in well-ventilated areas.
S56 Dispose of this material and its container to hazardous or special waste collection point.

EU DIRECTIVES

System of specific information relating to Dangerous Preparations. 2001/58/EC. Dangerous Preparations Directive 1999/45/EC.

APPROVED CODE OF PRACTICE

Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply.

NATIONAL REGULATIONS


INFORMATION SOURCES

Croner's Emergency Spillage Guide Croner's Emergency First Aid Guide Croner's Substances Hazardous to Health

REVISION COMMENTS

Amended in line with HSE requirements.

ISSUED BY

D Charles

REVISION DATE 22/05/2012

REV. NO./REPL. SDS GENERATED 10

SDS NO. 17659

SAFETY DATA SHEET STATUS

Approved.

DATE 22/05/2012

RISK PHRASES IN FULL

R11 Highly flammable
R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

DISCLAIMER

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.