SAFETY DATA SHEET



1. Identification

| Product identifier | TOP CLEAN | | |
|---------------------------------|---------------------------|--|--|
| Other means of identification | | | |
| SDS number | 565N-191A | | |
| Product code | HIL00810 | | |
| Recommended use | General Cleaner | | |
| Recommended restrictions | For Labeled Use Only | | |
| Manufacturer/Importer/Supplie | r/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 | Not classified. | |
| OSHA defined hazards | Not classified. | |
| Label elements | | |
| | | |

Signal word Hazard statement Precautionary statement Prevention

Danger Causes skin irritation. Causes serious eye damage.

Wash thoroughly after handling. Wear eye protection/face protection. Wear protective gloves. Caution: Do not get in eyes, on skin, or clothing. Use only with adequate ventilation. Do not breathe spray mist. (Inhalation of fine fog mist can cause irritation of mucous membranes.) Keep container closed when not in use. Wash thoroughly after handling. Use splash goggles. If prolonged or repeated contact is possible, wear rubber or other impervious gloves. Use only as directed: Improper dilution can lead to adverse health effects.

| 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. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. If skin irritation persists get medical attention. If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately. |
|--|---|
| 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 | 2.56% of the mixture consists of component(s) of unknown acute oral toxicity. 16.56% of the mixture consists of component(s) of unknown acute inhalation toxicity. 16.56% of the mixture consists of component(s) of unknown acute dermal toxicity. |

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|--|--------------------------|------------|-----------|
| Alcohols, C9-11, ethoxylated | | 68439-46-3 | 10 - < 20 |
| Sodium xylene sulfonate | | 1300-72-7 | 1-<3 |
| Citral | | 5392-40-5 | 0.004 |
| 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 | If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist. | |
|--|--|--|
| Skin contact | In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Remove contaminated clothing. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse. | |
| Eye contact | Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lens 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. Get medical attention if symptoms occur. If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention. | |
| 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. | | |
| Methods and materials for | This product is miscible in water. | | |
| 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. | | |
| | 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 | 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. | | |
| 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

Color

Odor

| US. ACGIH Threshold Lim | | | F | | |
|-------------------------------------|---|--|--|--|--|
| Components | Туре | Value | Form | | |
| Citral (CAS 5392-40-5) | TWA | 5 ppm | Inhalable fraction and vapor. | | |
| Biological limit values | No biological exposure limits noted for | No biological exposure limits noted for the ingredient(s). | | | |
| Exposure guidelines | | | | | |
| US ACGIH Threshold Limi | t Values: Skin designation | | | | |
| Citral (CAS 5392-40-5) | Can be | e absorbed through the skir | 1. | | |
| Appropriate engineering controls | Good general ventilation (typically 10 a should be matched to conditions. If ap or other engineering controls to mainta exposure limits have not been establis wash facilities and emergency shower | plicable, use process enclo ain airborne levels below re hed, maintain airborne leve | sures, local exhaust ventilation commended exposure limits. If els to an acceptable level. Eye | | |
| ndividual protection measure | s, such as personal protective equipme | int | | | |
| Eye/face protection | Wear safety glasses with side shields when working with concentrate. | (or goggles) and a face shi | eld. Chemical safety goggles | | |
| Skin protection | | | | | |
| Hand protection | Wear appropriate chemical resistant g | loves. | | | |
| Other | Wear appropriate chemical resistant clothing. | | | | |
| Respiratory protection | In case of insufficient ventilation, wear suitable respiratory equipment. | | | | |
| Thermal hazards | None known. Wear appropriate thermal protective clothing, when necessary. | | | | |
| 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 | l properties | | | | |
| Appearance | Clear, blue liquid | Clear, blue liquid | | | |
| Physical state | Liquid. | | | | |
| Form | Liquid. | | | | |

Blue

Fresh & Clean odor

| Odor threshold | Not available |
|--|---------------------------------------|
| рН | 6.5 - 8.5 (1:256 Dilution) |
| | 6.5 - 7.5 (Concentrate) |
| Melting point/freezing point | Not available |
| Initial boiling point and boiling range | 207 °F (97.22 °C) |
| Flash point | > 210.0 °F (> 98.9 °C) Tag Closed Cup |
| Evaporation rate | < 1 (ethyl ether = 1) |
| Flammability (solid, gas) | Not applicable. |
| Upper/lower flammability or expl | losive limits |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | 17.59 mm Hg |
| Vapor density | 0.6272 Air =1 |
| Relative density | 1.016 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 | 8.46 lb/gal |
| Explosive properties | Not explosive. |
| Oxidizing properties | Not oxidizing. |
| Percent volatile | 81 - 83 % |
| VOC | 0 % |

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

| Inhalation | Prolonged inhalation may be harmful. | | |
|--|---|--|--|
| Skin contact | Causes skin irritation. | | |
| Eye contact | Causes serious eye damage. | | |
| Ingestion | Expected to be a low ingestion hazard. | | |
| 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 eff | fects | | |

Acute toxicity

Not known.

| Components | Species | | Test Results | | |
|---|--|---|---------------------------------------|--|--|
| Citral (CAS 5392-40-5) | | | | | |
| Acute | | | | | |
| Oral | | | | | |
| LD50 | Rat | | 4950 mg/kg | | |
| * Estimates for product may t | be based on additional | component data not s | hown. | | |
| Skin corrosion/irritation | Causes skin irritation | · | | | |
| Serious eye damage/eye irritation | Causes serious eye | Causes serious eye damage. | | | |
| Respiratory or skin sensitizatio | n | | | | |
| ACGIH sensitization | | | | | |
| CITRAL, INHALABLE FF 5392-40-5) | RACTION AND VAPOR | CAS Dermal se | nsitization | | |
| Respiratory sensitization | Not a respiratory ser | nsitizer. | | | |
| Skin sensitization | This product is not e | xpected to cause skir | 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 c | onsidered to be a car | cinogen by IARC, ACGIH, NTP, or OSHA. | | |
| IARC Monographs. Overall Not listed. US. National Toxicology Pr Not listed. US. OSHA Specifically Reg Not regulated. | ogram (NTP) Report o | n Carcinogens | 50) | | |
| Reproductive toxicity | This product is not e | xpected to cause rep | roductive or developmental effects. | | |
| Specific target organ toxicity - single exposure | Not classified. | | | | |
| Specific target organ toxicity - repeated exposure | Not classified. | | | | |
| Aspiration hazard | Not an aspiration ha | Not an aspiration hazard. | | | |
| 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 | Spec | ies | Test Results | | |
| TOP CLEAN | | | | | |
| Aquatic | | | | | |
| Crustacea | EC50 Dapt | nnia | > 100 mg/l, 48 hours | | |

* Estimates for product may be based on additional component data not shown.

Fish

LC50

| monitorio in productinaj a | | |
|----------------------------------|---|--|
| Persistence and degradability | No data is available on the degradability of this product. | |
| Bioaccumulative potential | | |
| 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

Fish

| Disposal instructions | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. 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. |

> 100 mg/l, 96 hours

| Hazardous waste code | The waste code should be assigned in discussion between the user, the producer and the wa disposal company. | ste |
|--|---|-----|
| 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. | t |
| Contaminated packaging | Since emptied containers may retain product residue, follow label warnings even after contain emptied. Empty containers should be taken to an approved waste handling site for recycling o disposal. Triple rinse (or equivalent). Then offer clean, dry container for recycling or recondition | л |
| 14. Transport information | | |
| DOT | | |
| Not regulated as dangerous g | loods. | |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Not established. | |
| 15. Regulatory information | n | |
| US federal regulations | All components are on the U.S. EPA TSCA Inventory List. This product is 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 Substa | nce List (40 CFR 302.4) | |
| Not listed. SARA 304 Emergency relea | se notification | |
| Not regulated. US. OSHA Specifically Regu | ulated Substances (29 CFR 1910.1001-1050) | |
| Not regulated. | | |
| | eauthorization Act of 1986 (SARA) | |
| Hazard categories | Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No | |
| SARA 302 Extremely hazard Not listed. | dous substance | |
| SARA 311/312 Hazardous chemical | No | |
| SARA 313 (TRI reporting) Not regulated. | | |
| Other federal regulations | | |
| Safe Drinking Water Act (SDWA) | Not regulated. | |
| International Inventories | | |
| Country(s) or region | Inventory name On inventory (yes | |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | Yes |
| | Toxic Substances Control Act (TSCA) Inventory nents of this product comply with the inventory requirements administered by the governing country(s) e components of the product are not listed or exempt from listing on the inventory administered by the governing | Yes |
| 46 Other information incl | tuding data of propagation or last revision | |

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

| Issue date | 12-18-2014 |
|---------------|------------|
| Revision date | 09-26-2017 |
| Version # | 02 |

| 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. 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 | QUICK & CLEAN SUPER HIL-TONE |
|---------------------------------|------------------------------|
| Other means of identification | |
| SDS number | 578N-009A |
| Product code | HIL01016 |
| Recommended use | Floor 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 Health hazards | Not classified. Specific target organ toxicity, single exposure | Category 3 respiratory tract irritation |
|------------------------------------|--|---|
| Environmental hazards | Not classified. | |
| OSHA defined hazards | Not classified. | |
| Label elements | | |



| Signal word | Warning |
|--|--|
| Hazard statement | May cause respiratory irritation. |
| Precautionary statement | |
| Prevention | Avoid breathing mist or vapor. Use only outdoors or in a well-ventilated area. |
| Response | If inhaled: Remove person to fresh air and keep comfortable for breathing. If exposed or concerned: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. |
| Storage | Store in a well-ventilated place. Keep container tightly closed. Store locked up. |
| 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. |

Use only with adequate ventilation. Do not breathe vapors or spray mist. Ensure fresh air entry during application and drying. Do not spray fine fog mist into sparks or open flame - vapors may ignite. Close container after each use. Avoid prolonged contact with eyes, skin and clothing. Wash thoroughly after handling. Do not take internally. Repeated or prolonged skin contact may produce skin irritation.

3. Composition/information on ingredients

Mixtures

| Chemical name C | Common name and synonyms | CAS number | % |
|--|--------------------------|------------|-----------|
| Solvent Dewaxed Heavy Paraffinic Distillate (Petroleum) | | 64742-65-0 | 70 - < 80 |
| Distillates (petroleum), Solvent-dewaxed Light Paraffinic | | 64742-56-9 | 20 - < 30 |
| Solvent Naphtha (petroleum), Medium Aliphatic | | 64742-88-7 | 1 - < 3 |
| Other components below reportable levels | | | < 0.1 |

Other components below reportable is

4. First-aid measures

| Inhalation | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell. | |
|--|---|--|
| Skin contact | Wash off with soap and water. Get medical attention if irritation develops and persists. | |
| Eye contact | Rinse with water. Get medical attention if irritation develops and persists. | |
| Ingestion | Rinse mouth. Get medical attention if symptoms occur. | |
| Most important symptoms/effects, acute and delayed | May cause respiratory irritation. | |
| 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 | If you feel unwell, seek medical advice (show the label where possible). 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 | | |
| Demonstrations | Keen unnersen and some Keen and some for a state of the transformer | |

| 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. Avoid breathing mist/vapors. 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 | The product is immiscible with water and will spread on the water surface. 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. Avoid discharge into drains, water courses or onto the ground. |

7. Handling and storage

| Precautions for safe handling | Avoid breathing mist/vapors. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. |
|---|--|
| Conditions for safe storage, including any incompatibilities | Store locked up. Store in tightly closed container. 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.

| 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 protective glasses with side shield | |
| Skin protection | | |
| Hand protection | Wear appropriate chemical resistant gloves. | |
| Other | None normally required. If unable to avoid prolonged or repeated contact with skin, wear impervious clothing. | |
| Respiratory protection | 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 | 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 to slightly translucent, slight yellow liquid |
| Physical state | Liquid. |
| Form | Liquid. |
| Color | Slight yellow |
| Odor | Oil odor |
| Odor threshold | Not available |
| рН | Not available |
| Melting point/freezing point | Not applicable / Not available |
| Initial boiling point and boiling range | > 300 °F (> 148.89 °C) |
| Flash point | 225.0 °F (107.2 °C) Pensky-Martens Closed Cup |
| Evaporation rate | < 1 Ethyl ether = 1 |
| Flammability (solid, gas) | Not established. |
| Upper/lower flammability or expl | losive limits |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | 6.62 mm Hg |
| Vapor density | 4.7301 AIR=1 |
| Relative density | 0.854 at 77°C |
| Solubility(ies) | |
| Solubility (water) | insoluble |
| Partition coefficient (n-octanol/water) | Not available |
| Auto-ignition temperature | Not available. |
| Material name: OLIICK & CLEAN SHE | FR HIL-TONE |

| Not available |
|----------------|
| Not available |
| |
| 7.11 lbs/gal |
| Not explosive. |
| Not oxidizing. |
| 95 - 97.5 % |
| 2.9 % |
| |

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 | 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 | May cause irritation to the respiratory system. 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 | May cause respiratory irritation. |

Information on toxicological effects

| Acute toxicity | Not known. | |
|--------------------------------------|---|---------------------------|
| Product | Species | Test Results |
| QUICK & CLEAN SUPER HIL-TO | NE | |
| Acute | | |
| Dermal | | |
| LD50 | Rabbit | 6.667e+007 mg/kg |
| Oral | | |
| LD50 | Rat | 8664 g/kg |
| Skin corrosion/irritation | Prolonged skin contact may cause temporary irritat | ion. |
| Serious eye damage/eye irritation | Direct contact with eyes may cause temporary irritation. | |
| Respiratory or skin sensitization | 1 | |
| Respiratory sensitization | Not a respiratory sensitizer. | |
| Skin sensitization | This product is not expected to cause skin sensitiza | ation. |
| 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 Regulate | d Substances (29 CFR 1910.1001-1053) | |
| Not listed. | | |
| | ogram (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 | May cause respiratory irritation. |
|---|--------------------------------------|
| 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 | | Species | Test Results | |
| QUICK & CLEAN SUPER H | IL-TONE | ······· | | |
| Aquatic | | | | |
| Fish | LC50 | Fish | 8109.9604 mg/l, 96 hours estimated | |
| Persistence and degradability | No data is ava | No data is available on the degradability of this product. | | |
| Bioaccumulative potential | | | | |
| Mobility in soil | No data availa | able. | | |
| 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. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. 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.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

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

15. Regulatory information

| US federal regulations | This product is a Standard, 29 CF | "Hazardous Chemical" as defined by the OSHA Hazard Communication R 1910.1200. |
|------------------------|--------------------------------------|---|
| Toxic Substances Cont | rol Act (TSCA) | One or more components of the mixture are not on the TSCA 8(b) inventory or are designated "inactive". |
| TSCA Section 12(b) | Export Notification (| 40 CFR 707, Subpt. D) |
| Not regulated. | | |
| CERCLA Hazardous Su | bstance List (40 CFR | 302.4) |
| Not listed. | | |
| SARA 304 Emergency re | elease notification | |
| Not regulated. | | |

| OSHA Specifically Regulate | ed Substances (29 CFR 1910.1001-1053) | |
|---|---|--|
| Not listed. | · · · · · · · · · · · · · · · · · · · | |
| Superfund Amendments and Re | eauthorization Act of 1986 (SARA) | |
| SARA 302 Extremely hazar | | |
| Not listed. | | |
| SARA 311/312 Hazardous chemical | Yes | |
| Classified hazard categories | Specific target organ toxicity (single or repeated exposure) | |
| SARA 313 (TRI reporting) Not regulated. | | |
| Other federal regulations | | |
| Clean Air Act (CAA) Sectior | 112 Hazardous Air Pollutants (HAPs) List | |
| Not regulated. | | |
| | 112(r) Accidental Release Prevention (40 CFR 68.130) | |
| Not regulated. | | |
| Safe Drinking Water Act (SDWA) | Not regulated. | |
| US state regulations | | |
| California Proposition 65 | | |
| is not known to contain a | Nater and Toxic Enforcement Act of 1986 (Proposition 65): The ny chemicals currently listed as carcinogens or reproductive t ww.P65Warnings.ca.gov. | his material oxins. For |
| US. California. Candida subd. (a)) | te Chemicals List. Safer Consumer Products Regulations | ; (Cal. Code Regs, tit. 22, 69502.3, |
| | ı), Solvent-dewaxed Light Paraffinic (CAS 64742-56-9) avy Paraffinic Distillate (Petroleum) (CAS 64742-65-0) | |
| International Inventories | | |
| Country(s) or region | Inventory name | On inventory (yes/no)* |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |
| *A "Yes" indicates that all compore A "No" indicates that one or more country(s). | nents of this product comply with the inventory requirements adminis components of the product are not listed or exempt from listing on the | tered by the governing country(s) he inventory administered by the governing |
| United States & Puerto Rico *A "Yes" indicates that all compor A "No" indicates that one or more country(s). | Toxic Substances Control Act (TSCA) Inventory nents of this product comply with the inventory requirements adminis | tered by the governing country(s) |

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

| Issue date | 01-27-2015 |
|----------------------|---|
| Revision date | 08-23-2021 |
| Version # | 05 |
| HMIS® ratings | Health: 2 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 | This document has undergone significant changes and should be reviewed in its entirety. |



SAFETY DATA SHEET

1. Identification

| Product identifier | SANITIZER | |
|--|----------------------|--|
| Other means of identification | | |
| SDS number | 513N-90C | |
| Product code | HIL00825 | |
| Product registration number | 47371-147-1658 | |
| Recommended use | Sanitizer | |
| 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 1C |
| | Serious eye damage/eye irritation | Category 1 |
| Environmental hazards | Hazardous to the aquatic environment, acute hazard | Category 1 |
| | Hazardous to the aquatic environment, long-term hazard | Category 1 |
| OSHA defined hazards | Not classified. | |
| Label elements | | |



Danger

Signal word Hazard statement

Causes severe skin burns and eye damage. Causes serious eye damage. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

Precautionary statement Prevention

Do not breathe mist or vapor. Wash thoroughly after handling. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

| Response | If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. 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. Wash contaminated clothing before reuse. Collect spillage. |
|--|--|
| Storage | Store locked up. 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: Nonrefillable container. Do not reuse or refill this container. Wrap empty container and put in trash. |
| Hazard(s) not otherwise classified (HNOC) | None known. |
| Supplemental information | None. |

3. Composition/information on ingredients

Mixtures

| Chemical name Common | name and synonyms | CAS number | % |
|---|-------------------|------------|--------|
| Didecyldimethylammonium chloride | | 7173-51-5 | 2.41 |
| Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides | | 68424-85-1 | 1.45 |
| Other components below reportable levels | ····· | | 96.141 |

*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. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. 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. Call a physician or poison control center immediately. |
| Ingestion | Call a physician or poison control center immediately. Rinse mouth. 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 | Burning pain and severe corrosive skin damage. Causes serious eye damage. 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. Chemical 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 | 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 breathe mist or vapor. 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. 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. 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 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 breathe mist or vapor. Do not get in eyes, on skin, or on 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 locked up. Store in 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: Open dumping is prohibited. Store in original container in areas inaccessible to children. |

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.

| 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 | Avoid contact with eyes. Wear safety glasses with side shields (or goggles) and a face shield. | |
|-----------------------------------|---|--|
| Skin protection | | |
| Hand protection | Wear appropriate chemical resistant gloves. | |
| Other | Wear appropriate chemical resistant clothing. | |
| Respiratory protection | 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, golden yellow liquid |
|----------------|-----------------------------|
| Physical state | Liquid. |
| Form | Liquid. |
| Color | Yellow |
| Odor | Non-objectional odor |
| Odor threshold | Not available |
| рН | 6.00 - 8.00 Concentrate |

| Melting point/freezing point | Not applicable / Not available |
|--|---|
| Initial boiling point and boiling range | 210 |
| Flash point | > 200.0 °F (> 93.3 °C) Tag Closed Cup |
| Evaporation rate | < 1 (ethyl ether = 1) |
| Flammability (solid, gas) | Not applicable. |
| Upper/lower flammability or exp | losive limits |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | 17.64 mm Hg |
| Vapor density | 0.631 Air =1 |
| Relative density | 0.996 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 | 8.29 lb/gal |
| Explosive properties | Not explosive. |
| Oxidizing properties | Not oxidizing. |
| Percent volatile | 95 - 97 % |
| VOC | 0.96 % 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 informat | ion |
| Information on likely routes of ex | kposure |
| Inhalation | Movement initiation to the manipulant statem. Declar and the statement is the second statement of the |

| Inhalation | May cause irritation to the respiratory system. Prolonged inhalation may be harmful. |
|--|---|
| Skin contact | Causes severe skin burns. |
| Eye contact | Causes serious eye damage. |
| Ingestion | Causes digestive tract burns. |
| Symptoms related to the physical, chemical and toxicological characteristics | Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. |
| Information on toxicological eff | ects |

| monitation on toxicological energy | | | |
|------------------------------------|------------|--------------|--|
| Acute toxicity | Not known. | | |
| Product | Species | Test Results | |
| SANITIZER | | | |
| Acute | | | |
| Oral | | | |
| LD50 | Guinea pig | 929 g/kg | |
| | | | |

| Skin corrosion/irritation | Causes severe skin burns and eye damage. | | |
|--|--|--|--|
| 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 mutagenic or genotoxic. | present at greater than 0.1% are | |
| Carcinogenicity | Not classifiable as to carcinogenicity to humans. | | |
| Not listed. | Evaluation of Carcinogenicity d Substances (29 CFR 1910.1001-1052) | | |
| Not regulated. | gram (NTP) Report on Carcinogens | | |
| | This product is not expected to equip reproductive or de | | |
| Reproductive toxicity | This product is not expected to cause reproductive or de Not classified. | | |
| Specific target organ toxicity - single exposure | | | |
| 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 | Very toxic to aquatic life with long lasting effects. | | |
| Product | Species | Test Results | |
| SANITIZER | | | |
| | | | |
| | LC50 Fish | 30.4258 mg/l, 96 hours estimated | |
| Components | Species | Test Results | |
| • | unds, benzyl-C12-16-alkyldimethyl, chlorides (CAS 68424 | I-85-1) | |
| Aquatic Fish | LC50 Striped bass (Morone saxatilis) | | |
| | | 10.4 - 19.1 mg/l, 96 hours | |
| Persistence and degradability Bioaccumulative potential | No data is available on the degradability of this product. | | |
| Mobility in soil | No data available. | | |
| Other adverse effects | No other adverse environmental effects (e.g. ozone depl potential, endocrine disruption, global warming potential) | etion, photochemical ozone creation are expected from this component. | |
| 13. Disposal consideration | s | | |
| Disposal instructions | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. 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 | disposal company. | | |

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. Container Disposal: Nonrefillable container. Do not reuse or refill this container. Wrap empty container and put in trash.

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. |
|--|--|
| General information | This material is regulated under IATA and IMDG regulations. Contact manufacturer for shipping instructions. |

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 Substa | nce List (40 CFR 302.4) |
| Not listed. | |
| SARA 304 Emergency relea | se notification |
| Not regulated. | |
| | d Substances (29 CFR 1910.1001-1052) |
| Not regulated. | |
| - | authorization Act of 1986 (SARA) |
| SARA 302 Extremely hazard | lous substance |
| Not listed. | |
| SARA 311/312 Hazardous chemical | Yes |
| Classified hazard categories | Skin corrosion or irritation Serious eye damage or eye irritation |
| • | Schous eye damage of eye imitation |
| 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. |
| | |

FIFRA: This product is a U.S. EPA Registered pesticide, EPA Reg. No. 47371-147-1658, 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

Corrosive. Causes irreversible eye damage and skin burns. Do not get in eyes, on skin, or on clothing. Wear protective eyewear (goggles, face shield, or safety glasses), protective clothing and protective (rubber or chemical resistant) gloves. Harmful if swallowed or if absorbed through the skin. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse.

FIRST AID: 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. IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 – 20 minutes. 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. Call a poison control center or doctor for treatment advice. Have the product container or label with you when calling a Poison Control Center or doctor or going for treatment. NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression, and convulsion may be needed.

US state regulations

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (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

| Country(s) or region | inventory name | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | 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 | 05-11-2015 |
|----------------------|--|
| Revision date | 06-17-2019 |
| 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 or disposal of these products. |
| Revision information | This document has undergone significant changes and should be reviewed in its entirety. |
| | |

SAFETY DATA SHEET



1. Identification

| Product identifier | Mandarin Cranberry Premium Foam Soap | |
|-------------------------------|---|--|
| Other means of identification | | |
| SDS number | 11SAM1173B | |
| Product code | HIL00394 | |
| Recommended use | Hand Soap | |
| Recommended restrictions | For Labeled Use Only Protect from Freezing | |

This is a personal care or cosmetic product that is safe for consumers and other users under normal and reasonably foreseeable use. Cosmetics and consumer products, specifically defined by regulations around the world, are exempt from the requirement of an SDS for the consumer.

| 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. Avoid contact with eyes. |
| Response | If skin irritation or rash occurs, discontinue use. |
| 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

| Chemical name | Common name and synonyms | CAS number | % |
|--------------------------|--------------------------|------------|----------|
| Glycerin | | 56-81-5 | 3-<5 |
| FRAGRANCE | | Mixture | < 0.3 |
| Other components below r | eportable 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 | Under normal conditions of intended use, this material is not expected to be an inhalation hazard. | |
|--|--|--|
| Skin contact | If skin irritation or rash occurs: Get medical advice/attention. | |
| Eye contact | Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention if irritation develops and persists. | |
| Ingestion | Rinse mouth thoroughly. 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

| 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 | Not applicable. |
| Special protective equipment and precautions for firefighters | Not available. |
| Fire fighting equipment/instructions | Use standard firefighting procedures and consider the hazards of other involved materials. |
| 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 | 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. | | |
| | Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. | | |
| Environmental precautions | No special environmental precautions required. | | |
| 7. Handling and storage | | | |

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

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.

| Components | Туре | Value | Form | |
|--|--|------------|----------------------|--|
| Glycerin (CAS 56-81-5) | PEL | 5 mg/m3 | Respirable fraction. | |
| | | 15 mg/m3 | Total dust. | |
| ological limit values | No biological exposure limits noted for the ingr | edient(s). | | |
| ppropriate engineering ntrols | No special ventilation requirements. | | | |
| dividual 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. | | | |
| eneral hygiene nsiderations | Avoid contact with eyes. Keep away from food | and drink. | | |
| Physical and chemical | properties | | | |
| opearance | Clear, light orange liquid | | | |
| Physical state | Liquid. | | | |
| Form | Liquid. | | | |
| Color | Light orange | | | |
| lor | Mandarin Cranberry odor | | | |
| lor threshold | Not available | | | |
| 1 | 5 - 7 | | | |
| elting point/freezing point | Not applicable / Not available | | | |
| itial boiling point and boiling nge | 213 °F (100.56 °C) Согг. | | | |
| ash point | > 200.0 °F (> 93.3 °C) Tag Closed Cup | | | |
| aporation rate | < 1 Ethyl ether = 1 | | | |
| ammability (solid, gas) | Not applicable. | | | |
| oper/lower flammability or exp | losive limits | | | |
| Explosive limit - lower (%) | Not available. | | | |
| Explosive limit - upper (%) | Not available. | | | |
| por pressure | 17.38 mm Hg | | | |
| por density | 0.7146 AIR=1 | | | |
| lative density | 1.028 at 77°F | | | |
| lubility(ies) | | | | |
| Solubility (water) | 100 % complete | | | |
| rtition coefficient -octanol/water) | Not available | | | |
| ito-ignition temperature | Not available | | | |
| composition temperature | Not available | | | |
| scosity | Not available | | | |
| her information | | | | |
| Density | 8.52 lb/gal | | | |
| Explosive limit | Not available | | | |
| Explosive properties | Not explosive. | | | |
| Oxidizing properties | Not oxidizing. | | | |
| Percent volatile | 90 - 92 % | | | |
| VOC | 0 % | | | |

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 | None known. |

11. Toxicological information

Information on likely routes of exposure

| Inhalation | Prolonged inhalation may be harmful. |
|--|--------------------------------------|
| Skin contact | May cause an allergic skin reaction. |
| Eye contact | Not available. |
| Ingestion | Not available. |
| Symptoms related to the physical, chemical and toxicological characteristics | Not available. |

Information on toxicological effects

| Acute toxicity | Not known. | | |
|--|--|---------------------------|--------|
| Product | Species Test Results | | |
| Mandarin Cranberry Premium Foa | am Soap | · · · · · · · · · · · · | |
| Acute | | | |
| Dermal | | | |
| LD50 | Rabbit | 3.67e+006 mg/kg | |
| Inhalation | | | |
| LC50 | Rat | 9.722e+006 mg/l, 6 Hours | |
| Oral | | | |
| LD50 | Guinea pig | 1.488e+006 mg/kg | |
| | Rat | 598100 mg/kg | |
| Skin corrosion/irritation | Not available. | | |
| Serious eye damage/eye irritation | Avoid contact with eyes. | | |
| Respiratory or skin sensitization | n | | |
| 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. | | | |
| | ed Substances (29 CFR 1910.1001-1053) | | |
| Not listed. | ogram (NTP) Report on Carcinogens | | |
| Not listed. | Sgram (ATP) Report on Carcinogens | | |
| Reproductive toxicity | This product is not expected to cause reproductive of | 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. | | |
| Material name: Mandarin Cranberry F | Premium Foam Soap | | SDS US |

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 | | Species | Test Results |
| Mandarin Cranberry Premiur | m Foam Soar | 0 | |
| Aquatic | | | |
| Crustacea | EC50 | Daphnia | 82864.8906, 48 hours |
| Fish | LC50 | Fish | 6485.1128, 96 hours |
| Acute | | | |
| Crustacea | EC50 | Daphnia | 33437.957, 48 hours estimated |
| Fish | LC50 | Fish | 814.0121, 96 hours estimated |
| Persistence and degradability | No data is | available on the degradabili | ty of this product. |
| Bioaccumulative potential | | | |
| lobility in soil | No data a | No data available. | |
| Other adverse effects | No other a potential, | 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 consideration | ons | | |
| 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 informatior | n | | |
| от | | | |
| Not regulated as dangerous | aoods. | | |

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

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

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.

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

Toxic Substances Control Act (TSCA)

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 1910.1001-1053) Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance Not listed.

SARA 311/312 Hazardous No chemical

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 Not regulated. (SDWA)

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Glycerin (CAS 56-81-5)

Other Flavoring Substances with OSHA PEL's

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

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| Canada | Domestic Substances List (DSL) | No |
| Canada | Non-Domestic Substances List (NDSL) | 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 | 04-08-2015 |
|----------------------|--|
| Revision date | 02-22-2023 |
| Version # | 03 |
| Further information | This product meets Green Seal™ Standard GS-41A based on effective performance and protective limits on VOCs and human & environmental toxicity. GreenSeal.org. |
| HMIS® ratings | Health: 0 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 or disposal of these products. |
| Revision information | Identification: Recommended restrictions Composition / Information on Ingredients: Disclosure Overrides Physical & Chemical Properties: Multiple Properties Toxicological Information: Toxicological Data Regulatory information: California Proposition 65 Regulatory information: Safe Drinking Water Act (SDWA) |





1. Identification

| Product identifier | LIQUID ENZYME II |
|---------------------------------|--------------------------------|
| Other means of identification | |
| SDS number | 559N-46A |
| Product code | HIL00470 |
| Recommended use | Multipurpose Drain Maintenance |
| 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 | 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

| Inhalation Skin contact | Move to fresh air. Call a physician if symptoms develop or persist. Wash off with soap and water. Get medical attention if irritation develops and persists. | | | |
|--|---|--|--|--|
| Eye contact | Rinse with water. Get medical attention if irritation develops and persists. | | | |
| Ingestion | Rinse mouth. Get medical attention if symptoms occur. | | | |
| Most important symptoms/effects, acute and delayed | Direct contact with eyes may cause temporary irritation. | | | |
| 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 | Move container from fire area if it can be done without risk. |
| 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 | Extinguish all flames in the vicinity. This product is miscible in water. | |
| | Large Spills: 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: 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 handlingAvoid prolonged exposure. Observe good industrial hygiene practices.Conditions for safe storage,
including any incompatibilitiesStore in tightly closed container. 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.

| 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 | Where splashing of concentrate is a concern, use protective glasses with side shield | | |
| Skin protection | | | |
| Hand protection | Not normally needed. | | |
| Other | Not normally needed. | | |

| Respiratory protection | Not normally needed. |
|------------------------|----------------------|
| 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

| er i nyerear ana enemiear | pi opoi dico |
|--|---|
| Appearance | Opaque, white liquid |
| Physical state | Liquid. |
| Form | Liquid. |
| Color | White |
| Odor | Floral odor |
| Odor threshold | Not available |
| pН | 7 - 8 |
| Melting point/freezing point | Not available |
| Initial boiling point and boiling range | 212 °F (100 °C) |
| Flash point | > 200.0 °F (> 93.3 °C) Tag Closed Cup |
| Evaporation rate | < 1 (ethyl ether = 1) |
| Flammability (solid, gas) | Not applicable. |
| Upper/lower flammability or exp | losive limits |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | 17.5 mm Hg |
| Vapor density | 0.6 AIR=1 |
| Relative density | 0.99 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 | 8.32 lb/gal |
| Explosive properties | Not explosive. |
| Oxidizing properties | Not oxidizing. |
| Percent volatile | 99 - 100 % |
| VOC | 0 % |
| 10. Stability and reactivity | |
| Reactivity | The product is stable and non-reactive under normal conditions of use, storage and transpo |
| 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. |
| Hererdous deserves estites | |

No hazardous decomposition products are known. Hazardous decomposition products

and transport.

11. Toxicological information

Information on likely routes of exposure

| information on likely routes of e | exposure | | |
|--|--|--|--|
| Inhalation | Prolonged inhalation may be harmful. | | |
| Skin contact | Product concentrate is not an irritant; prolonged exposure may produce slight irritation in sensitive individuals | | |
| 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 effe | ects | | |
| 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 | 1 | | |
| 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. | | |
| Not listed. OSHA Specifically Regulate Not regulated. | Evaluation of Carcinogenicity d Substances (29 CFR 1910.1001-1052) ogram (NTP) Report on Carcinogens | | |
| 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

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.

| | possibility | r macialige of mequencispina (| an nave a narmul of damaging effect on the environment. | |
|-------------------------------|---|--------------------------------|---|--|
| Product | | Species | Test Results | |
| LIQUID ENZYME II | | | | |
| Aquatic | | | | |
| Crustacea | EC50 | Daphnia | 406.8965 mg/l, 48 hours estimated | |
| Fish | LC50 | Fish | 6608.8882 mg/l, 96 hours estimated | |
| 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 consideration | ons | | | |
| 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 disposal company. | producer and the waste | | |
|--|---|------------------------|--|--|
| 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 g | oods. | | | |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Not established. | | | |
| 15. Regulatory information | 1 | | | |
| US federal regulations | This product is not known to be a "Hazardous Chemical" as defined by th Communication Standard, 29 CFR 1910.1200. | e OSHA Hazard | | |
| TSCA Section 12(b) Export I | Notification (40 CFR 707, Subpt. D) | | | |
| Not regulated. CERCLA Hazardous Substa | nce List (40 CFR 302.4) | | | |
| Not listed. | | | | |
| SARA 304 Emergency release Not regulated. | se nouncation | | | |
| OSHA Specifically Regulate | d Substances (29 CFR 1910.1001-1052) | | | |
| Not regulated. | authorization Act of 1986 (SARA) | | | |
| SARA 302 Extremely hazard | | | | |
| Not listed. | | | | |
| SARA 311/312 Hazardous chemical | Νο | | | |
| SARA 313 (TRI reporting) Not regulated. | | | | |
| Other federal regulations | | | | |
| Clean Air Act (CAA) Section | 112 Hazardous Air Pollutants (HAPs) List | | | |
| Not regulated. | 112(r) Accidental Release Prevention (40 CFR 68.130) | | | |
| Not regulated. | | | | |
| Safe Drinking Water Act (SDWA) | Not regulated. | | | |
| US state regulations | | | | |
| | Vater and Toxic Enforcement Act of 2016 (Proposition 65): This material by chemicals currently listed as carcinogens or reproductive toxins. For ww.P65Warnings.ca.gov. | | | |
| International Inventories | • • | | | |
| Country(s) or region | Inventory name | On inventory (yes/no)* | | |
| Delta di Otata a la Duranta Di sa | | <i>a</i> 1 <i>aa</i> | | |

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

On inventory (yes/no)* 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 | 01-22-2015 |
|---------------|------------|
| Revision date | 12-19-2018 |
| Version # | 02 |

| HMIS® ratings | Health: 0 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 | This document has undergone significant changes and should be reviewed in its entirety. |





1. Identification

| Product identifier | Mandarin Cranberry Premium Foam Soap |
|-------------------------------|---|
| Other means of identification | |
| SDS number | 11\$AM1173B |
| Product code | HIL00394 |
| Recommended use | Hand Soap |
| Recommended restrictions | For Labeled Use Only Protect from Freezing |

This is a personal care or cosmetic product that is safe for consumers and other users under normal and reasonably foreseeable use. Cosmetics and consumer products, specifically defined by regulations around the world, are exempt from the requirement of an SDS for the consumer.

| 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. Avoid contact with eyes. |
| Response | If skin irritation or rash occurs, discontinue use. |
| 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

| Chemical name | Common name and synonyms | CAS number | % |
|--------------------------|--------------------------|------------|----------|
| Glycerin | | 56-81-5 | 3-<5 |
| FRAGRANCE | | Mixture | < 0.3 |
| Other components below r | eportable 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 Skin contact | Under normal conditions of intended use, this material is not expected to be an inhalation hazard. If skin irritation or rash occurs: Get medical advice/attention. |
|--|--|
| Eye contact | Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention if irritation develops and persists. |
| Ingestion | Rinse mouth thoroughly. 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

| 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 | Not applicable. |
| Special protective equipment and precautions for firefighters | Not available. |
| Fire fighting equipment/instructions | Use standard firefighting procedures and consider the hazards of other involved materials. |
| 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 | This product is miscible in water. | |
| | oonaminent and ocaning 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. | |
| | | Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. | |
| | Environmental precautions | No special environmental precautions required. | |
| | 7. Handling and storage | | |

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

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.

| Components | for Air Contaminants (29 CFR 1910.1000) Type | Value | Form |
|---------------------------------------|--|-------------|----------------------|
| Glycerin (CAS 56-81-5) | PEL | 5 mg/m3 | Respirable fraction. |
| | | 15 mg/m3 | Total dust. |
| ological limit values | No biological exposure limits noted for the ingr | redient(s). | |
| propriate engineering ntrols | No special ventilation requirements. | | |
| lividual 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. | | |
| neral hygiene nsiderations | Avoid contact with eyes. Keep away from food | and drink. | |
| Physical and chemical | properties | | |
| pearance | Clear, light orange liquid | | |
| Physical state | Liquid. | | |
| Form | Liquid. | | |
| Color | Light orange | | |
| or | Mandarin Cranberry odor | | |
| or threshold | Not available | | |
| | 5 - 7 | | |
| Iting point/freezing point | Not applicable / Not available | | |
| tial boiling point and boiling age | 213 °F (100.56 °C) Corr. | | |
| sh point | > 200.0 °F (> 93.3 °C) Tag Closed Cup | | |
| aporation rate | < 1 Ethyl ether = 1 | | |
| mmability (solid, gas) | Not applicable. | | |
| per/lower flammability or exp | losive limits | | |
| Explosive limit - lower (%) | Not available. | | |
| Explosive limit - upper (%) | Not available. | | |
| por pressure | 17.38 mm Hg | | |
| oor density | 0.7146 AIR=1 | | |
| ative density | 1.028 at 77°F | | |
| lubility(ies) | | | |
| Solubility (water) | 100 % complete | | |
| rtition coefficient octanol/water) | Not available | | |
| to-ignition temperature | Not available | | |
| composition temperature | Not available | | |
| cosity | Not available | | |
| ner information | | | |
| Density | 8.52 lb/gal | | |
| Explosive limit | Not available | | |
| Explosive properties | Not explosive. | | |
| Oxidizing properties | Not oxidizing. | | |
| Percent volatile | 90 - 92 % | | |
| VOC | 0 % | | |

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 | None known. |

11. Toxicological information

Information on likely routes of exposure

| Inhalation | Prolonged inhalation may be harmful. |
|--|--------------------------------------|
| Skin contact | May cause an allergic skin reaction. |
| Eye contact | Not available. |
| Ingestion | Not available. |
| Symptoms related to the physical, chemical and toxicological characteristics | Not available. |

Information on toxicological effects

| Acute toxicity | Not known. | | |
|--|---|--------------------------|--|
| Product | Species | Test Results | |
| Mandarin Cranberry Premium Foa | am Soap | | |
| Acute | | | |
| Dermal | | | |
| LD50 | Rabbit | 3.67e+006 mg/kg | |
| Inhalation | Dit | | |
| LC50 | Rat | 9.722e+006 mg/l, 6 Hours | |
| Oral | | | |
| LD50 | Guinea pig | 1.488e+006 mg/kg | |
| | Rat | 598100 mg/kg | |
| Skin corrosion/irritation | Not available. | | |
| Serious eye damage/eye irritation | Avoid contact with eyes. | | |
| Respiratory or skin sensitizatio | n | | |
| 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 hun | nans. | |
| IARC Monographs. Overall Evaluation of Carcinogenicity | | | |
| Not listed. | | | |
| OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) | | | |
| Not listed. US. National Toxicology Program (NTP) Report on Carcinogens | | | |
| Not listed. | Syram (MTP) Report on Carcinogens | | |
| Reproductive toxicity | This product is not expected to cause reproductive or developmental effects. | | |
| Specific target organ toxicity - | Not classified. | | |
| single exposure | Not oldollog. | | |
| Specific target organ toxicity - repeated exposure | Not classified. | | |
| Aspiration hazard | Prolonged inhalation may be harmful. | | |
| Chronic effects | Prolonged inhalation may be harmful. | | |
| Material name: Mandaria Oranham: E | | | |

12. Ecological information

| Ecotoxicity | The produce possibility | ct is not classified as enviro that large or frequent spills | onmentally hazardous. However, this does not exclude the can have a harmful or damaging effect on the environment. | |
|--|---|---|---|--|
| Product | | Species | Test Results | |
| Mandarin Cranberry Premiur | n Foam Soap | | | |
| Aquatic | | | | |
| Crustacea | EC50 | Daphnia | 82864.8906, 48 hours | |
| Fish | LC50 | Fish | 6485.1128, 96 hours | |
| Acute | | | | |
| Crustacea | EC50 | Daphnia | 33437.957, 48 hours estimated | |
| Fish | LC50 | Fish | 814.0121, 96 hours estimated | |
| Persistence and degradability | No data is | available on the degradabi | lity of this product. | |
| Bioaccumulative potential | | | | |
| Mobility in soil | No data av | ailable. | | |
| 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 consideratio | ns | | | |
| 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 applic | able 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 | emptied. E | mpty containers should be | product residue, follow label warnings even after container is taken to an approved waste handling site for recycling or Then offer clean, dry container for recycling or reconditioning. | |
| 14. Transport information | | | | |
| DOT | | | | |

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

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

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

Toxic Substances Control Act (TSCA)

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 1910.1001-1053) Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No

chemical

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 Not regulated. (SDWA)

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Glycerin (CAS 56-81-5) Other Flavoring Substances with OSHA PEL's

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

| Country(s) or region | Inventory name On in | ventory (yes/no)* |
|-----------------------------|---|-------------------|
| Canada | Domestic Substances List (DSL) | No |
| Canada | Non-Domestic Substances List (NDSL) | 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 | 04-08-2015 |
|----------------------|---|
| Revision date | 02-22-2023 |
| Version # | 03 |
| Further information | This product meets Green Seal™ Standard GS-41A based on effective performance and protective limits on VOCs and human & environmental toxicity. GreenSeal.org. |
| HMIS® ratings | Health: 0 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 | Identification: Recommended restrictions Composition / Information on Ingredients: Disclosure Overrides Physical & Chemical Properties: Multiple Properties Toxicological Information: Toxicological Data Regulatory information: California Proposition 65 Regulatory information: Safe Drinking Water Act (SDWA) |







Safety Data Sheet California CARB Compliant

1 - Chemical Product and Company Identification

| Trade Name: WD-40 Multi-Use Product 25% VOC Bulk Liquid | Manufacturer: Address: | WD-40 Company 9715 Businesspark Avenue San Diego, California, USA 92131 |
|--|---------------------------|--|
| Product Use: Lubricant, Penetrant, Drives Out Moisture, Removes and Protects Surfaces From Corrosion Restrictions on Use: None identified | | 1-888-324-7596 1-888-324-7596 s: 1-800-424-9300 (Chemtrec) 527-3887 (International Calls) |
| SDS Date Of Preparation: August 2, 2021 | | |
| | | |

2 – Hazards Identification

Hazcom 2012/GHS Classification: Flammable Liquid Category 3 Aspiration Toxicity Category 1 Specific Target Organ Toxicity Single Exposure Category 3 (nervous system effects)

Note: The 1 gallon size product is a consumer product and is labeled in accordance with the US Consumer Product Safety Commission regulations which take precedence over OSHA Hazard Communication labeling. The actual container label will not include the label elements below. The labeling below applies to larger containers sold for industrial/professional use.

Label Elements:



DANGER!

Flammable liquid and vapor.

May be fatal if swallowed and enters airways.

May cause drowsiness or dizziness.

Prevention

Keep away from heat, sparks, open flames, hot surfaces. - No smoking.

Keep container tightly closed.

Ground and bond containers and receiving equipment.

Use explosion-proof electrical equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Avoid breathing mists or vapors.

Use only outdoors or in a well-ventilated area.

Wear eye protection.

Response

IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.

In case of fire: Use water fog, dry chemical, carbon dioxide or foam to extinguish.

7 – Handling and Storage

Precautions for Safe Handling: Avoid contact with eyes. Avoid prolonged contact with skin. Avoid breathing vapors or aerosols. Use with adequate ventilation. Keep away from heat, sparks, hot surfaces and open flames. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep out of the reach of children.

Conditions for Safe Storage: Store in a cool, well-ventilated area, away from incompatible materials. NFPA 30 Class II Liquid.

8 – Exposure Controls/Personal Protection

| Chemical | Occupational Exposure Limits | |
|---------------------------|--|--|
| LVP Aliphatic Hydrocarbon | 1200 mg/m3 TWA (manufacturer recommended) | |
| Petroleum Base Oil | 5 mg/m3 TWA (Inhalable) ACGIH TLV (as Mineral oil) | |
| | 5 mg/m3 TWA OSHA PEL (as Oil mist, mineral) | |
| Aliphatic Hydrocarbon | 1200 mg/m3 TWA (manufacturer recommended) | |

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. Safety glasses or goggles recommended.

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.

| Appearance: | Light green to amber | Flammable Limits: | LEL: 0.8% UEL: 5.6% |
|----------------------------|---|---|----------------------------------|
| | liquid | (Solvent Portion) | |
| Odor: | Mild petroleum odor | Vapor Pressure: | 1 psi @38°C (100°F) ASTM D323 |
| Odor Threshold: | Not established | Vapor Density: | Greater than 1 (air=1) |
| pH: | Not Applicable | Relative Density: | 0.8 – 0.82 @ 60°F |
| Melting/Freezing Point: | Not established | Solubilities: | Insoluble in water |
| Boiling Point/Range: | 322 - 388°F (161 - 198°C) | Partition Coefficient; n- octanol/water: | Not established |
| Flash Point: | 138°F (59°C) Tag Closed Cup | Autoignition Temperature: | Not established |
| Evaporation Rate: | Not established | Decomposition Temperature: | Not established |
| Flammability (solid, gas): | Not Applicable | Viscosity: | 2.79-2.96 cSt @ 100°F |
| VOC: | 24.9% MIR=0.44 gO3/gVOC (204 grams/liter) | Pour Point: | -63°C (-81.4°F) ASTM D-97 |

9 – Physical and Chemical Properties

more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SĂRA TITLE III:

Hazard Category For Section 311/312: Refer to Section 2 for the OSHA Hazard Classification. Section 313 Toxic Chemicals: This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements: None

Section 302 Extremely Hazardous Substances (TPQ): None

EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory.

VOC Regulations: This product complies with the consumer product VOC limits of CARB, the US EPA and states adopting the OTC VOC rules.

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65): This product does not require a California Proposition 65 warning.

Canadian Environmental Protection Act: All of the ingredients are listed on the Canadian Domestic Substances List or exempt from notification

16 – Other Information

HMIS Hazard Rating: Health – 1 (slight hazard), Fire Hazard – 2 (moderate hazard), Physical Hazard – 0 (minimal hazard)

Revision Date: August 2, 2021

Supersedes: March 5, 2019

Revision Summary: Section 9: Appearance

Prepared by: Industrial Health & Safety Consultants, Inc. Shelton, CT, USA

Reviewed By: I. Kowalski

Regulatory Affairs Dept.

1022200/No.0084606

FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL CHEMTREC - DAY OR NIGHT 1-800-424-9300

1. **IDENTIFICATION OF THE MATERIAL AND SUPPLIER**

- **1.1 PRODUCT IDENTIFIER:** TRADE NAME:
- 1.2 RECOMMENDED USE:
- DRIFT REDUCTION/DEPOSITION AID ANTI-FOAM AGENT DRY ADJUVANT
- **1.3 SUPPLIER DETAILS:** LOVELAND PRODUCTS, INC.
 - P.O. Box 1286 Greeley, CO 80632-1286

1.4 24-Hour Emergency Phone: 1-800-424-9300 - Medical Emergencies: 1-866-944-8565 U.S. Coast Guard National Response Center: 1-800-424-8802

THRUST®

HAZARDS IDENTIFICATION 2.

2.1 Classification of the substance or mixture

Classification Not classified

2.2 Label elements



Further information: The product does not need to be labeled in accordance with EC directives or respective national laws.

2.3 Other hazards None known

KEEP OUT OF REACH OF CHILDREN -

Appearance and odor: White granules with slight chemical odor.

WARNING - CATEGORY 2A EYE IRRITANT - POSSIBLE SKIN IRRITATION, CLASS 3 - POSSIBLE MUCOUS MEMBRANE IRRITATION **Potential Health effects**

| Routes of exposure | Eye contact, skin contact, inhalation. Avoid breathing spray mist. | |
|--|--|--|
| Eyes | Causes serious eye irritation. | |
| Skin | Can cause mild skin irritation. | |
| Inhalation | May be irritating to respiratory system. | |
| Ingestion | May be irritating to mouth, throat, and stomach. | |
| Target organs | Eyes. Skin. Inhalation. | |
| Signs and symptoms | Harmful if swallowed, absorbed through skin or inhaled. | |
| Potential environmental effects | This product is not classified as environmentally hazardous. However, this does not exclude the possibility that large | |
| or frequent spills can have harmful or damaging effect on the environment. | | |

COMPOSITION, INFORMATION ON INGREDIENTS 3.

| 3.2 Mixtures | | | |
|---|---------------------|----------------|-------------------|
| Chemical Name: | CAS No. | Classification | Concentration [%] |
| Milled ammonium suffate, with Drift reduction / deposition polymers and antifoam | 7783-20-2 agents | | 100.00 |

FIRST AID MEASURES 4.

| 4.1 Description of First | t Aid Measures |
|--------------------------|---|
| General Advice: | Get medical attention if symptoms occur. |
| 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 eye. Call a poison control center or doctor for treatment advice. |
| Ingestion: | 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 a poison control centre or doctor. Do not give anything by mouth to an unconscious person. |
| Skin contact: | 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. |
| Inhalation: | Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable by mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice. |

| 8. | EXPOSURE CONTROLS | S / PERSONAL PROTECTION | |
|------|--|--|---|
| 8.1 | CONTROL PARAMETER | S: | |
| 000 | UPATIONAL EXPOSURE I | LIMITS | |
| | U.S. Workplace Exposure | Level (ACGIH) Guides | |
| | Components | Туре | Value |
| | PNOC* | TWA | 15 mg/m ³ Total dust |
| | *Particulates not | otherwise classified/regulated | |
| Biol | ogical limit values | | 14 |
| | | al Exposure Indices | |
| | Components | Value | Specimen |
| | No listings | | |
| | | | |
| ö.2 | EXPOSURE CONTROLS | | |
| | Engineering Measures | | eventioned Evenesus I light and within the side of the later of the second second |
| | | | cupational Exposure Limits and minimize the risk of inhalation of vapors and spray |
| | mists. Provide eyewash sta Individual Protection Me | | |
| | Eye / Face Protection: | Goggles or shielded safety glasses a | to toopmonded |
| | Skin Protection: | | |
| | Skin Protection. | | nended. Routinely wash work clothing and protective equipment to remove esistant gloves is recommended when handling undiluted product. Be aware |
| | | that the liquid may penetrate the glov | |
| | Respiratory Protection: | | sk of inhalation of dusts or vapors, use suitable respiratory equipment. Wear |
| | Respiratory Protection. | m case of madequate ventration of m | ns where spraying or misting occurs. In the U.S.A., if respirators are used, a |
| | | | compliance with 29 CFR 1910.134, the OSHA Respiratory Protection standard. |
| | | | on if exposure concentrations are unknown. |
| | | meet all addried readinatory brotecti | |

9. PHYSICAL AND CHEMICAL PROPERTIES

| 9.1 | APPEARANCE : | Free flowing granule |
|-----|------------------------------|---|
| | ODOR: | Slight chemical. |
| | ODOR THRESHOLD: | 0.1 ppm. |
| | COLOR : | White. |
| | pH : | No data available |
| | MELTING POINT / FREEZING | G POINT: No data available |
| | BOILING POINT: | Not applicable |
| | FLASH POINT: | Does not flash |
| | FLAMMABILILITY (solid, gas): | Does not support combustion. |
| | | LITY OR EXPLOSIVE LIMITS: Not applicable. |
| | VAPOR PRESSURE: | No data available. |
| | SOLUBILITY: | Soluble |
| | PARTITION CO-EFFICIENT, r | -OCTANOL / WATER: No data available. |
| | AUTO-IGNITION TEMPERAT | URE: No data available. |
| | DECOMPOSITION TEMPERA | TURE: Not determined |
| | VISCOSITY: | Not determined |
| | SPECIFIC GRAVITY (Water = | 1): 0.8329 – 0.913 g/ml |
| | BULK DENSITY: | 52 - 57 lbs/ft ³ / 832.9 - 913 kg/m ³ |
| | | |

Note: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

14. TRANSPORT INFORMATION

14.1 LAND TRANSPORT

DOT Shipping Description: NOT REGULATED.

U.S. Surface Freight Classification: ADHESIVES, ADJUVANTS, SPREADERS OR STICKERS (NMFC 4610; CLASS 60)

15. REGULATORY INFORMATION

| 15.1 SAFETY, HEALTH AND ENVIR | ONMENTAL REGULA | FIONS | | |
|--|---|---|--|--|
| NFPA & HMIS Hazard Ratings: | NFPA | | HMIS | |
| | 1 Health 0 Flammability 0 Instability | 0 Least 1 Slight 2 Moderate 3 High 4 Severe | 1 Health 0 Flammability 0 Reactivity X PPE | |
| SARA Hazard Notification/Reporting SARA Title III Hazard Category: | Immediate <u>Y</u> Delayed <u>N</u> | Fire Reactive | NSudden Release of Pressure | |
| Reportable Quantity (RQ) under U.S. SARA, Title III, Section 313: Not listed RCRA Waste Code: Not listed CA Proposition 65: WARNING: This | | cals known to the State | of California to cause cancer or birth defects or other reproductive | |

CA Proposition 65: WARNING: This product contains chemicals known to the State of California to cause cancer or birth defects or other reproductive harm.

16. OTHER INFORMATION

SDS STATUS: Format revised; all sections reviewed.

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental Health and Safety

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Disclaimer and Limitation of Liability: This data sheet was developed from information on the constituent materials identified herein and does not relate to the use of such materials in combination with any other material or process. No warranty is expressed or implied with respect to the completeness or ongoing accuracy of the information contained in this data sheet, and LOVELAND PRODUCTS, INC. disclaims all liability for reliance on such information. This data sheet is not a guarantee of safety. Users are responsible for ensuring that they have all current information necessary to safely use the product described by this data sheet for their specific purpose.





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Revision: February 28, 2023

| SECTION 1: Identification of the substance/mixture and of the company/ undertaking |
|--|
| · 1.1 Product identifier |
| · Trade name: Super Lube® Multi-Purpose Synthetic Grease with Syncolon® (PTFE) |
| Article number: No other identifiers 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available. |
| · Application of the substance / the mixture Lubricant |
| 1.3 Details of the supplier of the Safety Data Sheet Manufacturer/Supplier: Synco Chemical Corporation 24 DaVinci Dr., P.O. Box 405 Bohemia, NY 11716 Telephone: 631-567-5300 Email: info@super-lube.com 1.4 Emergency telephone number: |
| ChemTel 1-800-255-3924 (US/Canada), 1-813-248-0585 (International), 1-300-954-583 (Australia), 0-800-591-6042 (Brazil), 400-120-0751 (China), 000-800-100-4086 (India), 800-099-0731 (Mexico) |
| SECTION 2: Hazards identification |
| 2.1 Classification of the substance or mixture Classification according to Regulation (EU) No 2020/878 The product is not classified as hazardous according to OSHA GHS regulations within the United States. The product is not classified as hazardous according to the CLP regulation. |
| Information concerning particular hazards for human and environment: The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version. Classification system: The classification is according to the latest editions of the EU-lists, and extended by company and literature data. The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company. Additional information: 0 percent of the mixture consists of component(s) of unknown toxicity There are no other hazards not otherwise classified that have been identified. |
| • 2.2 Label elements • Labelling according to Regulation (EC) No 1272/2008 The product is not classified as hazardous according to OSHA GHS regulations within the United States. This product does not have a classification according to the CLP regulation. • Hazard pictograms Not Regulated • Signal word Not Regulated (Contd. on page 2) |

Revision: February 28, 2023

Trade name: Super Lube® Multi-Purpose Synthetic Grease with Syncolon® (PTFE) (Contd. of page 2) Seek medical treatment in case of complaints. • After swallowing: Rinse out mouth and then drink plenty of water. Do not induce vomiting; call for medical help immediately. • 4.2 Most important symptoms and effects, both acute and delayed May cause gastro-intestinal irritation if ingested. Acne Hazards 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 • Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions. · For safety reasons unsuitable extinguishing agents: Water with full jet · 5.2 Special hazards arising from the substance or mixture Formation of toxic gases is possible during heating or in case of fire. · 5.3 Advice for firefighters · Protective equipment: Wear self-contained respiratory protective device. Wear fully protective suit. · Additional information No further relevant information available. **SECTION 6: Accidental release measures** · 6.1 Personal precautions, protective equipment and emergency procedures Ensure adequate ventilation Particular danger of slipping on leaked/spilled product. · 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water. · 6.3 Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Pick up mechanically. Dispose contaminated material as waste according to item 13. • 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 Store away from oxidising agents.

Information about fire - and explosion protection: No special measures required.

(Contd. on page 4)

Revision: February 28, 2023

Trade name: Super Lube® Multi-Purpose Synthetic Grease with Syncolon® (PTFE)

(Contd. of page 4)

- · Body protection: Not required under normal conditions of use.
- · Limitation and supervision of exposure into the environment No special requirements.
- · Risk management measures No special requirements.

SECTION 9: Physical and chemical properties

| 9.1 Information on basic physical and General Information Appearance: Form: Colour: Odour: Odour threshold: | d chemical properties Semi-solid Translucent Mild Not determined. | |
|---|---|--------------------|
| · pH-value: | Not determined. | |
| Change in condition Melting point/Melting range: Boiling point/Boiling range: | Not Determined. Undetermined. | |
| · Flash point: | >220 °C (>428 °F) | |
| · Flammability (solid, gaseous): | Not applicable. | |
| Auto/Self-ignition temperature: | Not determined. | |
| Decomposition temperature: | Not determined. | |
| · Oxidizing properties: | Non-oxidizing. | |
| [.] Danger of explosion: | Product does not present an explosion hazard. | |
| ⁻ Explosion limits: Lower: Upper: | Not determined. Not determined. | |
| · Vapour pressure: | Not determined. | |
| Density at 20 °C (68 °F): Relative density Vapour density Evaporation rate | 0,89 g/cm³ (7,427 lbs/gal) Not determined. Not determined. Not determined. | |
| Solubility in / Miscibility with water: | Not miscible or difficult to mix. | |
| · Partition coefficient (n-octanol/water) | : Not determined. | |
| Solvent content: VOC (California) | <1% | |
| · Viscosity: Dynamic: Kinematic: | Not determined. Not determined. | (Contd. on page 6) |

Revision: February 28, 2023

Trade name: Super Lube® Multi-Purpose Synthetic Grease with Syncolon® (PTFE)

(Contd. of page 6)

Avoid transfer into the environment.

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

Smaller quantities can be disposed of with household waste.

Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

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.

· Uncleaned packaging:

· Recommendation: Disposal must be made according to official regulations.

| SECTION 14: Transport information | on |
|--|-----------------|
| 14.1 UN-Number | |
| DOT, ADR, ADN, IMDG, IATA | Not Regulated |
| 14.2 UN proper shipping name | - |
| DOT, ADR, ADN, IMDG, IATA | Not Regulated |
| 14.3 Transport hazard class(es) | |
| DOT, ADR, ADN, IMDG, IATA | |
| Class | Not Regulated |
| 14.4 Packing group | • |
| DOT, ADR, IMDG, IATA | Not Regulated |
| 14.5 Environmental hazards: | |
| Marine pollutant: | No |
| 14.6 Special precautions for user | Not applicable. |
| 14.7 Transport in bulk according to Anne | |
| MARPOL73/78 and the IBC Code | Not applicable. |
| UN "Model Regulation": | • |

(Contd. on page 8)

Revision: February 28, 2023

Trade name: Super Lube® Multi-Purpose Synthetic Grease with Syncolon® (PTFE)

(Contd. of page 8)

Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients are listed.

* 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.

• 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) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent

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 | Recon | |
|--|---|--|
| Other means of identification | | |
| SDS number | 577N-192A | |
| Product code | HIL00296 | |
| Recommended use | Urethane Wood Floor Refresher | |
| 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 | |

2. Hazard(s) identification

| Physical hazards | Not classified. | |
|-----------------------|---|---|
| Health hazards | Acute toxicity, inhalation | Category 4 |
| | Reproductive toxicity | Category 1B |
| | Specific target organ toxicity, single exposure | Category 3 respiratory tract irritation |
| Environmental hazards | Not classified. | |
| OSHA defined hazards | Not classified. | |
| Label elements | | |
| | | |

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



involving chemicals)

| Signal word | Danger |
|-------------------------|--|
| Hazard statement | Harmful if inhaled. May cause respiratory irritation. May damage fertility or the unborn child. |
| Precautionary statement | |
| Prevention | Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing mist/vapor. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. |
| Response | If inhaled: Remove person to fresh air and keep comfortable for breathing. If exposed or concerned: Get medical advice/attention. |
| Storage | Store in a well-ventilated place. Keep container tightly closed. Store locked up. |
| 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. |

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|---------------------------------|--------------------------|------------|----------|
| Ethoxydiglycol | | 111-90-0 | 1 - < 3 |
| Methyl Pyrrolidone | | 872-50-4 | 1 - < 3 |
| Other components below reportat | le levels | | 90 - 100 |

Other components below reportable levels

4. First-aid measures

| Inhalation | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a poison center or doctor/physician if you feel unwell. |
|--|--|
| Skin contact | Wash off with soap and water. Get medical attention if irritation develops and persists. |
| Eye contact | Rinse with water. Get medical attention if irritation develops and persists. |
| Ingestion | Rinse mouth. Get medical attention if symptoms occur. |
| Most important symptoms/effects, acute and delayed | May cause respiratory irritation. |
| Indication of immediate medical attention and special treatment needed | Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed. |
| General information | IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. |

5. Fire-fighting measures

| Suitable extinguishing media Unsuitable extinguishing media | Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). 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 General fire hazards | Use standard firefighting procedures and consider the hazards of other involved materials. 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. Avoid breathing mist/vapors. 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 | 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 Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing mist/vapors. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in tightly closed container. Store in a well-ventilated place. 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.

| US. Workplace Environmental Exposure Level (WE | EL) Guides |
|--|------------|
|--|------------|

| | US. Workplace Environme Components | ental Exposure Level (\ Type | , | , | /alue |
|------|---|--|--|----------------|---|
| | Ethoxydiglycol (CAS 111-90-0) | TWA | | | 140 mg/m3 |
| | | | | : | 25 ppm |
| | Methyl Pyrrolidone (CAS 872-50-4) | TWA | | 4 | 40 mg/m3 |
| | | | | | IO ppm |
| Bio | logical limit values | | | | |
| | ACGIH Biological Exposu | re Indices | | | |
| | Components | Value | Determinant | Specimen | Sampling Time |
| | Methyl Pyrrolidone (CAS 872-50-4) | 100 mg/l | 5-Hydroxy-N-m ethyl-2-pyrrolid one | Urine | * |
| | * - For sampling details, ple | ase see the source docu | iment. | | |
| Exp | osure guidelines | | | | |
| | US - California OELs: Ski | n designation | | | |
| | Methyl Pyrrolidone (CA US WEEL Guides: Skin de | | Can be | absorbed thro | bugh the skin. |
| | Methyl Pyrrolidone (CA | S 872-50-4) | Can be | absorbed thre | bugh the skin. |
| | propriate engineering strols | 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. | | | |
| Indi | vidual protection measure | s, such as personal pr | otective equipmen | it | |
| | Eye/face protection | Avoid contact with e side shield | yes. Where splashi | ng of concent | rate is a concern, use protective glasses with |
| | Skin protection | | | | |
| | Hand protection | Use protective glove | es when dealing with | h the concent | rate. |
| | Other | Avoid contact with th impervious clothing. | ne skin. If unable to | avoid prolong | ed or repeated contact with skin, wear |
| | Respiratory protection | concentrations below | w recommended ex | posure limits | gineering controls do not maintain airborne (where applicable) or to an acceptable level (ablished), an approved respirator must be |
| | Thermal hazards | None known. | | | |
| | eral hygiene siderations | measures, such as v | vashing after handli | ing the materi | ays observe good personal hygiene al and before eating, drinking, and/or e equipment to remove contaminants. |
| 9. I | Physical and chemica | l properties | | | |
| Арр | earance | Milky white liquid | | | |
| | Physical state | Liquid. | | | |
| | | | | | |

| Color | Milky white |
|--|---------------------------------------|
| Odor | Non-objectional odor. |
| Odor threshold | Not available. |
| рН | 7.75 - 8.75 |
| Melting point/freezing point | Not applicable / Not available |
| Initial boiling point and boiling range | > 200 °F (> 93.33 °C) |
| Flash point | > 200.0 °F (> 93.3 °C) Tag Closed Cup |
| Evaporation rate | < 1 Ethyl ether=1 |
| Flammability (solid, gas) | Not applicable. |
| Upper/lower flammability or expl | losive limits |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | 17.37 mm Hg |
| Vapor density | 0.8324 Air=1 |
| Relative density | 1.017 at 77° F |
| Solubility(ies) | |
| Solubility (water) | 100 % |
| Partition coefficient (n-octanol/water) | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |
| Other information | |
| Density | 8.47 lb/gal |
| Explosive properties | Not explosive. |
| Oxidizing properties | Not oxidizing. |
| Percent volatile | 87.5 - 88.5 % |
| VOC | < 275 g/l |
| | |

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 heat, 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 | Harmful if inhaled. | |
|--|--|--|
| 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 | May cause respiratory irritation. | |
| Information on toxicological effects | | |
| Acute toxicity | Harmful if inhaled. | |

| Product | Species | Test Results | | |
|---|--|--|--|--|
| Recon | | | | |
| Acute | | | | |
| Dermal | | | | |
| LD50 | Rabbit | 101600 mg/kg | | |
| Oral | _ | | | |
| LD50 | Rat | 44750 mg/kg | | |
| Components | Species | Test Results | | |
| Ethoxydiglycol (CAS 111-90-0) | | | | |
| Acute | | | | |
| Dermal | | | | |
| LD50 | Rat | 6000 mg/kg | | |
| Methyl Pyrrolidone (CAS 872-50- | 4) | | | |
| <u>Acute</u> | | | | |
| Dermal LD50 | Rabbit | | | |
| | Rabbit | 8000 mg/kg | | |
| Oral LD50 | Rat | 2014 malka | | |
| | | 3914 mg/kg | | |
| Skin corrosion/irritation | Prolonged skin contact may cause temporary irritation. | | | |
| Serious eye damage/eye irritation | Direct contact with eyes may cause to | emporary irritation. | | |
| Respiratory or skin sensitizatio | n | | | |
| Respiratory sensitization | Not a respiratory sensitizer. | | | |
| Skin sensitization | This product is not expected to cause | | | |
| Germ cell mutagenicity | No data available to indicate product mutagenic or genotoxic. | or any components present at greater than 0.1% are | | |
| Carcinogenicity | Not classifiable as to carcinogenicity | to humans. | | |
| IARC Monographs. Overall | Evaluation of Carcinogenicity | | | |
| Not listed. OSHA Specifically Regulate | ed Substances (29 CFR 1910.1001-10 | 53) | | |
| Not listed. US. National Toxicology Pr | ogram (NTP) Report on Carcinogens | | | |
| Not listed. | - | | | |
| Reproductive toxicity | May damage fertility or the unborn ch | ild. | | |
| Specific target organ toxicity - single exposure | May cause respiratory irritation. | | | |
| Specific target organ toxicity - repeated exposure | Not classified. | | | |
| Aspiration hazard | Not an aspiration hazard. | | | |
| Chronic effects | Prolonged inhalation may be harmful. | | | |
| 12. Ecological information | n | | | |
| Ecotoxicity | The product is not classified as enviro possibility that large or frequent spills | onmentally hazardous. However, this does not exclude the can have a harmful or damaging effect on the environment. | | |

| possibility that large or frequent spills can have a harmful or damaging effect on the er | | |
|---|----------------------|---|
| | Species | Test Results |
| - | | |
| | | |
| EC50 | Daphnia | 15133333504, 48 hours estimated |
| LC50 | Fish | 2056.2756, 96 hours |
| | | |
| EC50 | Daphnia | 4299999744, 48 hours estimated |
| LC50 | Fish | 2034.7676, 96 hours estimated |
| | EC50 LC50 EC50 | EC50 Daphnia LC50 Fish EC50 Daphnia |

| Components | | Species | Test Results |
|--------------------------------|---|---|-------------------------------------|
| Ethoxydiglycol (CAS 111-90 | -0) | | |
| Aquatic | | | |
| Acute | | | |
| Fish | LC50 | Fathead minnow (Pimephales prometas) | >= 7910 - <= 11800 mg/l, 96 hours |
| Persistence and degradability | No data i | s available on the degradability of this product. | |
| Bioaccumulative potential | | | |
| Partition coefficient n-octa | nol / water (| log Kow) | |
| Ethoxydiglycol | | -0.54 | |
| Methyl Pyrrolidone | | -0.38 | |
| Nobility in soil | No data a | available. | |
| Other adverse effects | The prode potential. | uct contains volatile organic compounds which | have a photochemical ozone creation |
| 13. Disposal consideration | ons | | |
| Disposal instructions | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. | | |
| a del alter a del de sudattema | | | |

| 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
productsDispose 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 packagingSince 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

14. Transport information

DOT

Not regulated as dangerous goods.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

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

disposal.

15. Regulatory information

| US federal regulations | | This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. | | |
|---|-------------------------|---|--|--|
| Toxic Substances Contro | ol Act (TSCA) | One or more components of the mixture are not on the TSCA 8(b) invento or are designated "inactive". | | |
| TSCA Section 12(b) | Export Notification (40 | CFR 707, Subpt. D) | | |
| Methyl Pyrrolidon | e (CAS 872-50-4) | 1.0 % Annual Export Notification required. | | |
| CERCLA Hazardous Substance List (40 CFR 302.4) Not listed. SARA 304 Emergency release notification Not regulated. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) Not listed. | | | | |
| Superfund Amendments and Reauthorization Act of 1986 (SARA) SARA 302 Extremely hazardous substance Not listed. | | | | |
| SARA 311/312 Hazardous chemical | s Yes | | | |

| Classified hazard categories | Acute toxicity (any rou Reproductive toxicity Specific target organ to | te of exposure) oxicity (single or repeat | ted exposure) | |
|--|--|--|--|----|
| SARA 313 (TRI reporting) | | 040 | | |
| Chemical name Methyl Pyrrolidone | | CAS number 872-50-4 | <u>% by wt.</u> 1 - < 3 | |
| Other federal regulations | | 012-00-4 | 1-<3 | |
| Clean Air Act (CAA) Section | 112 Hazardove Air Bol | llutanta (MADa) Liat | | |
| Not regulated. | | ilidiants (nars) List | | |
| Clean Air Act (CAA) Section | 112(r) Accidental Rele | ase Prevention (40 Cl | FR 68.130) | |
| Not regulated. | • • • • • • • | | | |
| Safe Drinking Water Act (SDWA) | Contains component(s |) regulated under the S | Safe Drinking Water Act. | |
| US state regulations | | | | |
| US. California. Candidate Ch (a)) | emicals List. Safer Co | nsumer Products Reg | gulations (Cal. Code Regs, tit. 22, 69502.3, subd. | |
| Methyl Pyrrolidone (CAS 8 | 872-50-4) | | | |
| California Proposition 65 | | | | |
| Cau Cau | s product can expose yo use birth defects or other w.P65Warnings.ca.gov. | reproductive harm. Fo | e, which is known to the State of California to or more information go to | |
| California Proposition 6 | 5 - CRT [.] Listed date/De | velonmental toxin | | |
| Methyl Pyrrolidone (C | | Listed: June 1 | 15, 2001 | |
| International Inventories | | | | |
| Country(s) or region | Inventory name | | On inventory (yes/no |)* |
| Canada | Domestic Substances I | List (DSL) | N | |
| Canada | Non-Domestic Substar | nces List (NDSL) | N | 0 |
| United States & Puerto Rico | Toxic Substances Cont | | | s |
| "A "Yes" indicates that all compon- A "No" indicates that one or more country(s). | ents of this product comply components of the product | with the inventory require are not listed or exempt f | ements administered by the governing country(s) from listing on the inventory administered by the governing | |
| 16. Other information, inclu | uding date of prepa | aration or last rev | vision | |
| Issue date | 09-08-2015 | | | |
| Revision date | 09-08-2021 | | | |
| Version # | 04 | | | |
| HMIS® ratings | Health: 2* Flammability: 0 Physical hazard: 0 | | | |
| Disclaimer | particular purpose, or o contained in this materi this Material Safety Dat Safety and Health Stan presented in good faith assumes all risks assoc | of any nature are made ial safety data sheet. The ta Sheet are supplied p idards Hazard Commun and is believed to be a ciated with the use, mis with all federal, state or | ess or implied, of merchantability, fitness for a with respect to the product(s) or information 'he information and recommendations contained in bursuant to 29 CFR 1910.1200 of the Occupational nication Rule. All information contained herein is appropriate and accurate. The buyer or user suse or disposal of this product. The buyer or user is r local regulations concerning the use, misuse or | |

Product and Company Identification: Product and Company Identification Hazard(s) identification: Disposal Hazard(s) identification: Response Composition / Information on Ingredients: Disclosure Overrides Composition/information on ingredients: Component information Accidental release measures: Personal precautions, protective equipment and emergency procedures Handling and storage: Precautions for safe handling Exposure controls/personal protection: Respiratory protection Physical & Chemical Properties: Multiple Properties Physical and chemical properties: Odor Stability and reactivity: Conditions to avoid Regulatory information: California Proposition 65 Regulatory information: Toxic Substances Control Act (TSCA) GHS: Classification



SAFETY DATA SHEET

| 1. Identification | | | | |
|--|--|--|--|--|
| Product identifier | RECON CROSSLINKER | | | |
| Other means of identification | | | | |
| SDS number | 521N-100A | | | |
| Product code | PART29635B | | | |
| Recommended use | CROSSLINKER Wood Finish Use with Pro 200, Pro 400, Uphold, Pro Satin, UDF / Strong Guard, Recon, and Trophy H2O. | | | |
| 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 | (800) 365-1555 (Ext. 8206) |
| Fax | (816) 383-8406 |
| 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 | Acute toxicity, oral | Category 4 |
| | Serious eye damage/eye irritation | Category 1 |
| | Sensitization, skin | Category 1 |
| | Germ cell mutagenicity | Category 2 |
| | Specific target organ toxicity, repeated exposure | Category 2 |
| Environmental hazards | Not classified. | |
| OSHA defined hazards | Not classified. | |
| Label elements | | |





| Signal word | Danger |
|-------------------------|--|
| Hazard statement | Harmful if swallowed. May cause an allergic skin reaction. Causes serious eye damage. Suspected of causing genetic defects. May cause damage to organs through prolonged or repeated exposure. |
| Precautionary statement | |
| Prevention | Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust, mist, gas, vapors or spray. Wash skin and face thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Wear permeation resistant protective gloves and |

clothing. Wear eye/face protection.

| response | Water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor or emergency medical facility (i.e., 911) If skin irritation or rash occurs: Get medical attention. Wash contaminated clothing before reuse. |
|--|---|
| Storage | Store locked up. |
| Disposal | Dispose of contents and container in accordance with existing federal, state, and local environmental control laws. |
| Hazard(s) not otherwise classified (HNOC) | None known. |
| Supplemental information | None. |

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|--|--|---|--------------------|
| Trimethylolpropane Tris(2-methyl-1-aziridine)propie | | 64265-57-2 | 95-100 |
| *Designates that a specific che | emical identity and/or percentage has been with | held as a trade secret. | 2.5 |
| 4. First-aid measures | | | |
| Inhalation | If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing Call a physician or poison control center immediately. | | |
| Skin contact | Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. | | |
| 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. Drink 1 or 2 glasses of water. 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. | | |
| Most important symptoms/effects, acute and delayed | Harmful if swallowed. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause an allergic skin reaction. Dermatitis. Rash. Prolonged exposure may cause chronic effects. | | |
| Indication of immediate medical attention and special treatment needed | Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed. | | |
| General information | IF exposed or concerned: Get medical advice (show the label where possible). Ensure that involved, and take precautions to protect then attendance. Wash contaminated clothing before | medical personnel are aware nselves. Show this safety data | of the material(s) |
| 5. Fire-fighting measures | | | |
| Suitable extinguishing media | Water fog. Foam. Dry chemical powder. Carb | on 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. | | n in case of fire. |
| Fire fighting equipment/instructions | Move containers from fire area if you can do s | o without risk. | |
| Specific methods | Use standard firefighting procedures and cons | sider the hazards of other invo | lved 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 breathe mist/vapors. 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.

| containment and cleaning up | This productio missione 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. | | |
| | Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. 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 | Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist/vapors. Do not get this material in contact with eyes. Do not taste or swallow. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Observe good industrial hygiene practices. | | |
| Conditions for safe storage, including any incompatibilities | Store locked up. Store away from incompatible materials (see Section 10 of the SDS). Store in tightly closed original container in a well-ventilated place. Crosslinker should be stored between 41°F and 104°F. Substances to avoid: Oxidizing agents, Anhydrides, Acids, Copper, Copper compounds, Silver, Silver compounds. | | |

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.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Components | Туре | Value |
|---|-------------------------------|-----------------------------------|
| Polyfunctional aziridine (CAS 75-55-8) | PEL | 5 mg/m3 |
| | | 2 ppm |
| US. ACGIH Threshold Limit Va | lues | |
| Components | Туре | Value |
| Polyfunctional aziridine (CAS 75-55-8) | STEL | 0.4 ppm |
| | TWA | 0.2 ppm |
| US. NIOSH: Pocket Guide to C | hemical Hazards | |
| Components | Туре | Value |
| Polyfunctional aziridine (CAS 75-55-8) | TWA | 5 mg/m3 |
| | | 2 ppm |
| ological limit values | No biological exposure limits | s noted for the ingredient(s). |
| posure guidelines | | |
| US - California OELs: Skin des | ignation | |
| 2-Methylaziridine (CAS 75-5 | | Can be absorbed through the skin. |
| US - Minnesota Haz Subs: Skir | - | |
| 2-Methylaziridine (CAS 75-5 | | Skin designation applies. |
| US - Tennessee OELs: Skin de | - | |
| 2-Methylaziridine (CAS 75-5 US ACGIH Threshold Limit Val | | Can be absorbed through the skin. |
| 2-Methylaziridine (CAS 75-5 | - | Danger of cutaneous absorption |
| US NIOSH Pocket Guide to Ch | | |
| 2-Methylaziridine (CAS 75-5 | | Can be absorbed through the skin. |
| US. OSHA Table Z-1 Limits for | | |
| 2-Methylaziridine (CAS 75-5 | - | Can be absorbed through the skin. |
| | | |

| Appropriate engineering controls | 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 | Avoid contact with eyes. Chemical resistant goggles must be worn., Chemical safety goggles in combination with a full face shield if a splash hazard exists. |
| Skin protection | |
| Hand protection | Wear appropriate chemical resistant gloves. Ensure gloves remain in good condition during use and replace if any deterioration is observed. Permeation resistant gloves., Neoprene gloves, Butyl rubber gloves., Nitrile rubber gloves. |
| Other | Avoid contact with the skin. Permeation resistant clothing. |
| Respiratory protection | Chemical respirator with organic vapor cartridge and full facepiece. |
| Thermal hazards | None known. Wear appropriate thermal protective clothing, when necessary. |
| General hygiene considerations | Observe any medical surveillance requirements. Keep away from food and drink. 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. Contaminated work clothing should not be allowed out of the workplace. |

9. Physical and chemical properties

| Appearance | Light yellow liquid |
|--|--|
| Physical state | Liquid. |
| Form | Liquid. |
| Color | Light yellow. |
| Odor | Amine-like. |
| Odor threshold | Not available. |
| рН | Not available |
| Melting point/freezing point | Not applicable |
| Initial boiling point and boiling range | > 347 °F (> 175 °C) Decomposes > 175°C |
| Flash point | 487.4 °F (253.0 °C) Closed Cup |
| Evaporation rate | Not available |
| Flammability (solid, gas) | Not applicable. |
| Upper/lower flammability or exp | losive limits |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | Not available |
| Vapor density | Not available |
| Relative density | Not available |
| Solubility(ies) | |
| Solubility (water) | Not available |
| Partition coefficient (n-octanol/water) | Not Available |
| Auto-ignition temperature | 653 °F (345 °C) |
| Decomposition temperature | No decomposition if used as directed |
| Viscosity | 200 cP at 68°F |
| Other information | |
| Density | 8.95 lb/gal at 68° F |
| Explosive properties | Not explosive. |
| Oxidizing properties | Not oxidizing. |
| Percent volatile | Not available |
| VOC | Not available |

10. Stability and reactivity

Reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport. Exothermic reaction with strong acids.

| 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 decomposition temperature. Contact with incompatible materials. Oxidizing agents, Anhydrides, Acids, Copper, Copper compounds, Silver, Silver compounds. |
| Incompatible materials | Acids. |
| 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 | May cause an allergic skin reaction. | |
| Eye contact | Causes serious eye damage. | |
| Ingestion | Harmful if swallowed. | |
| 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. May cause an allergic skin reaction. Dermatitis. Rash. | |
| Ingestion Symptoms related to the physical, chemical and | Harmful if swallowed. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause an allergic skin | |

Information on toxicological effects

| abbit tabbit sat s pecies | Test Results 35000 mg/kg 6.35e+006 mg/l, 4 Hours Test Results | |
|--|---|---|
| at pecies | 6.35e+006 mg/l, 4 Hours | |
| at pecies | 6.35e+006 mg/l, 4 Hours | |
| at pecies | 6.35e+006 mg/l, 4 Hours | |
| at pecies | 6.35e+006 mg/l, 4 Hours | |
| pecies | - | |
| pecies | - | |
| · · · · · · · · · · · · · · · · · · · | Test Results | |
| Suinea pig | | |
| juinea pig | | |
| Suinea pig | | |
| iuinea pig | | |
| | 43 mg/kg | |
| | | |
| lat | 19 mg/kg | |
| Prolonged skin contact may cause temporary irritation. | | |
| Causes serious eye damage. | | |
| | | |
| a respiratory sensitizer. | | |
| y cause an allergic skin reac | tion. | |
| Suspected of causing genetic defects. | | |
| Not classifiable as to carcinogenicity to humans. | | |
| ation of Carcinogenicity | | |
| - | • • | |
| n (NTP) Report on Carcino | gens | |
| 8) | Reasonably Anticipated to be a Human Carcinoge | en. |
| s product is not expected to | cause reproductive or developmental effects. | |
| classified. | | |
| | hrough prolonged or repeated exposure. | |
| | a respiratory sensitizer. (cause an allergic skin read pected of causing genetic of classifiable as to carcinoge ation of Carcinogenicity (NTP) Report on Carcino (NTP) Report on Carcino product is not expected to classified. | a respiratory sensitizer. y cause an allergic skin reaction. pected of causing genetic defects. classifiable as to carcinogenicity to humans. ation of Carcinogenicity B) 2B Possibly carcinogenic to humans. Distances (29 CFR 1910.1001-1053) (NTP) Report on Carcinogens B) Reasonably Anticipated to be a Human Carcinogen a product is not expected to cause reproductive or developmental effects. |

| Aspiration hazard | Not an aspiration hazard. |
|----------------------------|---|
| Chronic effects | Prolonged inhalation may be harmful. May cause damage to organs through prolonged or repeated exposure. |
| 12. Ecological information | |

| Eco | tox | rici | hv - |
|-----|-----|------|------|

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.

| Polyfunctional aziridine Aquatic Fish LC50 Fish 13135.791, 96 hours Persistence and degradability No data is available on the degradability of this product. Bloaccumulative potential Partition coefficient n-octanol / water (log Kow) Polyfunctional aziridine 1.4 2-dimethylaminoethanol -0.55 2-Methylaziridine 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 Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contenti/container in accordance with local/regional/national/international regulations. Buyer assumes all risk and litability associtated with disposal of this product (original concentration or ditution) in violation of applicable law. Local disposal regulations Dispose in accordance with local/regulations. Hazardous waste code products Dispose in accordance with local regulations. Empty containers may retain some product redidues. 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 mappied. Empty containers should be taken to an approved waste handling site for recycling or disposal. 14. Transport information This material is regulated under IATA and IMDG regulations. Contact manufa | Product | Sp | ecies | Test Results | |
|---|---|--|---|---|--|
| Fish LC50 Fish 13135.791,96 hours Persistence and degradability No data is available on the degradability of this product. Bioaccumulative potential Partition coefficient noctume/Tweet (Log Kow) Partition coefficient noctume/Tweet (Log Kow) 1.4 2-dimethylaminotelhanol -0.55 2-dimethylaminotelhanol 0.13 Mobility in soil No otter adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component. 13-Disposal considerations No otter adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component. 14-Disposal considerations No otter adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential) are expected from this component. 15-Disposal considerations No otter adverse environmental effects (e.g. ozone depletion, photochemical ozone creation or disposal regulations. 14-Disposal considerational archive and liability associated with logalorgical this product (original concentration or disposal regulations. No otter adverse environmental essigned in discussion between the user, the producer and the waste disposal of this product container must be disposed of in a safe manner (see: Disposal instructions). 12-Disposal frequence Since emptled containers may retain product residue, follow label warnings even after container is egulations. Empty containers or liners may retain spr | Polyfunctional aziridine | | | | |
| Persistence and degradability No data is available on the degradability of this product. Bioaccumulative potential Partition coefficient n-octanol / water (log Kow) Polyfunctional azirdime 1, Not Available 2-dimethylaminoethanol -0.55 2-Methylazirdine 0.13 Mobility in soil No data available. Other adverse effects No other adverse environmental effects (e.g. coone depletion, photochemical ozone creation potential, and occine disruption, global warning potential) are expected from this component. 13. Disposal considerations Collect and reclaim or dispose in sceled containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. Buyer assumes all risk and liably associated with disposal of this product (original concentration or diulitor) in violation of applicable law. Local disposal regulations Dispose in accordance with local/regional/national/international regulations. Buyer assumes all risk and liably associated with disposal of this product (original concentration or diulitor) in violatic company. US RCRA Hazardous Waste P List: Reference 2-Methylazindine (CAS 75-55-0) P067 Waste from residues / unuse product residue. 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 tak | Aquatic | | | | |
| Bioaccumulative potential Partition coefficient n-octanol / water (log Kow) Polyfunctional azirdine 1.4 2-dimethylaminoethanol 0.55 2-Methylazirdine 0.13 Mobility in soil 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 Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/informational regulations. Buyer assumes all risk and liability associated with disposal of this product (original concentration or diution) in violation of applicable law. Local disposal regulations Dispose in accordance with all applicable regulations. Local disposal regulations Dispose of in accordance with all applicable regulations. Local disposal values P List: Reference 2-Methylazindine (CAS 75-55-9) 2-Methylazindine (CAS 75-55-9) P067 Waste from residues / unused Dispose of in accordance with local regulations. Empty containers or liners may retain some products Disposal instructions). Since emptied. Empty 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 This material a | Fish | LC50 Fis | h | 13135.791, 96 hours | |
| Partition coefficient n-octanol / water (log Kow) 1, Not Available Polyfunctional azifidme 1.4 2-dimethylaminoethanol 0.55 2-Methylazinione 0.13 Mobility in soil No data available. Other adverse effects No dota available discuption, global warming potential) are expected from this component. 13. Disposal considerations Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contentis/container in accordance with local/regional/inational/international regulations. Buyer assumes all risk and liability associated with disposal of this product (original concentration or disposel on accordance with all applicable regulations. Local disposal regulations Dispose in accordance with assigned in discussion between the user, the producer and the waste disposal or product and the waste code should be assigned in discussion between the user, the producer and the waste gioposal instructions. VB RCRA Hazardous Waste P List: Reference 2.4Methylazindine (CAS 75-55-9) P067 Waste from residues / unused pipose 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: Dispose) instructions). Contaminated packaging Not established. Trewsport information Adverse effects Not established. Other and its containers and its container must be disposed of manner (see: Dispose) ins | Persistence and degradability | No data is availab | le on the degradability of | this product. | |
| Polyfunctional aziridine 1, Not Available 14 | Bioaccumulative potential | | | | |
| 1.4 2-dimethylaxindine 0.55 2-Methylaziridine 0.13 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 Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/hational/international regulations. Buyer assumes all risk and liability associated with disposal of this product (orginal 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 instructions. US RCRA Hazardous Waste P List: Reference 2-Methylaziridine (CAS 75-55-8) P067 Waste from residues / unused Dispose of in accordance with local regulations. Empty containers or liners may retain some products 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 Not established. Annex II of MARPOL 73778 and the sitructions. 15.< | | nol / water (log Kow | - | | |
| 2-dimethylaminoethanol -0.55 2-Methylaziridine 0,13 Mobility in soil No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warning potential) are expected from this component. 13. Disposal consideration: The adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warning potential) are expected from this component. 13. Disposal consideration: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. Buyer assumes all risk and liability associated with disposal of this product (original concentration or dispose in accordance with all applicable regulations. Local disposal regulations Dispose of in accordance with local/regulations. Empty containers or liners may retain some products Waste from residues / unused Dispose of in accordance with local regulations. Empty containers or liners may retain some products Products Dispose of in accordance with local regulations. Empty containers or liners may retain some products Disposal instructions 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 This material is regulated under IATA and IMDG regulations. Contact manufacturer for shippin | Polyfunctional aziridine | | - | able | |
| Mobility in soil No data available. Other adverse enfrots No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component. J3. Disposal consideration: Collect and reclaim or dispose in sealed containers at licensed waste disposal sile. Dispose of contents/container in accordance with local/regional/national/international regulations. Buyer assumes all risk and liability associated with disposal of this product (orginal concentration 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 instructions. US RCRA Hazardous Waste P List: Reference 2-Methylaziridine (CAS 75-55-9) PO67 Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some products Ontaminated 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 handing site for recycling or disposal. Transport in bulk according to Annex II of MARPOL 73/78 and the Edd (20 CFR 1910-1200. This material is regulated under IATA and IMDG regulations. Contact manufacturer for shipping the Edd (20 CFR 1910-1200. Toxic Substances Control < <td>CTSA Section 12(b) Exp-tr Notification (40 CFR 70, Subpt. D) Nor regulated.</td> <td>•</td> <td></td> <td>-0.55</td> <td></td> | CTSA Section 12(b) Exp-tr Notification (40 CFR 70, Subpt. D) Nor regulated. | • | | -0.55 | |
| 13. Disposal considerations Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. Buyer assumes all risk and liability associated with disposal of this product (original concentration or diition) 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. US RCRA Hazardous Waste P List: Reference 2-Methylazindine (CAS 75-55-5) Po67 Po67 Waste form residues / unused 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 the BC code General information This material is regulated under IATA and IMDG regulations. Contact manufacturer for shipping instructions. TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated. One or more components of the mixture are not on the TSCA 8(b) inventor or are designated "inactive". CERCLA Hazardous Substance List (40 CFR 707, Subpt. D) Not regulated. One or more components of the mixture are not on th | Mobility in soil | No data available. | | | |
| Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. Buyer assumes all risk 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. US RCRA Hazardous Waste P List: Reference 2. 2.Methylazindine (CAS 75-55-6) P067 Waste from residues / unused 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 enjaposal. H4. Transport information This material is regulated under IATA and IMDG regulations. Contact manufacturer for shipping instructions. Disposel instructions. This material is regulated under IATA and IMDG regulations. Contact manufacturer for shipping instructions. US federal regulation This material is regulated under IATA and IMDG regulations. Contact manufacturer for shipping instructions. US federal regulation This material is regulated under IATA and IMDG regulations. Contact manufacturer for shipping instructions. TSCA Section 12(b) Export Notification (40 CFR 707, | Other adverse effects | | | | |
| contents/container in accordance with local/regional/international/international regulations. Buyer assumes all risk associated with disposal of this product (original concentration or dilution) in violation of applicable law. Local disposal regulations Hazardous waste code Dispose in accordance with all applicable regulations. Hazardous waste code Disposal company. US RCRA Hazardous Waste P List: Reference 2-Methylazindime (CAS 75-55-8) P067 Waste from residues / unuse products solutions / unuse products. 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 containers is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Transport information DOT Not regulated as dangerous goods. Transport in bulk according to Annex II of MARPOL 73/78 and He IBC Code General information US federal regulations Tokic Substances Control K tips material is regulated under IATA and IMDG regulations. Contact manufacturer for shipping instructions. TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated. CERCLA Hazardous Substance List (40 CFR 302.4) 2-Methylazindime (CAS 75-56-8) Listed. SARA 304 Emergency release notification | 13. Disposal consideratio | ons | | | |
| Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company. US RCRA Hazardous Waste P List: Reference 2-Methylazirdime (CAS 75-55-8) P067 Waste from residues / unused 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 Not regulated as dangerous goods. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established. General information This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. Toxic Substances Control Act (TSCA) One or more components of the mixture are not on the TSCA 8(b) inventor or are designated "inactive". TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated. Not regulated. CERCLA Hazardous Substance List (40 CFR 302.4) 2-Wethylazifier (CAS 75-55-8) Listed. SARA 304 Emergency release notification Listed. | Disposal instructions | contents/container assumes all risk a | r in accordance with local nd liability associated wit | /regional/national/international regulations. Buyer | |
| disposal company. US RCRA Hazardous Waste P List: Reference 2-Methylaziridine (CAS 75-55-8) P067 Waste from residues / unused product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). 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 Not established. POT Not regulated as dangerous goods. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established. General information This material is regulated under IATA and IMDG regulations. Contact manufacturer for shipping instructions. 15. Regulatory information This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. Toxic Substances Control Act (TSCA) One or more components of the mixture are not on the TSCA 8(b) inventor or are designated "inactive". TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated. Not regulated. CERCLA Hazardous Substance List (40 CFR 302.4) 2-Methylaziridine (CAS 75-55-8) <td>Local disposal regulations</td> <td>Dispose in accord</td> <td>ance with all applicable re</td> <td>egulations.</td> | Local disposal regulations | Dispose in accord | ance with all applicable re | egulations. | |
| 2-Methylaziridine (CAS 75-55-8) P067 Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some products calculations). 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 DOT Not regulated as dangerous goods. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established. General information This material is regulated under IATA and IMDG regulations. Contact manufacturer for shipping instructions. 15. Regulatory information This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. Toxic Substances Control Act (TSCA) One or more components of the mixture are not on the TSCA 8(b) inventor or are designated "inactive". TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated. Not regulated. CERCLA Hazardous Substance List (40 CFR 302.4) 2-Methylaziridine (CAS 75-55-8) Listed. SARA 304 Emergency release notification Listed. | Hazardous waste code | | | ussion between the user, the producer and the waste | |
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| products 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 DOT Not regulated as dangerous goods. Transport in bulk according to HB IBC Code Not established. General information This material is regulated under IATA and IMDG regulations. Contact manufacturer for shipping instructions. 15. Regulatory information This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. Toxic Substances Control Act (TSCA) One or more components of the mixture are not on the TSCA 8(b) inventor or are designated "inactive". TSCA Section 12(b) Export Notification (40 CFR 302.4) One or more components of the mixture are not on the TSCA 8(b) inventor or are designated "inactive". OERCLA Hazardous Substance List (40 CFR 302.4) Listed. SARA 304 Emergency release notification Listed. | • | - | | | |
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| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established. General information This material is regulated under IATA and IMDG regulations. Contact manufacturer for shipping instructions. 15. Regulatory information This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. Toxic Substances Control Act (TSCA) One or more components of the mixture are not on the TSCA 8(b) inventor or are designated "inactive". TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated. Not regulated. CERCLA Hazardous Substance List (40 CFR 302.4) 2-Methylaziridine (CAS 75-55-8) Listed. SARA 304 Emergency release notification Listed. | DOT | | | | |
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| Standard, 29 CFR 1910.1200. Toxic Substances Control Act (TSCA) One or more components of the mixture are not on the TSCA 8(b) inventor or are designated "inactive". TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated. CERCLA Hazardous Substance List (40 CFR 302.4) Listed. 2-Methylaziridine (CAS 75-55-8) Listed. SARA 304 Emergency release notification Here and the component of the mixture are not on the TSCA 8(b) inventor or are designated "inactive". | 15. Regulatory informatio | 'n | | | |
| or are designated "inactive". TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated. CERCLA Hazardous Substance List (40 CFR 302.4) 2-Methylaziridine (CAS 75-55-8) Listed. SARA 304 Emergency release notification | US federal regulations | | | defined by the OSHA Hazard Communication | |
| Not regulated. CERCLA Hazardous Substance List (40 CFR 302.4) 2-Methylaziridine (CAS 75-55-8) Listed. SARA 304 Emergency release notification | Toxic Substances Control | Act (TSCA) | | | |
| 2-Methylaziridine (CAS 75-55-8) Listed. SARA 304 Emergency release notification | | port Notification (40 | CFR 707, Subpt. D) | | |
| SARA 304 Emergency release notification | - | ance List (40 CFR 36 |)2.4) | | |
| | | | Listed. | | |
| | Aziridine, 2-methyl (CAS | \$ 75-55-8) | 1 LBS | | |

| озпа эреспісану кеуи Not listed. | ateu substance | ש נצש טרת ושונ | 1001-1003) | | |
|--|---|--|--|--|--|
| Superfund Amendments and SARA 302 Extremely has | | • | SARA) | | |
| Chemical name | CAS number | Reportable quantity (pounds) | Threshold planning quantity (pounds) | Threshold planning quantity, lower value (pounds) | Threshold planning quantity, upper value (pounds) |
| 2-Methylaziridine | 75-55-8 | 1 | 10000 | | |
| SARA 311/312 Hazardou chemical | s Yes | | | | |
| Classified hazard categories | Serious eye Respiratory Germ cell n | ty (any route of damage or eye or skin sensitiz nutagenicity get organ toxicit | irritation | exposure) | |
| SARA 313 (TRI reporting Chemical name |) | C | AS number | % by wt. | |
| 2-Methylaziridine | | 7 | /5-55-8 | < 0.2 | |
| ther federal regulations | | | | | |
| Clean Air Act (CAA) Sec | tion 112 Hazardo | us Air Pollutar | nts (HAPs) List | | |
| 2-Methylaziridine (CA | S 75-55-8) | | | | |
| Clean Air Act (CAA) Sect | tion 112(r) Accid | ental Release I | Prevention (40 CFR 6 | 8.130) | |
| 2-Methylaziridine (CA | S 75-55-8) | | | | |
| Safe Drinking Water Act (SDWA) | Not regulate | ed. | | | |
| S state regulations | | | | | |
| US. California. Candidate (a)) | e Chemicals List | . Safer Consur | ner Products Regula | tions (Cal. Code Regs, | tit. 22, 69502.3, subd. |
| 2-Methylaziridine (CA | S 75-55-8) | | | | |
| California Proposition 65 | 5 | | | | |
| WARNING: | | | 2-Methylaziridine, white the second s | ch is known to the State arnings.ca.gov. | of California to |
| California Propositio | on 65 - CRT: List | ed date/Carcin | ogenic substance | | |
| 2-Methylaziridine | | | Listed: January 1, | 1988 | |
| ternational Inventories | | | - | | |
| Country(s) or region | Inventory n | ame | | | On inventory (yes/no)* |
| Canada | - | ubstances List (| DSL) | | No |
| Canada | Non-Domes | tic Substances | List (NDSL) | | Yes |
| United States & Puerto Rid | | | ct (TSCA) Inventory | | Yes |
| *A "Yes" indicates that all com A "No" indicates that one or m country(s). | ponents of this pro | duct comply with t | the inventory requirement | ts administered by the gov isting on the inventory adm | erning country(s) |
| 6. Other information, i | ncluding date | of preparat | ion or last revisio | on | |
| sue date | 09-08-2015 | | | | |
| evision date | 04-12-2023 | | | | |
| ersion # | 08 | | | | |
| MIS® ratings | Health: 3* Flammability Physical ha | | | | |

Material name: RECON CROSSLINKER PART29635B Version #: 08 Revision date: 04-12-2023 Issue date: 09-08-2015

| UISCIAIIIICI | 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. |

Material name: RECON CROSSLINKER PART29635B Version #: 08 Revision date: 04-12-2023 Issue date: 09-08-2015

SAFETY DATA SHEET



1. Identification

| Product identifier | RE-JUV-NAL |
|---------------------------------|-------------------------|
| Other means of identification | |
| SDS number | 587N-047C |
| Product code | HIL00816 |
| Product registration number | 1839-169-1658 |
| 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. 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 it 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

| Chemical name | Common name and synonyms | CAS number | % |
|---|--------------------------|------------|-------------|
| Alkyl dimethyl benzyl ammonium chloride (C12-16) | | 68424-85-1 | 2.170% |
| Octyl decyl dimethyl ammonium chloride | | 32426-11-2 | 1.627% |
| Didecyl dimethyl ammonium chloride | | 7173-51-5 | 0.814% |
| Dioctyl dimethyl ammonium chloride | | 5538-94-3 | 0.814% |
| Other components below reportable le | evels | | 94.57622008 |

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. Causes severe irritation and/or burns. |
| 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 Unsuitable extinguishing media | Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). 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, | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear | | | |
|--------------------------|--|--|--|--|
| protective equipment and | appropriate protective equipment and clothing during clean-up. Do not touch damaged containers | | | |
| emergency procedures | 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. 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 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 50oF or | | |

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.

higher than 120°F), dry and locked storage area inaccessible to children.

| 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. Provide eyewash station and safety shower. | | |
| Individual protection measures, | such as personal protective equipment | | |
| Eye/face protection | Avoid contact with eyes. Chemical safety goggles when working with concentrate. | | |
| Skin protection Hand protection | Wear appropriate chemical resistant 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 | 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 |
| рH | 6 - 7 Concentrate |
| Melting point/freezing point | Not applicable / Not available |
| Initial boiling point and boiling range | 201 °F (93.89 °C) |
| Flash point | > 200.0 °F (> 93.3 °C) Tag Closed Cup |

| Evaporation rate | < 1 Ethyl ether = 1 |
|--|---------------------|
| Flammability (solid, gas) | Not applicable. |
| Upper/lower flammability or exp | losive limits |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | 17.67 mm Hg |
| Vapor density | 0.632 Air =1 |
| Relative density | 1.002 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 | 8.34 ib/gal |
| Explosive properties | Not explosive. |
| Oxidizing properties | Not oxidizing. |
| Percent volatile | 91.5 - 92.5 % |
| VOC | 0.24 % |
| | |

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

| Inhalation | Prolonged inhalation may be harmful. |
|--|---|
| Skin contact | Causes skin irritation. |
| Eye contact | Causes serious eye damage |
| Ingestion | Expected to be a low ingestion hazard |
| 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. | | |
|----------------|------------|--------------|--|
| Product | Species | Test Results | |
| RE-JUV-NAL | | | |
| Acute | | | |
| Dermal | | | |
| LD50 | Rabbit | 332100 mg/kg | |
| Oral | | | |
| LD50 | Rat | 9741 mg/kg | |

| Components | Species | | Test Results | |
|--|--------------------------------------|--|---------------------------------------|--|
| Didecyl dimethyl ammonium chlo | ride (CAS 7173- | -51-5) | ······ | |
| Acute | | | | |
| Orai LD50 | Rat | | 94 malka | |
| | | 3.5 | | |
| Skin corrosion/irritation | Causes skin | imiation. ous eye damage. | | |
| Serious eye damage/eye irritation | | us eye damage. | | |
| Respiratory or skin sensitization | | | | |
| Respiratory sensitization | • | tory sensitizer. | | |
| Skin sensitization | - | is not expected to cause skin sensitizat | | |
| Germ cell mutagenicity | mutagenic or | - | ents present at greater than 0.1% are | |
| Carcinogenicity | Not classifiat | ble as to carcinogenicity to humans. | | |
| IARC Monographs. Overal Not listed. OSHA Specifically Regulat Not listed. | | | | |
| US. National Toxicology P | rogram (NTP) R | eport on Carcinogens | | |
| Not listed. | | · | | |
| Reproductive toxicity | - | is not expected to cause reproductive o | r developmental effects. | |
| Specific target organ toxicity - single exposure | Not classified | Not classified. | | |
| Specific target organ toxicity - repeated exposure | Not classified | d. | | |
| Aspiration hazard | Not an aspira | Not an aspiration hazard. | | |
| Chronic effects | Prolonged inhalation may be harmful. | | | |
| 12. Ecological information | n | | | |
| Ecotoxicity | Toxic to aqua | Toxic to aquatic life with long lasting effects. | | |
| Product | | Species | Test Results | |
| RE-JUV-NAL | | | | |
| Aquatic | | | | |
| Crustacea | EC50 | Daphnia | 126.6858, 48 hours | |
| Fish | LC50 | Fish | 58.9702, 96 hours | |
| Acute | | | | |
| Crustacea | EC50 | Daphnia | 49.903, 48 hours estimated | |
| Fish | LC50 | Fish | 0.0061, 96 hours estimated | |
| Components | | Species | Test Results | |
| Alkyl dimethyl benzyl ammo | nium chloride (C | 12-16) (CAS 68424-85-1) | | |
| Aquatic | | | | |
| Acute | 1.050 | Chinad base (Massas southlin) | | |
| Fish Dideed dimethol | LC50 | Striped bass (Morone saxatilis) | >= 10.4 - <= 19.1 mg/l, 96 hours | |
| Didecyl dimethyl ammonium Aquatic | CRIOTIDE (CAS 7 | 170-01-0) | | |
| Aquatic | | | | |
| Fish | LC50 | White sturgeon (Acipenser transmontanus) | >= 0.0001 - <= 0.001 mg/l, 96 hours | |

Persistence and degradability No data is available on the degradability of this product.

| 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.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

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

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. | | |
|---|--|---|--|
| Toxic Substances Control Act (TSCA) | | One or more components of the mixture are not on the TSCA 8(b) inventory or are designated "inactive". | |
| TSCA Section 12(b) Exp Not regulated. | oort Notification (40 CF | R 707, Subpt. D) | |
| CERCLA Hazardous Substa Not listed. SARA 304 Emergency relea Not regulated. OSHA Specifically Regulate Not listed. | se notification | | |
| Superfund Amendments and Re SARA 302 Extremely hazard Not listed. | | 986 (SARA) | |
| SARA 311/312 Hazardous chemical | Yes | | |
| Classified hazard categories | Skin corrosion or irrita Serious eye damage o | | |
| SARA 313 (TRI reporting) Not regulated. | | | |

| Other federal regulations | |
|-----------------------------------|--|
| Clean Air Act (CAA) Sectior | n 112 Hazardous Air Pollutants (HAPs) List |
| Not regulated. | |
| , , | 112(r) Accidental Release Prevention (40 CFR 68.130) |
| Not regulated. | |
| Safe Drinking Water Act (SDWA) | Contains component(s) regulated under the Safe Drinking Water Act. |
| 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 for treatment advice. If swallowed: 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

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

| Country(s) or region | Inventory name On | i inventory (yes/no)* | |
|--|---|-----------------------|--|
| Canada | Domestic Substances List (DSL) | Yes | |
| Canada | Non-Domestic Substances List (NDSL) | No | |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes | |
| *A "You" indicates that all components of this product comply with the inventory requirements administered by the second control (a) | | | |

*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 | 01-11-2022 |
| Version # | 05 |
| 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. |





1. Identification

| Product identifier | Pre-Game Concentrate | |
|--|----------------------|--|
| Other means of identification | | |
| SDS number | 585N-02A | |
| Product code | HIL00452 | |
| Recommended use | Floor 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 | Serious eye damage/eye irritation | Category 2A |
| Environmental hazards | Hazardous to the aquatic environment, acute hazard | Category 3 |
| OSHA defined hazards | Not classified. | |
| Label elements | • | |
| | | |

| | ▼ |
|--|--|
| Signal word | Warning |
| Hazard statement | Causes serious eye irritation. Harmful to aquatic life. |
| Precautionary statement | |
| Prevention | Wash thoroughly after handling. Avoid release to the environment. Wear 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. |
| 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. |

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|--|--------------------------|------------|-----------|
| Dipropylene Glycol Methyl E | ther | 34590-94-8 | 5 - < 10 |
| Methoxyisopropanol | | 107-98-2 | 5 - < 10 |
| Other components below reportable levels | | | 80 - < 90 |

4. First-aid measures

| All not all modelloo | |
|--|---|
| 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. If eye irritation persists: Get medical advice/attention. |
| Ingestion | Rinse mouth. 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. |
| 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 | During fire, gases hazardous to health may be formed. |

the chemicalSpecial protective equipment
and precautions for firefightersSelf-contained breathing apparatus and full protective clothing must be worn in case of fire.Fire fighting
equipment/instructionsMove containers from fire area if you can do so without risk.Specific methodsUse standard firefighting procedures and consider the hazards of other involved materials.General fire hazardsNo 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 | Prevent product from entering drains. |
| 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 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 Avoid contact with eyes. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

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.

| Components | or Air Contaminants (29 CFF Type | Value |
|--|---|--|
| Dipropylene Glycol Methyl Ether (CAS 34590-94-8) | PEL | 600 mg/m3 |
| | | 100 ppm |
| US. ACGIH Threshold Limit Components | Values Type | Value |
| - | | |
| Dipropylene Glycol Methyl Ether (CAS 34590-94-8) | STEL | 150 ppm |
| | TWA | 100 ppm |
| Methoxyisopropanol (CAS 107-98-2) | STEL | 100 ppm |
| | TWA | 50 ppm |
| US. NIOSH: Pocket Guide to | Chemical Hazards | |
| Components | Туре | Value |
| Dipropylene Glycol Methyl Ether (CAS 34590-94-8) | STEL | 900 mg/m3 |
| | | 150 ppm |
| | TWA | 600 mg/m3 |
| | | 100 ppm |
| Methoxyisopropanol (CAS 107-98-2) | STEL | 540 mg/m3 |
| | | 150 ppm |
| | TWA | 360 mg/m3 |
| | | 100 ppm |
| logical limit values | No biological exposure limits | noted for the ingredient(s). |
| osure guidelines | | |
| US - California OELs: Skin d | • | |
| Dipropylene Glycol Methy Methoxyisopropanol (CAS US - Tennessee OELs: Skin | | Can be absorbed through the skin. Can be absorbed through the skin. |
| Dipropylene Glycol Methy US ACGIH Threshold Limit V | l Ether (CAS 34590-94-8) /alues: Skin designation | Can be absorbed through the skin. |
| Dipropylene Glycol Methy US NIOSH Pocket Guide to C | l Ether (CAS 34590-94-8) Chemical Hazards: Skin desi | Danger of cutaneous absorption gnation |
| Dipropylene Glycol Methy US. OSHA Table Z-1 Limits f | l Ether (CAS 34590-94-8) or Air Contaminants (29 CFF | Can be absorbed through the skin. R 1910.1000) |
| | l Ether (CAS 34590-94-8) | Can be absorbed through the skin. |
| propriate engineering trols | applicable, use process encl maintain airborne levels belo | build be used. Ventilation rates should be matched to conditions. If osures, local exhaust ventilation, or other engineering controls to be recommended exposure limits. If exposure limits have not been be levels to an acceptable level. |
| vidual protection measures, | | |
| Eye/face protection | | ere splashing of concentrate is a concern, use protective glasses w |
| Skin protection | | |
| • | | dealing with the concentrate. |

| Other | None normally required. If unable to avoid prolonged or repeated contact with skin, wear impervious clothing. |
|-----------------------------------|--|
| Respiratory protection | 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. Not normally needed. |
| 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, light blue liquid |
|--|---------------------------------------|
| Physical state | Liquid. |
| Form | Liquid. |
| Color | Light blue |
| Odor | Non-objectional odor. |
| Odor threshold | Not available. |
| pH | 5.25 - 8 |
| Melting point/freezing point | Not applicable / Not available |
| Initial boiling point and boiling range | 207 °F (97.22 °C) |
| Flash point | > 200.0 °F (> 93.3 °C) Tag Closed Cup |
| Evaporation rate | < 1 Ethyl ether=1 |
| Flammability (solid, gas) | Not applicable. |
| Upper/lower flammability or expl | losive limits |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | 17.17 |
| Vapor density | 1.3235 Air=1 |
| Relative density | 1.003 at 77°F |
| Solubility(ies) | |
| Solubility (water) | 100 % |
| Partition coefficient (n-octanol/water) | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |
| Other information | |
| Density | 8.35 ib/gal |
| Explosive properties | Not explosive. |
| Oxidizing properties | Not oxidizing. |
| Percent volatile | > 99 % |
| VOC | 3.97 % 1:4 Dilution |
| | 19.83 % Concentrate |

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 acids. 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 | Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. |

Information on toxicological effects

| Acute toxicity | Not known. | |
|---|---|--|
| Product | Species | Test Results |
| Pre-Game Concentrate | | |
| Acute | | |
| Dermal | | |
| LD50 | Rabbit | 56 g/kg |
| Inhalation | | |
| LC50 | Rat | 554 mg/l, 4 Hours |
| Oral | - | " |
| LD50 | Rat | 28 g/kg |
| Components | Species | Test Results |
| Dipropylene Glycol Methyl Ether | (CAS 34590-94-8) | |
| Acute | | |
| Dermal | Rabbit | |
| LD50 | Rabbit | 9.5 g/kg |
| Oral LD50 | Rat | 5.35 g/kg |
| Methoxyisopropanol (CAS 107-98 | | 5.55 g/kg |
| Acute | 5-2) | |
| Dermal | | |
| LD50 | Rabbit | 13 g/kg |
| Inhalation | | |
| LC50 | Rat | 54.6 mg/i, 4 Hours |
| Oral | | |
| LD50 | Rat | 5.71 g/kg |
| Skin corrosion/irritation | Prolonged skin contact may cause temporary irri | itation. |
| Serious eye damage/eye irritation | Causes serious eye irritation. | |
| Respiratory or skin sensitizatio | n | |
| Respiratory sensitization | Not a respiratory sensitizer. | |
| Skin sensitization | This product is not expected to cause skin sensi | tization. |
| Germ cell mutagenicity | No data available to indicate product or any com mutagenic or genotoxic. | ponents present at greater than 0.1% are |
| Carcinogenicity | Not classifiable as to carcinogenicity to humans. | |
| IARC Monographs. Overall Not listed. | l Evaluation of Carcinogenicity ted Substances (29 CFR 1910.1001-1053) | |
| OSHA Specifically Regulate Not listed. | | |
| | rogram (NTP) Report on Carcinogens | |
| Reproductive toxicity This product is not expected to cause reproductive or developmental effects. | | ve 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 | Harmful to aquatic life. | | | |
|-------------------------------|---|---|-------------------------------------|--|
| Product | Species | | Test Results | |
| Pre-Game Concentrate | | | | |
| Aquatic | | | | |
| Crustacea | EC50 | Daphnia | 579.2982 mg/l, 48 hours estimated | |
| Fish | LC50 | Fish | 762.8829 mg/l, 96 hours estimated | |
| Persistence and degradability | sility No data is available on the degradability of this product. | | | |
| Bioaccumulative potential | | | | |
| Partition coefficient n-octa | nol / water (log | • | | |
| Methoxyisopropanol | | -0.49 | | |
| Mobility in soil | No data avail | able. | | |
| Other adverse effects | The product of potential. | contains volatile organic compounds which | have a photochemical ozone creation | |

13. Disposal considerations

| Disposal instructions | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. 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.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

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

15. Regulatory information

| US federal regulations | This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. | |
|----------------------------|---|---|
| Toxic Substances Control A | kct (TSCA) | One or more components of the mixture are not on the TSCA 8(b) inventory or are designated "inactive". |
| TSCA Section 12(b) Exp | 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 1910.1001-1053) Not listed. Superfund Amendments and Reauthorization Act of 1986 (SARA) SARA 302 Extremely hazardous substance Not listed SARA 311/312 Hazardous Yes chemical **Classified hazard** Serious eye damage or eye irritation categories 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 Not regulated. (SDWA) 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.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Methoxyisopropanol (CAS 107-98-2)

International Inventories

| Country(s) or region | Inventory name On in | ventory (yes/no)* |
|---|---|-------------------|
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |
| ** "Man" indicates that all common at a static conduct comply with the investory apprint administered by the covering asymptotic) | | |

*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 Revision date | 01-12-2017 04-19-2021 |
|-----------------------------|---|
| Version # | 03 |
| HMIS® ratings | Health: 2 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. |

Product and Company Identification: Alternate Trade Names Hazard(s) identification: Disposal Composition/information on ingredients: Component information Exposure controls/personal protection: Thermal hazards Physical & Chemical Properties: Multiple Properties Physical and chemical properties: Odor Stability and reactivity: Conditions to avoid Regulatory information: California Proposition 65 Regulatory information: Safe Drinking Water Act (SDWA) Regulatory information: Toxic Substances Control Act (TSCA) GHS: Classification

SAFETY DATA SHEET



1. Identification

| Product identifier | SUPER SHINE-ALL |
|--|----------------------|
| Other means of identification | |
| SDS number | 578N65A |
| Product code | HIL00140 |
| 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 | Serious eye damage/eye irritation | Category 2B |
| Environmental hazards | Not classified. | |
| OSHA defined hazards | Not classified. | |
| Label elements | | |
| Hazard symbol | None. | |
| Signal word | Warning | |
| Hazard statement | Causes eye irritation. | |
| Precautionary statement | | |
| Prevention | Wash thoroughly after handling. Observe good industrial hygiene practices. | |
| 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. | |
| Storage | Store away from incompatible materials. | |
| Disposal | or dilution) in violation of applicable law. Waste public-owned treatment works in compliance w | with disposal of this product (original concentration e from normal use may be sewered to a with applicable federal, state and local requirements. valent). Then offer clean, dry container for recycling |
| Hazard(s) not otherwise classified (HNOC) | None known. | |
| Supplemental information | not in use. If prolonged or repeated contact is | oid breathing spray mist. Use with adequate o not take internally. Keep container closed when possible, wear rubber or other impervious gloves roper dilution can lead to adverse health effects. |

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|--------------------------------|---|-------------------------------|------------|
| Ammonium Laureth Sulfate | | 67762-19-0 | 1 - < 3 |
| Fragrance | | Mixture | 0.3 |
| Camphor | | 76-22-2 | 0.003 |
| Pin-2(3)-ene | | 80-56-8 | 0.0004 |
| Other components below re | portable levels | | 90 - 100 |
| dditional components | | | |
| Chemical name | Common name and synonyms | CAS number | % |
| Fatty Acids, Tall-oil, Trietha | anolamine Salts | 67784-78-5 | 2 - < 3.05 |
| Tall Oil, Potassium Salt | | 68647-71-2 | 0.5 - < 1 |
| esignates that a specific che | emical identity and/or percentage of composition ha | s been withheld as a trade se | ecret. |

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 with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Continue rinsing. |
| Ingestion | Rinse mouth. Get medical attention if symptoms occur. |
| 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 | 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. 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 discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

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 Store in tightly closed container. 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.

| for Air Contaminants (29 CFR 1910. | • |
|---|---|
| Туре | Value |
| PEL | 2 mg/m3 |
| t Values | |
| Туре | Value |
| STEL | 3 ppm |
| TWA | 2 ppm |
| TWA | 20 ppm |
| to Chemical Hazards | |
| Туре | Value |
| TWA | 2 mg/m3 |
| No biological exposure limits noted | for the ingredient(s). |
| General ventilation normally adequa | ate. |
| , such as personal protective equip | ment |
| Avoid contact with eyes. Where splashing of concentrate is a concern, use protective glasses w side shield | |
| | |
| Wear appropriate chemical resistant | it gloves. |
| Wear suitable protective clothing. None normally required. If unable to avoid prolonged or repeated contact with skin, wear impervious clothing. | |
| In case of insufficient ventilation, wear suitable respiratory equipment. | |
| None known. Wear appropriate thermal protective clothing, when necessary. | |
| 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. | |
| properties | |
| Clear, light amber liquid (darkens wi | ith age) |
| Liquid. | |
| Liquid. | |
| Light Amber, Will darken with age. | |
| Sassafras odor | |
| Sassafras odor | |
| Sassafras odor Not available | |
| | Type PEL t Values Type STEL TWA TWA to Chemical Hazards Type TWA to Chemical Hazards Type TWA No biological exposure limits noted General ventilation normally adequate t, such as personal protective equip Avoid contact with eyes. Where spliside shield Wear appropriate chemical resistant Wear appropriate chemical resistant Wear suitable protective clothing. Norepeated contact with skin, wear im In case of insufficient ventilation, we None known. Wear appropriate the Always observe good personal hygi and before eating, drinking, and/or sequipment to remove contaminants properties Clear, light amber liquid (darkens w Liquid. Liquid. |

Melting point/freezing point

range

Flash point Evaporation rate

Initial boiling point and boiling

8 - 9 (diluted 1:128) 8 - 9 (diluted 1:42)

205 °F (96.11 °C)

< 1 Ethyl ether = 1

> 205.0 °F (> 96.1 °C) Tag Closed Cup

Not available

| Flammability (solid, gas) | Not applicable. |
|--|-----------------|
| Upper/lower flammability or exp | osive limits |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | 17.63 mm Hg |
| Vapor density | 0.6314 Air=1 |
| Relative density | 1.008 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 | 8.39 lb/gal |
| Explosive properties | Not explosive. |
| Oxidizing properties | Not oxidizing. |
| Percent volatile | 87 - 88 % |
| VOC | 0.62 % |
| | |

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 | 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 | Not known. | |
|-----------------|------------|----------------------|
| Product | Species | Test Results |
| SUPER SHINE-ALL | | |
| Acute | | |
| Dermal | | |
| LD50 | Rabbit | 1.139e+007 mg/kg |
| Inhalation | | |
| LC50 | Rat | 240000 mg/l, 4 Hours |
| Oral | | |
| LD50 | Rat | 48720 mg/kg |
| | | - • |

| Components | Species | Test Results |
|---|---|---------------------------------------|
| Camphor (CAS 76-22-2) | | |
| Acute | | |
| Oral | | |
| LD50 | Mouse | 1310 mg/kg |
| Pin-2(3)-ene (CAS 80-56-8) | | |
| Acute | | |
| Oral | | |
| LD50 | Rat | 3700 mg/kg |
| Skin corrosion/irritation | Prolonged skin contact may cause temporary irritation | on. |
| Serious eye damage/eye irritation | Causes eye irritation. | |
| Respiratory or skin sensitization | 1 | |
| ACGIH sensitization | | |
| Turpentine and selected | monoterpenes (CAS 80-56-8) Dermal sensitization | |
| Respiratory sensitization | Not a respiratory sensitizer. | |
| Skin sensitization | This product is not expected to cause skin sensitizat | lion. |
| Germ cell mutagenicity | No data available to indicate product or any compon mutagenic or genotoxic. | ents present at greater than 0.1% are |
| Carcinogenicity | Not classifiable as to carcinogenicity to humans. | |
| IARC Monographs. Overail I Not listed. | Evaluation of Carcinogenicity | |
| | d Substances (29 CFR 1910.1001-1053) | |
| Not listed. | | |
| US. National Toxicology Pro Not listed. | ogram (NTP) Report on Carcinogens | |
| Reproductive toxicity | This product is not expected to cause reproductive of | 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 | 1 | |
| Ecotoxicity | The product is not classified as environmentally haz possibility that large or frequent spills can have a ha | |

| Product | | Species | Test Results |
|------------------------------|--|-------------------------------|------------------------------|
| SUPER SHINE-ALL | | | ·· |
| Aquatic | | | |
| Crustacea | EC50 | Daphnia | 1112.3597, 48 hours |
| Fish | LC50 | Fish | 1819.8174, 96 hours |
| Acute | | | |
| Crustacea | EC50 | Daphnia | 340.7242, 48 hours estimated |
| Fish | LC50 | Fish | 959.0725, 96 hours estimated |
| ersistence and degradability | No data is | s available on the degradabil | ity of this product. |
| ioaccumulative potential | | | |
| Partition coefficient n-octa | nol / water (| log Kow) | |
| Camphor | | 2.38 | |
| Pin-2(3)-ene | | 4.83 | |
| obility in soil | No data a | vailable. | |
| ther 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. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. 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.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

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

15. Regulatory information

US federal regulations

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

Toxic Substances Control Act (TSCA)

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 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Yes

chemical

Classified hazard Serious eye damage or eye irritation categories

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)

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

| Country(s) or region | Inventory name On inventory (| yes/no)* |
|--|---|----------|
| Canada | Domestic Substances List (DSL) | No |
| Canada | Non-Domestic Substances List (NDSL) | 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 several security (a) | | |

*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 | 10-22-2021 |
| Version # | 06 |
| 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. GreenSeal.org. |
| 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: Disposal Composition / Information on Ingredients: Disclosure Overrides Physical & Chemical Properties: Multiple Properties Physical and chemical properties: Color Toxicological Information: Toxicological Data Ecological Information: Ecotoxicity Transport Information: Agency Name, Packaging Type, and Transport Mode Selection Regulatory Information: United States Regulatory information: California Proposition 65 |





1. Identification

Product identifier NON-ACID RESTROOM DISINFECTANT/CLEANER Other means of identification **SDS number** 584N-154B **Product code** HIL00819 1839-169-1658 **Product registration** number Recommended use **Bathroom Cleaner Recommended restrictions** For Labeled Use Only Manufacturer/Importer/Supplier/Distributor information Manufacturer HILLYARD INDUSTRIES Company name 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. Toxic to aquatic life with long lasting effects. |
| Precautionary statement | |
| Prevention | Wash thoroughly after handling. Avoid release to the environment. Wear protective gloves. Wear eye protection/face protection. |
| 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 – Non-refillable container. Do not reuse or refill this container. For containers 2 gallons or less with a one-way opening that doesn't allow containers to be rinsed: Replace cap and discard in trash. Offer for recycling if available. |
| Hazard(s) not otherwise classified (HNOC) | None known. |
| Supplemental information | None. |
| 0.0 | |

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|---|--------------------------|------------|---------|
| Alkyl dimethyl benzyl ammonium chloride (C12-16) | | 68424-85-1 | 1 - < 3 |
| Octyl decyl dimethyl ammonium chloride | | 32426-11-2 | 1 - < 3 |
| Didecyl dimethyl ammonium chloride | | 7173-51-5 | < 1 |
| Dioctyl dimethyl ammonium chloride | | 5538-94-3 | < 1 |

Other components below reportable levels

*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 | 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. 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). |
| Uกsuitable 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. |

90 - 100

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. Prevent product from entering drains. |
| containing ap | 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 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

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.

| 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 | Avoid contact with eyes. Where splashing of concentrate is a concern, use protective glasses with side shield |
| Skin protection | |
| Hand protection | Wear appropriate chemical resistant gloves. |
| Other | Wear appropriate chemical resistant 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 | 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 | proportion |

9. Physical and chemical properties

| Appearance | Clear, dark blue liquid. |
|----------------|--------------------------|
| Physical state | Liquid. |
| Form | Liquid. |
| Color | Dark blue. |
| Odor | Floral fragrance |

| Odor threshold | Not available |
|--|---|
| рH | 6.00 - 7.00 Concentrate |
| Melting point/freezing point | Not applicable / Not available |
| Initial boiling point and boiling range | 202 °F (94.44 °C) |
| Flash point | > 200.0 °F (> 93.3 °C) Tag Closed Cup |
| Evaporation rate | < 1 (ethyl ether = 1) |
| Flammability (solid, gas) | Not applicable. |
| Upper/lower flammability or expl | losive limits |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | 17.69 mm Hg |
| Vapor density | 0.634 Air =1 |
| Relative density | 1.002 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 | 8.34 lb/gal |
| Explosive properties | Not explosive. |
| Oxidizing properties | Not oxidizing. |
| Percent volatile | 91.5 - 92.5 % |
| VOC | CARB COMPLIANT |
| 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. |

| | 1 |
|---------------------------------------|---|
| 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 | Causes skin irritation. |
| Eye contact | Causes serious eye damage. |
| Ingestion | Expected to be a low ingestion hazard. |
| 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 eff | fects |
| | N to a loss of |

Not known.

| Components | Species | | Test Results |
|---|--|------------------------------------|------------------------------------|
| Didecyl dimethyl ammonium chlori | ide (CAS 7173-5 | 51-5) | |
| Acute | | | |
| Dermal | | | |
| LD50 | Rabbit | Rabbit 2730 mg/kg | |
| Skin corrosion/irritation | Causes skin i | rritation. | |
| Serious eye damage/eye irritation | Causes seriou | us eye damage. | |
| Respiratory or skin sensitization | n | | |
| Respiratory sensitization Not a respiratory sensitizer. | | | |
| Skin sensitization | This product is | s 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 classifiabl | le as to carcinogenicity to hur | nans. |
| IARC Monographs. Overall I Not listed. OSHA Specifically Regulate Not regulated. US. National Toxicology Pro Not listed. | d Substances (| (29 CFR 1910.1001-1052) | |
| Reproductive toxicity | This product is | s not expected to cause repro | oductive or developmental effects. |
| Specific target organ toxicity - single exposure | Not classified. | | |
| Specific target organ toxicity - repeated exposure | Not classified. | | |
| Aspiration hazard | Prolonged inh | alation may be harmful. | |
| Chronic effects | Prolonged inh | alation may be harmful. | |
| 12. Ecological information | 1 | | |
| Ecotoxicity | | tic life with long lasting effects | 2 |
| Product | Toxio to aquat | Species | Test Results |
| NON-ACID RESTROOM DISI | NEECTANT/CU | • | 1 697 17697119 |
| Aquatic | | | |
| - | EC50 | Daphnia | 126.6858 mg/l, 48 hours estimated |
| | LC50 | Fish | 58.64 mg/l, 96 hours estimated |
| Persistence and degradability | | ailable on the degradability of | • |
| Bioaccumulative potential | no vala is dva | mable of the degradaunity Of | |
| | | | |
| Mobility in soil | No data availa | lDie. | |

13. Disposal considerations

| Disposal instructions | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. 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). 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. 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.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

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

the IBC Code

15. Regulatory information

US federal regulations

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

| 29 CFN 1910.1200. |
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| (40 CFR 707, Subpt. D) |
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| CFR 302.4) |
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| es (29 CFR 1910.1001-1052) |
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| n Act of 1986 (SARA) |
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| ion or irritation |
| e damage or eye irritation |
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| ous Air Pollutants (HAPs) List |
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| iental Release Prevention (40 CFR 68.130) |
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| ed. |
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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 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

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (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

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | 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 Revision date | 04-23-2015 04-26-2019 |
|-----------------------------|---|
| 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. |
| Revision information | This document has undergone significant changes and should be reviewed in its entirety. |



SAFETY DATA SHEET

1. Identification

| Product identifier | SUPER STRIP | |
|--|--|--|
| Other means of identification | | |
| SDS number | 576N-66A | |
| Product code | HIL00152 | |
| Recommended use | Stripper | |
| Recommended restrictions | For Labeled Use Only DO NOT USE ON GLASS. | |
| 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 1 |
| | Serious eye damage/eye irritation | Category 1 |
| | Specific target organ toxicity, single exposure | Category 3 respiratory tract irritation |
| Environmental hazards | Hazardous to the aquatic environment, acute hazard | Category 3 |
| OSHA defined hazards | Not classified. | |
| Label elements | | |
| | | |



Signal word Danger **Hazard statement** Harmful in contact with skin. Causes severe skin burns and eye damage. Causes serious eye damage. Harmful if inhaled. May cause respiratory irritation. Harmful to aquatic life. **Precautionary statement** Prevention Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Response If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. 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. Take off contaminated clothing and wash it before reuse. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Storage

| Disposal | Do not dispose of in storm drain. 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 | PERSONAL PROTECTIVE EQUIPMENT: For eyes use chemical safety goggles; for skin wear impervious rubber gloves, boots, and aprons where splashing of concentrate is a problem. Wear impervious/slip resistant boots such as Hillyard Stripping Boots while standing in the stripping solution. |

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|-------------------------------------|--------------------------|--|-----------|
| Butoxyethanol | | 111-76-2 | 20 - < 30 |
| Ethanolamine | | 141-43-5 | 5 - < 10 |
| Sodium xylene sulfonate | | 1300-72-7 | 5 - < 10 |
| POTASSIUM HYDROXIDE | | 1310-58-3 | 1 - < 3 |
| Sodium metasilicate | | 6834-92-0 | 1 - < 3 |
| Other components below reportable I | evels | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 50 - < 60 |

4. First-aid measures

| Inhalation | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell. |
|--|---|
| Skin contact | Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. 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. Call a physician or poison control center immediately. |
| Ingestion | Call a physician or poison control center immediately. Rinse mouth. 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 | Headache. Nausea, vomiting. Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation. |
| Indication of immediate medical attention and special treatment needed | Provide general supportive measures and treat symptomatically. Chemical 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 warm. Keep victim under observation. Symptoms may be delayed. |
| General information | If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. |
| 5. Fire-fighting measures | |
| Suitable extinguishing media | Alcohol resistant foam. Water Spray or Fog. 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 breathe mist/vapors. 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 | Use water spray to reduce vapors or divert vapor cloud drift. 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 breathe mist/vapors. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices. |
| Conditions for safe storage, including any incompatibilities | Store locked up. 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

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.

| Components | Туре | Value | |
|--|---------------|-----------|---|
| Butoxyethanol (CAS 111-76-2) | PEL | 240 mg/m3 | _ |
| | | 50 ppm | |
| Ethanolamine (CAS 141-43-5) | PEL | 6 mg/m3 | |
| | | 3 ppm | |
| US. ACGIH Threshold Limit Values | 5 | | |
| Components | Туре | Value | |
| Butoxyethanol (CAS 111-76-2) | TWA | 20 ppm | |
| Ethanolamine (CAS 141-43-5) | STEL | 6 ppm | |
| | TWA | 3 ppm | |
| POTASSIUM HYDROXIDE (CAS 1310-58-3) | Ceiling | 2 mg/m3 | |
| US. NIOSH: Pocket Guide to Chem | nical Hazards | | |
| Components | Туре | Value | |
| Butoxyethanol (CAS 111-76-2) | TWA | 24 mg/m3 | |
| | | 5 ppm | |
| Ethanolamine (CAS 141-43-5) | STEL | 15 mg/m3 | |
| | | 6 ppm | |
| | TWA | 8 mg/m3 | |
| | | 3 ppm | |
| POTASSIUM HYDROXIDE (CAS 1310-58-3) | Ceiling | 2 mg/m3 | |

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| Thermal hazards No oneral hygiene Alw nsiderations an eq Physical and chemical prop | | Avoid contact with the skin. Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended. Wear impervious/slip resistant boots such as Hillyard Stripping Boots while standing in the stripping solution. If engineering controls do not maintain airborne concentrations below recommended exposure | | |
| neral hygiene Alv nsiderations an eq Physical and chemical prop | 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 no been established), an approved respirator must be worn. Chemical respirator with organic vap cartridge. Use With Adequate Ventilation. | | | untries where exposure limits have not |
| nsiderations an eq Physical and chemical prop | one known. | | | |
| | | inking, and/or smo | | as washing after handling the materia wash work clothing and protective |
| | perties | | | |
| pearance Cle | ear, colorless to sli | ght amber liquid | | |
| | juid. | | | |
| Form Liq | luid. | | | |
| Color Co | lorless to slight an | nber. | | |
| lor Mil | ld solvent odor | | | |
| lor threshold No | t available | | | |
| 13 | - 14 | | | |
| Iting point/freezing point No | t applicable / Not a | vailable | | |
| nge | 3 °F (100.56 °C) C | | | |
| | 200.0 °F (> 93.3 °C | | | |
| • | Slower than 1 Eth | iyl ether = 1 | | |
| mmability (solid, gas) No per/lower flammability or explosiv | t applicable. | | | |

Explosive limit - lower (%) Not available.

| Explosive limit - upper (%) | Not available, |
|--|------------------|
| Vapor pressure | 15.83 mm Hg |
| Vapor density | 1.764 Air=1 |
| Relative density | 1.052 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 | 8.76 lb/gal |
| Explosive properties | Not explosive. |
| Oxidizing properties | Not oxidizing. |
| Percent volatile | 81 - 86 % |
| VOC | 33 % Concentrate |

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 | Hazardous polymerization does not occur. |
| Conditions to avoid | Avoid temperatures exceeding the flash point. Contact with incompatible materials. Do not mix with other chemicals. |
| Incompatible materials | Strong acids. Strong oxidizing agents, Oxidizing agents, |
| Hazardous decomposition products | No hazardous decomposition products are known. |

11. Toxicological information

Information on likely routes of exposure

| information on likely routes of | exposure | | | |
|--|--|--|--|--|
| Inhalation | May cause irritation to the respirat | ory system. Prolonged inhalation may be harmful. | | |
| Skin contact | Causes severe skin burns. Harmful in contact with skin. | | | |
| | 2-Butoxyethanol may be absorbed prolonged. These effects have no | through the skin in toxic amounts if contact is repeated and t been observed in humans. | | |
| | Prolonged or repeated exposure n been observed in humans. | nay cause liver and kidney damage. These effects have not | | |
| Eye contact | Causes serious eye damage. | | | |
| Ingestion | Causes digestive tract burns. | | | |
| Symptoms related to the physical, chemical and toxicological characteristics | eye damage. Symptoms may inclu | ning pain and severe corrosive skin damage. Causes serious ide stinging, tearing, redness, swelling, and blurred vision. blindness could result. May cause respiratory irritation. | | |
| Information on toxicological ef | fects | | | |
| Acute toxicity | In high concentrations, vapors are central nervous system effects. Ha | anesthetic and may cause headache, fatigue, dizziness and Irmful in contact with skin. | | |
| Product | Species | Test Results | | |
| SUPER STRIP | | | | |
| Acute | | | | |
| Inhalation | | | | |
| LC50 | Guinea pig | 6.135e+006 ppm, 6 Hours | | |
| | Mouse | 319700 mg/l, 4 Hours | | |
| | | 2745 ppm, 7 Hours | | |
| | | | | |

| Product | Species | Test Results | |
|--|--|---|--|
| | Rat | 1765 ppm, 4 Hours | |
| Components | Species | Test Results | |
| Butoxyethanol (CAS 111-76-2) | | | |
| Acute | | | |
| Oral | | | |
| LD50 | Rat | 560 mg/kg | |
| POTASSIUM HYDROXIDE (CAS | 1310-58-3) | | |
| Acute | | | |
| Oral | Det | 070 | |
| LD50 | Rat | 273 mg/kg | |
| Sodium metasilicate (CAS 6834-9 | 2-0) | | |
| Acute | | | |
| Oral | Pat | 1280 | |
| LD50 | Rat | 1280 mg/kg | |
| Skin corrosion/irritation | Causes severe skin burns and eye damage. | | |
| Serious eye damage/eye rritation | Causes serious eye damage. | | |
| lespiratory or skin sensitization | n | | |
| 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 o mutagenic or genotoxic. | r any components present at greater than 0.1% are | |
| Carcinogenicity | Not classifiable as to carcinogenicity to | humans. | |
| IARC Monographs. Overall | Evaluation of Carcinogenicity | | |
| Butoxyethanol (CAS 111 OSHA Specifically Regulate | -76-2) 3 Not o ad Substances (29 CFR 1910.1001-105 | classifiable as to carcinogenicity to humans. 3) | |
| Not listed. US. National Toxicology Pro | ogram (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 | May cause respiratory irritation. | | |
| Specific target organ toxicity - epeated exposure | Not classified. | | |
| spiration hazard | Not an aspiration hazard. | | |
| Chronic effects | Prolonged inhalation may be harmful. May be harmful if absorbed through skin. | | |
| | 2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans. | | |
| | Prolonged or repeated exposure may observed in humans. | cause liver and kidney damage. These effects have not | |

12. Ecological information

| Ecotoxicity | Harmful t | o aquatic life. | |
|-------------|-----------|-----------------|------------------------------------|
| Product | | Species | Test Results |
| SUPER STRIP | - | | |
| Aquatic | | | |
| Fish | LC50 | Fish | 1752.6577 mg/l, 96 hours estimated |

| Components | Species Test Results | | Test Results |
|--|--|--|-------------------------------------|
| Butoxyethanol (CAS 111-76- | 2) | | |
| Aquatic | | | |
| Fish | LC50 | Inland silverside (Menidia beryllina) | 1250 mg/l, 96 hours |
| Ethanolamine (CAS 141-43- | 5) | | |
| Aquatic | | | |
| Fish | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 114 - 196 mg/l, 96 hours |
| POTASSIUM HYDROXIDE (| CAS 1310-58-3 |) | |
| Aquatic | | | |
| Fish | LC50 | Western mosquitofish (Gambusia affinis) | 80 mg/l, 96 hours |
| Persistence and degradability | No data is available on the degradability of this product. | | |
| Bioaccumulative potential | | | |
| Partition coefficient n-octa | nol / water (log | Kow) | |
| Butoxyethanol | | 0.83 | |
| Ethanolamine | NI . I . I . I . | -1.31 | |
| Mobility in soil | No data avai | | |
| Other adverse effects | The product of potential. | contains volatile organic compounds which | have a photochemical ozone creation |
| 13. Disposal consideratio | ns | | |
| Disposal instructions | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. | | |
| Local disposal regulations | Dispose in accordance with all applicable regulations. | | |
| Hazardous waste code | D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel] 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 | 1 | | |
| DOT | | | |
| UN number | NA1760 | | |
| UN proper shipping name | Compound, C | Cleaning Liquid, (Potassium Hydroxide, Mor | noethanolamine) |

| NA1/60 |
|---|
| Compound, Cleaning Liquid, (Potassium Hydroxide, Monoethanolamine) |
| |
| 8 |
| - |
| 8 |
| |
| Read safety instructions, SDS and emergency procedures before handling. |
| Not established. |
| |



15. Regulatory information

| US federal regulations | This product is a Standard, 29 CFI | "Hazardous Chemical" as defined by the OSHA Hazard Communication R 1910.1200. |
|---|--|---|
| Toxic Substances Control | Act (TSCA) | One or more components of the mixture are not on the TSCA 8(b) inventor or are designated "inactive". |
| TSCA Section 12(b) Ex | port Notification (4 | 10 CFR 707, Subpt. D) |
| Not regulated. | | |
| CERCLA Hazardous Substa | ance List (40 CFR : | 302.4) |
| POTASSIUM HYDROXI SARA 304 Emergency relea | | b) Listed. |
| Not regulated. | | |
| OSHA Specifically Regulate Not listed. | ed Substances (29 | CFR 1910.1001-1053) |
| Superfund Amendments and Re | eauthorization Act | of 1986 (SARA) |
| SARA 302 Extremely hazar | dous substance | |
| Not listed. | | |
| SARA 311/312 Hazardous chemical | Yes | |
| Classified hazard categories | | irritation age or eye irritation gan toxicity (single or repeated exposure) |
| SARA 313 (TRI reporting) Not regulated. | | |
| Other federal regulations | | |
| Clean Air Act (CAA) Section | n 112 Hazardous A | ir Pollutants (HAPs) List |
| Not regulated. Clean Air Act (CAA) Section | n 112(r) Accidental | Release Prevention (40 CFR 68.130) |
| Not regulated. | | |
| Safe Drinking Water Act (SDWA) | Not regulated. | |
| US state regulations | | |
| California Proposition 65 | | |
| California Safe Drinking is not known to contain a more information go to w | iny chemicals currer | forcement Act of 1986 (Proposition 65): This material ntly listed as carcinogens or reproductive toxins. For a.gov. |
| US. California. Candida subd. (a)) | te Chemicals List. | Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, |
| Butoxyethanol (CAS | 111-76-2) | |
| International Inventories | · | |
| Country(s) or region | Inventory name | On inventory (yes/no) |
| Canada | Domestic Substa | |
| Canada | Non-Domestic Su | ubstances List (NDSL) No |
| United States & Puerto Rico | Toxic Substances | s Control Act (TSCA) Inventory Yes |
| *A "Yes" indicates that all compo A "No" indicates that one or more country(s). | nents of this product o components of the p | comply with the inventory requirements administered by the governing country(s) roduct are not listed or exempt from listing on the inventory administered by the governing |

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

| Issue date Revision date Version # HMIS® ratings | 11-17-2014 01-22-2021 04 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. |
| Revision information | This document has undergone significant changes and should be reviewed in its entirety. |



SAFETY DATA SHEET

1. Identification

| Product identifier | ROBUSTO | |
|--|----------------------|--|
| Other means of identification | | |
| SDS number | 572N-75A | |
| Product code | HIL00842 | |
| 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 | Caution | | |
| Hazard statement | The mixture does not meet the criteria for classification. | | |
| Precautionary statement | | | |
| Prevention | Avoid contact with eyes. Do not take internally. | | |
| Response | If in eyes, flush with water for 15 minutes. Get medical attention if irritation develops and persists. 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. 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

| Chemical name Alcohols, C9-11, ethoxylated | Common name and synonyms | CAS number | % |
|--|---|---|---|
| Other components below report | | 68439-46-3 | 3-<5 |
| | | | 90 - 100 |
| | al identity and/or percentage of composition ha | is been withneld as a trade sec | ret. |
| 4. First-aid measures | | | |
| nhalation | Move to fresh air. Call a physician if symptom | ns develop or persist. | |
| Skin contact | Wash off with soap and water. Get medical a | - | i persists. |
| Eye contact | Rinse with water. Get medical attention if irrit | ation develops and persists. | |
| ngestion | Rinse mouth. Get medical attention if sympto | ms occur. | |
| Most important symptoms/effects, acute and delayed | Direct contact with eyes may cause temporar | y irritation. | |
| Indication of immediate medical attention and special treatment needed | Treat symptomatically. | | |
| General information | Ensure that medical personnel are aware of t protect themselves. | he material(s) involved, and tak | e precautions to |
| 5. Fire-fighting measures | | | |
| Suitable extinguishing media | Water fog. Foam. Dry chemical powder. Carb | oon dioxide (CO2). | |
| Jnsuitable extinguishing nedia | Do not use water jet as an extinguisher, as th | | |
| 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 | | 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 con | sider the hazards of other invol | ved materials. |
| General fire hazards | No unusual fire or explosion hazards noted. | | |
| 6. Accidental release meas | sures | | |
| Personal precautions, protective equipment and emergency procedures | Keep unnecessary personnel away. For perso | onal protection, see section 8 o | f the SDS. |
| Methods and materials for containment and cleaning up | Large Spills: Stop the flow of material, if this is possible. Absorb in vermiculite, dry sand or ear recovery, flush area with water. | s without risk. Dike the spilled n arth and place into containers. I | naterial, where this Following product |
| | Small Spills: Wipe up with absorbent material remove residual contamination. | (e.g. cloth, fleece). Clean surfa | ce thoroughly to |
| | Never return spills to original containers for re | | ection 13 of the SE |
| 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 ind | ustrial hygiene practices. | |
| Conditions for safe storage, ncluding any incompatibilities | Store in tightly closed container. Store away fi SDS). | rom incompatible materials (see | e Section 10 of the |

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.

| Biological limit values | No biological exposure limits noted for the ingredient(s). |
|-------------------------|--|
| Appropriate engineering | General ventilation normally adequate. |
| controls | |

Individual protection measures, such as personal protective equipment

| Eye/face protection | Avoid contact with eyes. Where splashing of concentrate is a concern, use protective glasses with side shield |
|-----------------------------------|---|
| Skin protection | |
| Hand protection | Not normally needed. |
| Other | Not normally needed. |
| 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 | Clear, purple liquid | |
|--|---|--|
| Physical state | Liquid. | |
| Form | Liquid. | |
| Color | Purple | |
| Odor | Lavender odor | |
| Odor threshold | Not available. | |
| рН | 6.00 - 8.00 | |
| Melting point/freezing point | Not applicable / Not available | |
| Initial boiling point and boiling range | 212 °F (100 °C) | |
| Flash point | > 200.0 °F (> 93.3 °C) Tag Closed Cup | |
| Evaporation rate | < 1 Ethyl ether = 1 | |
| Flammability (solid, gas) | Not applicable. | |
| Upper/lower flammability or exp | losive limits | |
| Explosive limit - lower (%) | Not available. | |
| Explosive limit - upper (%) | Not available. | |
| Vapor pressure | 17.64 mm Hg | |
| Vapor density | 0.631 | |
| Relative density | 1.003 | |
| 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 | 8.35 lb/gal | |
| Explosive properties | Not explosive. | |
| Oxidizing properties | Not oxidizing. | |
| Percent volatile | 95 - 96 % | |
| VOC | 0 % | |
| 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 | No hazardous decomposition products are known. |
| products | |

11. Toxicological information

Information on likely routes of exposure

| Inhalation | Prolonged inha | alation may be harmful. | |
|--|---|---|--|
| Skin contact | No adverse eff | fects due to skin contact are expected. | |
| Eye contact | Direct contact | with eyes may cause temporary irritation. | |
| Ingestion | Expected to be | e a low ingestion hazard. | |
| Symptoms related to the physical, chemical and toxicological characteristics | Direct contact with eyes may cause temporary irritation. | | |
| Information on toxicological effe | ects | | |
| Acute toxicity | Not known. | | |
| Skin corrosion/irritation | Prolonged skir | o contact may cause temporary irritation. | |
| Serious eye damage/eye irritation | Direct contact | with eyes may cause temporary irritation. | |
| Respiratory or skin sensitization | ו | | |
| Respiratory sensitization | Not a respirato | - | |
| Skin sensitization | • | 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 | e as to carcinogenicity to humans. | |
| IARC Monographs. Overall I | Evaluation of Ca | arcinogenicity | |
| Not listed. | | | |
| OSHA Specifically Regulate | d Substances () | 29 CFR 1910.1001-1052) | |
| Not regulated. US. National Toxicology Pro | ogram (NTP) Re | port on Carcinogens | |
| Not listed. | 3 | | |
| Reproductive toxicity | This product is | not expected to cause reproductive or de | velopmental effects. |
| Specific target organ toxicity - single exposure | Not classified. | | |
| Specific target organ toxicity - repeated exposure | Not classified. | | |
| Aspiration hazard | Not an aspirati | on hazard. | |
| Chronic effects | Prolonged inhalation may be harmful. | | |
| 12. Ecological information | L | | |
| Ecotoxicity | The product is possibility that | not classified as environmentally hazardo large or frequent spills can have a harmfu | us. However, this does not exclude the I or damaging effect on the environment. |
| Components | | Species | Test Results |
| Alcohols, C9-11, ethoxylated (| CAS 68439-46-3 | 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 |
| Persistence and degradability Bioaccumulative potential | No data is avai | lable on the degradability of this product. | |
| 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 Not established. Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

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.

US federal regulations

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 No chemical

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 Not regulated. (SDWA)

US state regulations

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (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

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| Canada | Domestic Substances List (DSL) | No |
| Canada | Non-Domestic Substances List (NDSL) | 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 | 08-09-2019 |
|-----------------------------|--|
| Revision date | 08-09-2019 |
| Version # | 03 |
| HMIS® ratings | Health: 0 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 or disposal of these products. |
| Revision information | This document has undergone significant changes and should be reviewed in its entirety. |



SAFETY DATA SHEET

1. Identification

| Product identifier | EXPLORER |
|---------------------------------|-------------------------|
| Other means of identification | |
| SDS number | 582N-015A |
| Product code | HIL00534 |
| Recommended use | Floor Finish |
| 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 haz | ards | Not classified. |
| Health hazar | ds | Not classified. |
| Environment | al hazards | Hazardous to the aquatic environment, acute Category 3 hazard |
| OSHA define | d hazards | Not classified. |
| Label elemen | its | |
| Hazard s | ymbol | None. |
| Signal w | ord | None. |
| Hazard s | tatement | Harmful to aquatic life. |
| Precautio | onary statement | |
| Prev | ention | Avoid release to the environment. |
| Resp | onse | Wash hands after handling. |
| Stora | age | Store away from incompatible materials. |
| Disp | osal | 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 classified (HM | | None known. |
| Supplementa | l information | None. |
| | | |

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|-------------------------|--------------------------|------------|----------|
| Ethoxydiglycol | | 111-90-0 | 5 - < 10 |
| Material name: EXPLORER | | | SDS US |

| Chemical name | Common name and synonyms | CAS number | % |
|---|---|---|---|
| Tributoxyethyl Phosphate | | 78-51-3 | 1 - < 3 |
| Other components below repor | table levels | · · · · · · · · · · · · · · · · · · · | 90 - 100 |
| 4. First-aid measures | | | |
| nhalation | Move to fresh air. Call a physician if symptom | s develop or persist. | |
| Skin contact | Wash off with soap and water. Get medical at | | nd persists. |
| Eye contact | Immediately flush with plenty of water for at le | • | • |
| ngestion | | Drink water as a precaution. Get medical attention if any discomfort continues. | |
| Most important symptoms/effects, acute and delayed | Direct contact with eyes may cause temporary irritation. | | |
| ndication 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 | | | |
| Suitable extinguishing media | Water fog. Foam. Dry chemical powder. Carbo | on dioxide (CO2). | |
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this | s will spread the fire. | |
| Specific hazards arising from he chemical | During fire, gases hazardous to health may be | formed. | |
| Special protective equipment and precautions for firefighters | Self-contained breathing apparatus and full pro | otective clothing must be won | n in case of fire. |
| Fire fighting equipment/instructions | Move containers from fire area if you can do s | o without risk. | |
| Specific methods | Use standard firefighting procedures and cons | ider the hazards of other invo | lved materials. |
| General fire hazards | No unusual fire or explosion hazards noted. | | |
| 6. Accidental release mea | sures | | |
| Personal precautions, protective equipment and emergency procedures | Keep unnecessary personnel away. Keep peo appropriate protective equipment and clothing authorities should be advised if significant spill safe handling described in this safety data she SDS. | during clean-up. Ensure adec ages cannot be contained. For | quate ventilation. Loo |
| Methods and materials for | This product is miscible in water. Prevent prod | uct from entering drains. | |
| containment and cleaning up | Large Spills: Stop the flow of material, if this is possible. Absorb in vermiculite, dry sand or ea recovery, flush area with water. | without risk. Dike the spilled rth and place into containers. | material, where this i Following product |
| | Small Spills: Wipe up with absorbent material or remove residual contamination. | (e.g. cloth, fleece). Clean surf | ace thoroughly to |
| | Never return spills to original containers for re- | use. For waste disposal, see | section 13 of the SD |
| Environmental precautions | Avoid release to the environment. Inform appro environmental releases. Prevent further leakage drains, water courses or onto the ground. | opriate managerial or supervis | sory personnel of all |
| '. Handling and storage | | | |
| Precautions for safe handling | Avoid prolonged exposure. Provide adequate very equipment. Avoid release to the environment. | ventilation. Wear appropriate Observe good industrial hygie | personal protective ane practices. |
| Conditions for safe storage, ncluding any incompatibilities | Store in tightly closed container. Store away fro 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.

| US. Workplace Environme | ntal Exposure Level (WEEL) Guides | |
|-------------------------------------|--|---|
| Components | Туре | Value |
| Ethoxydiglycol (CAS 111-90-0) | TWA | 140 mg/m3 |
| | | 25 ppm |
| Biological limit values | No biological exposure limits noted f | or 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 | s, such as personal protective equipn | nent |
| 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 | | |
| Hand protection | Not normally needed. | |
| Other | Not normally needed. | |
| Respiratory protection | concentrations below recommended | ventilation. If engineering controls do not maintain airborne exposure limits (where applicable) or to an acceptable level have not been established), an approved respirator must be |
| Thermal hazards | None known. | |
| General hygiene considerations | | ene measures, such as washing after handling the material moking. Routinely wash work clothing and protective |

9. Physical and chemical properties

| | • |
|--|---------------------------------------|
| Appearance | White emulsion |
| Physical state | Liquid. |
| Form | Liquid. |
| Color | White |
| Odor | non-objectionable odor |
| Odor threshold | Not available |
| pН | 8 - 9 |
| Melting point/freezing point | Not applicable / Not available |
| Initial boiling point and boiling range | > 200 °F (> 93.33 °C) |
| Flash point | > 200.0 °F (> 93.3 °C) Tag Closed Cup |
| Evaporation rate | < 1 (ethyl ether = 1) |
| Flammability (solid, gas) | Not applicable. |
| Upper/lower flammability or exp | losive limits |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | 17.28 mm Hg |
| Vapor density | 1.4724 AIR=1 |
| Relative density | 1.039 at 77°F |
| Solubility(ies) | |
| Solubility (water) | Dispersable |
| Partition coefficient (n-octanol/water) | Not available |
| Auto-ignition temperature | Not available |
| Decomposition temperature | Not available |
| Viscosity | Not available |
| Other information | |
| Density | 8.65 lb/gal |
| | |

| Explosive properties | Not explosive. |
|----------------------|----------------|
| Oxidizing properties | Not oxidizing. |
| Percent volatile | 74.5 - 75.5 |
| VOC | CARB Compliant |

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

| , | |
|--|--|
| Inhalation | Prolonged inhalation may be harmful. Under normal conditions of intended use, this material is not expected to be an inhalation hazard. |
| Skin contact | May be irritating to the skin. |
| 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.

| Acute toxicity | NUL KHUWH. | |
|-----------------------------------|---|--|
| Product | Species | Test Results |
| EXPLORER | | |
| Acute | | |
| Dermal | | |
| LD50 | Rabbit | 28980 mg/kg |
| Oral | | |
| LD50 | Rat | 16120 mg/kg |
| Components | Species | Test Results |
| Ethoxydiglycol (CAS 111-90-0) | | |
| Acute | | |
| Dermal | | |
| LD50 | Rat | 6000 mg/kg |
| Tributoxyethyl Phosphate (CAS 7 | '8-51-3) | |
| Acute | | |
| Oral | | |
| LD50 | Rat | 3000 mg/kg |
| Skin corrosion/irritation | Prolonged skin contact may caus | e temporary irritation. |
| Serious eye damage/eye irritation | Direct contact with eyes may cau | se temporary irritation. |
| Respiratory or skin sensitizatio | n | |
| Respiratory sensitization | Under normal conditions of inten | ded use, this material is not expected to be an inhalation hazard. |
| Skin sensitization | This product is not expected to ca | ause skin sensitization. |
| Germ cell mutagenicity | No data available to indicate proc mutagenic or genotoxic. | duct or any components present at greater than 0.1% are |
| Carcinogenicity | Not classifiable as to carcinogeni | city to humans. |
| | | |

| Not listed. OSHA Specifically Regulated Not listed. | Evaluation of Carcinogenicity d Substances (29 CFR 1910.1001-1053) gram (NTP) Report on Carcinogens |
|---|---|
| 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 | Harmful to ac | uatic life. | |
|---|---|--|-----------------------------------|
| Product | | Species | Test Results |
| EXPLORER | | | |
| Aquatic | | | |
| Crustacea | EC50 | Daphnia | 304.9095 mg/l, 48 hours estimated |
| Fish | LC50 | Fish | 296.619 mg/l, 96 hours estimated |
| Components | | Species | Test Results |
| Ethoxydiglycol (CAS 111-90- | 0) | | |
| Aquatic | | | |
| Fish | LC50 | Bluegill (Lepomis macrochirus) | > 10000 mg/l, 96 hours |
| Tributoxyethyl Phosphate (C/ | AS 78-51-3) | | |
| Aquatic | | | |
| Fish | LC50 | Fathead minnow (Pimephales promelas) | 10.4 - 12 mg/l, 96 hours |
| Persistence and degradability | No data is av | ailable on the degradability of this product. | |
| Bioaccumulative potential | | | |
| Partition coefficient n-octar Ethoxydiglycol Tributoxyethyl Phosphate | nol / water (log | Kow) -0.54 3.75 | |
| Mobility in soil | No data avail | able. | |
| 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 consideratio | ns | | |
| Disposal instructions | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. 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 | | accordance with local regulations. Empty c ues. This material and its container must be ructions). | |
| Contaminated packaging | | d containers may retain product residue, fol oty containers should be taken to an approv | |

14. Transport information

DOT

Not regulated as dangerous goods.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

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

15. Regulatory information

US federal regulations

Toxic Substances Control Act (TSCA)

One or more components of the mixture are not on the TSCA 8(b) inventory or are designated "inactive".

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 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No

chemical

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 Not regulated. (SDWA)

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.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Tributoxyethyl Phosphate (CAS 78-51-3)

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | 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 | 02-19-2015 |
|---------------|------------|
| Revision date | 06-04-2021 |

| Version # | 04 |
|----------------------|---|
| HMIS® ratings | Health: 0 Fłammability: 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 | This document has undergone significant changes and should be reviewed in its entirety. |





1. Identification

| Product identifier | VINDICATOR+ |
|---------------------------------|--------------------------|
| Froductidentiller | VINDICATOR |
| Other means of identification | |
| SDS number | 566N-150A |
| Product code | HIL00806 |
| Product registration number | 1839-167-1658 |
| 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 | Flammable liquids | Category 4 |
|-----------------------|---|------------|
| Health hazards | Acute toxicity, oral | Category 4 |
| | Skin corrosion/irritation | Category 1 |
| | Serious eye damage/eye irritation | Category 1 |
| Environmental hazards | Hazardous to the aquatic environment, acute hazard | Category 1 |
| | Hazardous to the aquatic environment, long-term hazard | Category 1 |
| OSHA defined hazards | Not classified. | |

Label elements



Signal word Hazard statement

Combustible liquid. Causes severe skin burns and eye damage. Causes serious eye damage. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

Precautionary statement Prevention

Keep away from flames and hot surfaces-No smoking. Do not breathe mist or vapor. Wash thoroughly after handling. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

| Response | If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. 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. Wash contaminated clothing before reuse. In case of fire: Use appropriate media to extinguish. Collect spillage. |
|--|--|
| Storage | Store in a well-ventilated place. Keep cool. Store locked up. |
| 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 | Nepe |

Supplemental information None.

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|--|--------------------------|------------|-----------|
| Alkyl dimethyl benzyl ammonium chłoride (C12-16) | | 68424-85-1 | 8.680% |
| Octyl decyl dimethyl ammonium chloride | | 32426-11-2 | 6.510% |
| Tetrasodium EDTA | | 64-02-8 | 3 - < 5 |
| Didecyl dimethyl ammonium chloride | | 7173-51-5 | 3.255% |
| Dioctyl dimethyl ammonium chloride | | 5538-94-3 | 3.255% |
| C12-15 Alcohols Ethoxylated | | 68131-39-5 | 1 - < 3 |
| Ethanol | | 64-17-5 | 1 - < 3 |
| Other components below reportable | levels | | 60 - < 70 |

*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. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. 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. Call a physician or poison control center immediately. |
| Ingestion | Call a physician or poison control center immediately. Rinse mouth. 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 | Burning pain and severe corrosive skin damage. Causes serious eye damage. 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. Chemical 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 | 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 breathe mist or vapor. 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. 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. 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 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 | Keep away from open flames, hot surfaces and sources of ignition. When using do not smoke. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on 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 locked up. Keep away from heat, sparks and open flame. 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). 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 a dry place no lower in temperature than 50° F or higher than 120° F that is locked and inaccessible to children. | |

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.

| Components | ntaminants (29 CFR 1910.1000) Type | Value | |
|------------------------------------|---------------------------------------|------------|--|
| Ethano! (CAS 64-17-5) | PEL | 1900 mg/m3 | |
| | | 1000 ppm | |
| US. ACGIH Threshold Limit Values | | | |
| Components | Туре | Value | |
| Ethanol (CAS 64-17-5) | STEL | 1000 ppm | |
| JS. NIOSH: Pocket Guide to Chemica | l Hazards | | |
| Components | Туре | Value | |
| Ethanol (CAS 64-17-5) | TWA | 1900 mg/m3 | |
| | | 1000 ppm | |

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. Ensure adequate ventilation, especially in confined areas. Eye wash facilities and emergency shower must be available when handling this product. |
|-------------------------------------|---|
| Individual protection measures, | such as personal protective equipment |
| Eye/face protection | Avoid contact with eyes. Chemical safety goggles when working with concentrate. |
| Skin protection | |
| Hand protection | Use protective gloves when dealing with the concentrate. |
| Other | Avoid contact with eyes, skin and clothing. If contact is likely, wear protective clothing appropriate to use conditions. |
| Respiratory protection | 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 | None known. |
| 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, yellow liquid |
|--|--------------------------------|
| Physical state | Liquid |
| Form | Liquid. |
| Color | Not available. |
| Odor | Floral fragrance |
| Odor threshold | Not available |
| рН | 6.5 - 7.8 Concentrate |
| Melting point/freezing point | Not applicable / Not available |
| Initial boiling point and boiling range | 202 °F (94.44 °C) |
| Flash point | 144.0 Tag Closed Cup |
| Evaporation rate | < 1 Ethyl ether = 1 |
| Flammability (solid, gas) | Not applicable. |
| Upper/lower flammability or exp | losive limits |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | 18.17 mm Hg |
| Vapor density | 0.6661 Air=1 |
| Relative density | 1.006 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 | 8.38 lb/gal |
| Explosive properties | Not explosive. |
| Oxidizing properties | Not oxidizing. |
| Percent volatile | 67 - 70 % |
| VOC | 2.71 % |
| | |

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 May cause irritation to the respiratory sys | | May cause irritation to the respiratory system. Prolonged inhalation may be harmful. |
|--|--|---|
| | Skin contact | Causes severe skin burns. |
| | Eye contact | Causes serious eye damage. |
| | Ingestion | Causes digestive tract burns. |
| | Symptoms related to the physical, chemical and toxicological characteristics | Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. |
| | | |

Information on toxicological effects

| Acute toxicity | Not known. | |
|---|---|--|
| Components | Species | Test Results |
| Didecyl dimethyl ammonium chlor | ide (CAS 7173-51-5) | |
| Acute | | |
| Oral | | |
| LD50 | Rat | 84 mg/kg |
| Ethanol (CAS 64-17-5) | | |
| Acute | | |
| Inhalation | | |
| LC50 | Mouse | 39 mg/l, 4 Hours |
| Oral | | |
| LD50 | Rat | 6.2 g/kg |
| Skin corrosion/irritation | Causes severe skin burns and | eye damage. |
| Serious eye damage/eye irritation | Causes serious eye damage. | |
| Respiratory or skin sensitizatio | n | |
| 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 pr mutagenic or genotoxic. | oduct or any components present at greater than 0.1% are |
| Carcinogenicity | Not classifiable as to carcinoge | nicity to humans. |
| IARC Monographs. Overall | Evaluation of Carcinogenicity | |
| Not listed. | | |
| OSHA Specifically Regulate | ed Substances (29 CFR 1910.10 | 01-1053) |
| Not listed. | | |
| | ogram (NTP) Report on Carcino | gens |
| Not listed. | T his was done in a star of the | |
| Reproductive toxicity | | 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

| cotoxicity | Very toxic | to aquatic life with long lasting effects. | |
|------------------------------|---|--|--|
| Product | | Species | Test Results |
| VINDICATOR+ | | · · · · · · · · · · · · · · · · · · · | |
| Aquatic | | | |
| Crustacea | EC50 | Daphnia | 31.6714 mg/l, 48 hours estimated |
| Fish | LC50 | Fish | 14.734 mg/l, 96 hours estimated |
| Components | | Species | Test Results |
| Alkyl dimethyl benzyl ammo | nium chloride | (C12-16) (CAS 68424-85-1) | |
| Aquatic | | | |
| Fish | LC50 | Striped bass (Morone saxatilis) | 10.4 - 19.1 mg/l, 96 hours |
| C12-15 Alcohols Ethoxylate | d (CAS 6813 ⁻ | 1-39-5) | |
| Aquatic | | | |
| Crustacea | EC50 | Water flea (Ceriodaphnia dubia) | 0.37 - 0.43 mg/l, 48 hours |
| Fish | LC50 | Channel catfish (Ictalurus punctatus) | 1.04 - 1.39 mg/l, 96 hours |
| Didecyl dimethyl ammonium | chloride (CA | S 7173-51-5) | |
| Aquatic | | | |
| Fish | LC50 | White sturgeon (Acipenser transmontanus) | 0.001 - 0.01 mg/l, 96 hours |
| Ethanol (CAS 64-17-5) | | | |
| Aquatic | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | 7.7 - 11.2 mg/l, 48 hours |
| Fish | LC50 | Fathead minnow (Pimephales promelas) | > 100 mg/l, 96 hours |
| Tetrasodium EDTA (CAS 64 | -02-8) | | |
| Aquatic | | | |
| Fish | LC50 | Bluegill (Lepomis macrochirus) | 472 - 500 mg/l, 96 hours |
| rsistence and degradability | No data is | s available on the degradability of this product. | |
| oaccumulative potential | | 5 , | |
| Partition coefficient n-octa | nol / water (| ioa Kow) | |
| Ethanol | | -0.31 | |
| obility in soil | No data available. | | |
| her 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. | | |
| 3. Disposal consideration | ons | | |
| sposal instructions | pesticide, disposed | DE DISPOSAL - Pesticide wastes are acutely h spray mixture, or rinsate is a violation of Feder of by use according to label instructions, contain spray, or the Hazardoue Waster representative | al Law. If these wastes cannot be ct your State Pesticide or Environmer |

| | 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 – Nonrefillable container. Do not reuse or refill this container. After rinsing container, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. For containers 1 gallon or less with a one-way opening that doesn't allow containers to be rinsed: Replace cap and discard in trash. Offer for recycling if available. 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.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according toNot established.Annex II of MARPOL 73/78 andthe IBC Code

15. Regulatory information

US federal regulations

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

Toxic Substances Control Act (TSCA)

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 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

| SARA 311/312 Hazardous chemical | Yes |
|---------------------------------|---|
| Classified hazard categories | Flammable (gases, aerosols, liquids, or solids) Acute toxicity (any route of exposure) Skin corrosion or irritation 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 Contains component(s) regulated under the Safe Drinking Water Act.

(SDWA)

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

FIFRA Information

FIFRA: This product is a U.S. EPA Registered pesticide, EPA Reg. No. 1839-167-1658, 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. May be fatal if absorbed through the skin. Do not get in eyes, on skin or on clothing. Wear protective eyewear (goggles or face shield), clothing, and gloves when handling. Harmful if swallowed. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Remove contaminated clothing and wash before reuse.

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 poison control center or doctor for treatment advice. If swallowed: Call poison control center or doctor for treatment advice. If swallowed: Call 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.

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

| Country(s) or region | Inventory name | On inventory (yes/no)* | |
|--|---|------------------------|--|
| Canada | Domestic Substances List (DSL) | Yes | |
| Canada | Non-Domestic Substances List (NDSL) | 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 "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 | 06-12-2015 |
|---------------|---|
| issue date | 00-12-2010 |
| Revision date | 02-04-2021 |
| Version # | 05 |
| | Health: 3 Flammability: 2 Physical hazard: 0 |
| | 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. |
| | Physical & Chemical Properties: Multiple Properties Regulatory information: California Proposition 65 |

HILLYARD INDUSTRIES SAFETY DATA SHEET

1. Identification

Product Identifier: HILLYARD #103 LIGHT ACID BOWL CLEANER Application or recommended use: Disinfectant toilet bowl cleaner Restrictions on use: Do not use in any fashion not specified on the product label. Manufacturer / supplier: Hillyard Industires 302 N. Fourth Street St. Joseph, MO 64501 USA

Telephone: 1-816-233-1321

Emergency phone: 1-800-424-9300

National Poison Center: 1-800-222-1222

2. Hazards Identification

| GHS Classification: | Classification of this mixture in accordance with paragraph (d) of §1910.1200. |
|---------------------|--|
| | Skin Corrosion/Irritation - Category 1B |
| | Eye Damage/Irritation - Category 1 |
| | Corrosive to Metals - 1 |
| Label Flements | |

Label Elements:



| Symbol: | \mathbf{v} |
|----------------------|--|
| Signal word: | DANGER |
| Hazard statements: | Causes severe skin burns and serious eye damage. |
| | May be corrosive to metals. |
| Precautionary staten | nents: Do not breathe mist/vapors/spray. |
| | Wash hands, face and any skin contact thoroughly after handling. |
| | Wear protective gloves/protective clothing/eye protection/face protection. |
| | Keep only in original container. |
| | Absorb spillage to prevent material damage. |
| | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. |
| | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with |
| | water/shower. Wash contaminated clothing before reuse. |
| | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| | 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 or doctor/physician. |
| | See <u>4. First-Aid Measures</u> for specific treatment. |
| | Store locked up in corrosive resistant container. |
| | Dispose of contents/container to an approved disposal facility. |
| | |

Other Hazards: None known

3. Composition / Information on Ingredients

Chemical characterization: Hydrochloric acid solution, blended with detergents, germicides and auxiliary agents. Hazardous ingredients: 9.0% Hydrochloric acid (Muriatic acid) CAS 7647-01-0 EINECS/ELINCS 231-595-7

| Other ingredients (> 1%): CAS 7732-18-5, EIX > 88% Water CAS 7732-18-5, EIX | NECS/ELINCS 231-791-2 |
|---|-----------------------|

4. First-Aid Measures

Symptoms: Causes irritation or burning sensation. Causes severe skin burns and serious eye damage.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. Inhalation: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth to an unconscious person. If respiratory irritation, dizziness, or unconsciousness occurs, seek immediate medical assistance.

Skin Contact: Remove contaminated clothing and wash before reuse. Wash contaminated area with soap and water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Eye Contact: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

4. First-Aid Measures (cont.)

Ingestion: 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 a person who is unconscious or convulsing. If vomiting occurs, keep head below hips to reduce risk of aspiration. Probable mucosal damage may contraindicate the use of gastric lavage.

Note to Physician: Treat exposed patients symptomatically.

5. Fire-Fighting Measures

Suitable Extinguishing Media: Not applicable. Product is not a fire hazard.

Unsuitable Extinguishing Media: High pressure water jet.

Specific hazards in case of fire: Hydrogen chloride gas may be generated at high temperatures.

Special Fire Fighting Precautions: Fire fighters should wear appropriate protective equipment, including self-contained breathing apparatus and impervious clothing.

6. Accidental Release Measures

Emergency Procedures: Depending on the extent of release, consider the need for emergency responders with adequate personal protective equipment for clean up, need for evacuation or restriction of access to spill area.

Personal Precautions: Provide adequate ventilation. Do not eat, drink or smoke during clean up. If necessary, use selfcontained respirator, or filtered mask. Wear protective clothing, eye protection and impervious gloves (e.g. neoprene). Wash thoroughly after clean up.

Environmental Precautions: Prevent spills from entering storm sewers/drains or contact with soil. Clean up Methods: Small spills may be wiped up and rinsed with water. For larger spills, neutralize with sodium carbonate and absorb on fire retardant material (e.g. sand). Pick up absorbent and dispose of at an appropriate waste disposal facility.

7. Handling and Storage

Precautions for Safe Handling: Never use with chlorine products. Can react to give chlorine gas. If this occurs, flush toilet to remove chemicals and leave area. Do not return for half hour. Ventilate if possible. Never use or mix with other cleaners or chemicals. Do not use on any surface that can be damaged by acid materials. Do not breathe mist/vapors. Wash hands, face and any skin contact thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves, protective clothing, eye protection, face protection. Use product only according to label directions. If unsure about safe use, contact your supervisor immediately. Provide adequate ventilation in use.

Conditions for Safe Storage: Keep out of reach of children. Do not contaminate water, food or feed by storage and disposal. Store locked up in tightly closed, original, corrosive resistant container in a cool (10^{*} - 30^{*}C), dry, well-ventilated area. Incompatibility: Chlorine bleach, alkali.

8. Exposure Controls / Personal Protection

| Components with occ | upational exposu | re limits: | |
|---------------------|------------------|------------|-----------|
| Component | Reference | TWA | PEL |
| Hydrochloric acid | ACGIH | 2 ppm (C) | |
| | OSHA | | 5 ppm (C) |

Engineering Controls: Proper ventilation in accordance with good industrial hygiene should be provided.

Personal Protective Equipment

Respiratory: Respiratory protection is not necessary under normal conditions of use. If necessary to prevent exposure above occupational limits, use an approved cartridge style respirator.

Gloves: Use water impervious gloves (latex or neoprene rubber). No breakthrough time has been established. Eye Protection: Chemical resistant goggles and face protection.

Other: Protective clothing (long sleeves, pants), eyewash, safety shower are always advisable when working with chemicals.

9. Physical and Chemical Properties

| Physical State - | Liquid | Auto-ignition temperate | ure - Not applicable |
|---------------------------|----------------------------|-------------------------|--------------------------------|
| • | 1 | ÷ : | |
| Color - | Blue | Flash Point - | None |
| Odor - | Sassafras, acidic | Flammability - | Not applicable |
| Odor Threshold - | No data available | Flammability Limits - | Not applicable |
| Boiling Point - | 212°F | Partition coefficient - | Not applicable |
| Decomposition temper | rature - No data available | Solubility (Water) - | Complete |
| Freezing Point - | 0°F | Vapor Density - | No data available |
| pH (Neat) - | < 1 | Vapor Pressure - | No data available |
| Relative Density - | 1.040 | Viscosity - | Water thin |
| Evaporation Rate - | Similar to water | % VOC - | < 0.2 (Excluding LVP material) |

10. Stability and Reactivity

Reactivity: No specific reactivity test data is available. Under normal conditions of storage and use, hazardous reactions are Incompatible materials: Mixing with bleach, alkali or oxidizers may generate toxic gases. not expected. Chemical stability: This product is stable at ambient temperatures and pressures.

Conditions to avoid: Temperatures above 50°C or below 10°C.

Hazardous decomposition products: Hydrogen chloride

11. Toxicological Information

| Acute Toxicity: Toxicity | data is not availab | ole for this mixture. Data | below are estimates based on summation methods. |
|--------------------------|---------------------|----------------------------|---|
| Test | Results | Classification (A.0.4.1(c | c)) Basis (A.1.3.6.1) |
| Oral | > 2000mg/kg | Not applicable | Ingredient literature (Additive formula) |
| Dermal | > 2000mg/kg | Not applicable | Ingredient literature (Additive formula) |
| Inhalation | > 20 mg/L | Not applicable | Ingredient literature (Additive formula) |
| Eye Damage/Irritation | Corrosion | Category 1 | Ingredient literature |
| Skin Damage/Irritation | Corrosion | Category 1B | Ingredient literature |
| Summary: Skin and eve | contact are most li | kelv routes of exposure | Exposure causes skin burns and serious eve damage |

immary: Skin and eye contact are most likely routes of exposure. Exposure causes skin burns and serious eye damage.

| Subchronic/Chronic Toxicity: | | | |
|--|------------------|----------------|------------------------|
| Test | Results | Classification | Basis |
| Skin Sensitization | Not a sensitizer | Not applicable | Ingredient literature. |
| Summary: Repeated or prolonged contact causes skin burns and eye damage. | | | |

Carcinogens - Ingredients are not listed on the NTP Report on Carcinogens, IARC Monographs or by OSHA Other data - No other toxicological information is available for this mixture.

12. Ecological Information

This material has not been tested for acute environmental effects.

Persistence and degradability: Material is not persistent. All organic components > 1% are readily biodegradable. Bio-accumulative potential: No evidence to suggest bio-accumulation will occur.

Mobility: Accidental spillage may lead to penetration of soil and groundwater. However, due to degradability, no evidence suggests this would cause adverse ecological effects. Material will lower pH of affected area.

13. Disposal Considerations

RCRA Class - D002. Do not contaminate water, food or feed by disposal. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray, or mixture of rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label directions, contact your State Pesticide or Environmental Control Agency, or the hazardous waste representative at the nearest EPA Regional Office for guidance. Container Disposal: Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container promptly after emptying. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incinerate, or if allowed by state and local authorities, burn. If burned, stay out of smoke. If container is one gallon or less, wrap empty container in plastic bag and discard in trash.

14. Transport Information

Proper Shipping Name: UN1789 Hydrochloric acid solution RQ - 5000 Lbs. (Hydrochloric Acid) Shipping emergency phone: 800-424-9300 Transport hazard class: 8 Hazard Label: Corrosive (When shipped as a Limited Quantity, labeling is not required.) Marine Pollutant: No Packing Group: II **Emergency Guide No.:** 154

15. Regulatory Information

Inventory status: All components are listed on TSCA(US), EINECS/ELINCS(EU), DSL(Canada), AICS(Australia), ENCS(Japan).

FIFRA: This product is a U.S. EPA Registered pesticide, EPA Reg. No. 8155-4-1658, 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.

Danger: Corrosive. Causes eye and skin damage. May be fatal if swallowed. Do not breathe vapor or fumes. Do not get in eyes, on skin or on clothing. Use with adequate ventilation. Wear goggles or face shield and rubber gloves when handling. CHEMICAL HAZARDS: Never use with chlorine products. Can react to give chlorine gas. If this occurs, flush toilet to remove chemicals and leave area. Do not return for half hour. Ventilate if possible. Never use or mix with other cleaners or chemicals. Do not use on any surface that can be damaged by acid materials. Many surfaces are not resistant to acid. Do not use on PVD finished surfaces. The pesticide label also includes other important information, including directions for use.

15. Regulatory Information (cont.)

OSHA Hazard Communication Standard: This product meets the §1910.1200 definition of a "Hazardous Chemical".

| Superfund Amendments and Reauthor | rization Ac | t of 1986 Title III (EPCRA) Sections 31 | 1 and 312 |
|-----------------------------------|-------------|---|-----------|
| Immediate (Acute) Health Hazard | Yes | Delayed (Chronic) Health Hazard | No |
| Fire Hazard | No | Reactive Hazard | No |
| Sudden Release of Pressure Hazard | No | | |

Superfund Amendments and Reauthorization Act of 1986 Title III (EPCRA) Section 313 *Chemicals marked with an asterisk in "3. Composition/Information on Ingredients" are subject to reporting requirements for Section 313 of Title III of the Superfund Amendments and Reauthorization Act(SARA) of 1986 and 40CFR Part 372.

Pennsylvania/New Jersey/Massachusetts Right to Know

See "3. Composition/Information on Ingredients" for hazardous and top five ingredients over 1% (w/w).

California Proposition 65: This product does not contain a listed substance known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

16. Other information Date issued: 12/01/2014

F300-001 Revision: N/A

Disclaimer: No representation or warranty, either expressed or implied, of merchantability, fitness for a particular purpose, or of any other nature, is made with respect to information concerning the product referred to in this document. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, it is impossible to foresee every health effect or exposure risk incurred by the use of this product. All chemicals present some degree of hazard and should be used with caution. The information and recommendations contained herein are presented in good faith. The user should review this information in conjunction with their knowledge of the application intended to determine the suitability of this product for such purpose. In no event will the supplier be responsible for any damages of any nature whatsoever, resulting from the use, reliance upon, or the misuse of this information. Furthermore, it is the direct responsibility of the user to comply with all applicable regulations governing the use and disposal of this material. Prepared by: R&D

Revision Date: N/A



SAFETY DATA SHEET

1. Identification

| Product identifier | DOUBLE DOWN CARPET SPOTTER |
|-------------------------------|----------------------------|
| Other means of identification | |
| SDS number | 573N14A/527N83B |
| Product code | HIL00932 |
| Recommended use | Carpet Cleaner |
| Recommended restrictions | For Labeled Use Only |
| Manufacturer/Importer/Supplie | r/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 2 |
| Environmental hazards | Not classified. | |
| OSHA defined hazards | Not classified. | |
| Label elements | | |
| | | |
| Signal word | Warning | |
| Hazard statement | May be harmful if swallowed. Causes se | erious eye irritation. |
| Precautionary statement | | |
| Prevention | Wash thoroughly after handling. Wear e not take internally. | ye protection/face protection. Avoid contact with eyes. Do |
| Response | | r several minutes. Remove contact lenses, if present and tion persists: Get medical advice/attention. |
| Storage | Store away from incompatible materials | |
| Disposal | Buyer assumes all risk and liability asso or dilution) in violation of applicable law requirements. | ciated with disposal of this product (original concentration in compliance with applicable federal, state and local |
| Hazard(s) not otherwise classified (HNOC) | None known. | |
| Supplemental information | None known. | |
| | | |

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|----------------------------|---|------------------------|----------|
| Hydrogen Peroxide | | 7722-84-1 | 3 - < 5 |
| *Complex Surfactant Blend | | Proprietary | 1 - < 3 |
| Sodium Carbonate | | 497-19-8 | 1 - < 3 |
| Other components below rep | ortable leveis | | 90 - 100 |
| 4. First-aid measures | | | |
| Inhalation | Move to fresh air. Call a physician if symptom | ns 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. If eye irritation persists: Get medical advice/attention. | | |
| Ingestion | Rinse mouth. Drink plenty of water. Never give anything by mouth to a victim who is unconscious or is having convulsions. 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. |
|--|---|
| 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 | 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 discharge into drains, water courses or onto the ground. |
| 7. Handling and storage | |
| Precautions for safe handling | 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 | Store in tightly closed container. 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.

| Components | for Air Contaminants (29 CFR 1910. Type | Value | | |
|--|--|---|--|--|
| Hydrogen Peroxide (CAS 7722-84-1) | PEL | 1.4 mg/m3 | | |
| | | 1 ppm | | |
| US. ACGIH Threshold Limit | Values | | | |
| Components | Туре | Value | | |
| Hydrogen Peroxide (CAS 7722-84-1) | TWA | 1 ppm | | |
| US. NIOSH: Pocket Guide to | Chemical Hazards | | | |
| Components | Туре | Value | | |
| Hydrogen Peroxide (CAS 7722-84-1) | TWA | 1.4 mg/m3 | | |
| | | 1 ppm | | |
| iological limit values | No biological exposure limits noted f | or the ingredient(s). | | |
| ppropriate engineering ontrols | 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. Provide eyewash station. | | | |
| dividual protection measures, Eye/face protection | such as personal protective equipm Do not get in eyes. Wear safety glas | | | |
| Skin protection | | | | |
| Hand protection | Wear appropriate chemical resistant | Wear appropriate chemical resistant gloves. | | |
| Other | Wear suitable protective clothing. None normally required. If unable to avoid prolonged or repeated contact with skin, wear impervious clothing. | | | |
| Respiratory protection | In case of insufficient ventilation, wear suitable respiratory equipment. Not normally required with adequate ventilation. | | | |
| Thermal hazards | None known. Wear appropriate them | mal protective clothing, when necessary. | | |
| eneral hygiene onsiderations | Wash contaminated clothing before reuse. 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. | | | |
| Physical and chemical | properties | | | |
| ppearance | Clear, colorless liquid | | | |
| Physical state | Liquid. | | | |
| Form | Liquid. | | | |
| Color | Colorless | | | |
| dor | non-objectionable odor | | | |
| dor threshold | Not available. | | | |
| 4 | 9 - 10 | | | |
| elting point/freezing point | Not applicable / Not available | | | |
| itial boiling point and boiling nge | 203 °F (95 °C) | | | |
| ash point | > 200.0 °F (> 93.3 °C) Tag Closed C | up | | |
| /aporation rate | < 1 Ethyl ether = 1 | | | |
| ammability (solid, gas) | Not applicable. | | | |
| oper/lower flammability or exp | losive limits | | | |

Upper/lower flammability or explosive limits

 Explosive limit - lower (%)
 Not available.

 Explosive limit - upper (%)
 Not available.

| Vapor pressure | 17.6 mm Hg |
|--|----------------|
| Vapor density | 0.62 Air=1 |
| Relative density | 1.04 at 77°F |
| Solubility(ies) | |
| Solubility (water) | 100 % |
| Partition coefficient (n-octanol/water) | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |
| Other information | |
| Density | 8.66 lb/gal |
| Explosive properties | Not explosive. |
| Oxidizing properties | Not oxidizing. |
| Percent volatile | 94 - 95 % |
| VOC | 0 % |
| 10. Stability and reactivity | r |

| 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

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

Information on toxicological effects

| Acute toxicity | Not known. | |
|-------------------|------------|---------------------|
| Product | Species | Test Results |
| DOUBLE DOWN CARPE | T SPOTTER | |
| Acute | | |
| Dermal | | |
| LD50 | Rabbit | 1.538e+006 mg/kg |
| Inhalation | | |
| LC50 | Guinea pig | 29.63 mg/l, 2 Hours |
| | Mouse | 44.44 mg/l, 2 Hours |
| | Rat | 170.4 mg/l, 2 Hours |
| Oral | | |
| LD50 | Rat | 23660 mg/kg |
| | | |

* 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 serious eye irritation. |
|---|---|
| Respiratory or skin sensitization | ı |
| 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 |
| Hydrogen Peroxide (CAS OSHA Specifically Regulate | 3 Not classifiable as to carcinogenicity to humans. d Substances (29 CFR 1910.1001-1053) |
| Not listed. US. National Toxicology Pro Not listed. | ogram (NTP) Report on Carcinogens |
| 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

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 | |
|-------------|----------------------|---|--|
| PET SPOTTER | | | |
| | | | |
| EC50 | Daphnia | 11583.1025, 48 hours | |
| LC50 | Fish | 46084.4844, 96 hours | |
| | | | |
| EC50 | Daphnia | 5783.1289, 48 hours estimated | |
| LC50 | Fish | 9172.6191, 96 hours estimated | |
| | EC50 LC50 EC50 | EC50 Daphnia LC50 Fish EC50 Daphnia | |

* 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 | Dispose of this material and its container to hazardous or special waste collection point. Incinerate the material under controlled conditions in an approved incinerator. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. |
|--|---|
| 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. |

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 Not established. Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

| US federal regulations | This product is a "Haz: Standard, 29 CFR 191 | ardous Chemical" as defined by the OSHA Hazard Communication 0.1200. | |
|----------------------------|---|--|--|
| Toxic Substances Control A | A TROAD | | |

Toxic Substances Control Act (TSCA)

One or more components of the mixture are not on the TSCA 8(b) inventory or are designated "inactive".

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 (Conc.> 52%) (CAS 7722-84-1) 1000 LBS

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

country(s).

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

| Chemical name | CAS number | Reportable quantity (pounds) | Threshold planning quantity (pounds) | Threshold planning quantity, lower value (pounds) | Threshold planning quantity, upper value (pounds) |
|---|-------------------------------------|------------------------------------|---|--|--|
| Hydrogen Peroxide | 7722-84-1 | 1000 | 1000 | | <u>_</u> |
| SARA 311/312 Hazardou chemical | s Yes | | | | |
| Classified hazard categories | Serious eye | e damage or eye | e irritation | | |
| SARA 313 (TRI reporting Not regulated. |) | | | | |
| ther federal regulations | | | | | |
| Clean Air Act (CAA) Sect | ion 112 Hazard | ous Air Pollutai | nts (HAPs) List | | |
| Not regulated. | | | , | | |
| Clean Air Act (CAA) Sect | ion 112(r) Accid | iental Release | Prevention (40 CFR 6 | 8.130) | |
| Not regulated. | | | | | |
| Safe Drinking Water Act (SDWA) | Not regulate | ed. | | | |
| S state regulations | | | | | |
| California Proposition 65 | i | | | | |
| California Safe Drinkir | ng Water and Tox n any chemicals | currently listed a | Act of 1986 (Proposition as carcinogens or repro | on 65): This material iductive toxins. For | |
| ternational Inventories | | | | | |
| Country(s) or region | Inventory r | name | | | On inventory (yes/no)* |
| Canada | | ubstances List (I | DSL) | | No |
| Canada | Non-Domes | stic Substances | List (NDSL) | | No |
| United States & Puerto Ric | | | ct (TSCA) Inventory | | Yes |
| *A "Yes" indicates that all com A "No" indicates that one or m | ponents of this pro | duct comply with t | the inventory requirement | s administered by the gov isting on the inventory adm | erning country(s) |

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

| Issue date | 04-09-2015 |
|----------------------|---|
| Revision date | 12-06-2021 |
| Version # | 03 |
| HMIS® ratings | Health: 2 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 | This document has undergone significant changes and should be reviewed in its entirety. |



SAFETY DATA SHEET

1. Identification

LLYARD

The Cleaning Resource.

| Product identifier | DEFOAMER II | |
|--|----------------------|--|
| Other means of identification | | |
| SDS number | 585N-61B | |
| Product code | HIL00183 | |
| Recommended use | Defoamer | |
| 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 | 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. 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

The manufacturer lists no ingredients as hazardous to health according to OSHA 29 CFR 1910.1200.

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 with water. Get medical attention if irritation develops and persists. |
| 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

| ······ | |
|--|---|
| 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. For personal protection, see section 8 of the SDS. |
|---|---|
| Methods and materials for | This product is miscible in water. |
| 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. |
| | 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 | 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

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.

| 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 protective glasses with side shield | |
| | | |

| Skin protection Hand protection | Not normally needed. For prolonged or repeated skin contact use suitable 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 | 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 | Opaque, white to off-white, slightly viscous liquid. |
|--|--|
| Physical state | Liquid. |
| Form | Liquid. |
| Color | White to Off-White |
| Odor | Non-objectionable |
| Odor threshold | Not available |
| pН | 5.5 - 7.5 Concentrate |
| Melting point/freezing point | Not applicable / 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 |
| Flammability (solid, gas) | Not applicable. |
| Upper/lower flammability or exp | losive limits |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | 17.53 mm Hg |
| Vapor density | 0.622 Air =1 |
| Relative density | 0.999 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 | 600 - 1350 cP |
| Other information | |
| Density | 8.32 lb/gal |
| Explosive properties | Not explosive. |
| Oxidizing properties | Not oxidizing. |
| Percent volatile | > 98 % |
| VOC | 0.02 % |
| 10. Stability and reactivity | |

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 | No hazardous decomposition products are known. |
| products | |

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

| Acute toxicity | | | | |
|--|--|---|------------------------------------|--|
| Product | Species | | Test Results | |
| DEFOAMER II | | | | |
| Acute | | | | |
| Dermal | | | | |
| LD50 | Rabbit | | 5.857e+006 mg/kg | |
| Oral | | | | |
| LD50 | Rat | | 57100 g/kg | |
| Skin corrosion/irritation | Prolonged s | Prolonged skin contact may cause temporary irritation. | | |
| Serious eye damage/eye irritation | Direct conta | Direct contact with eyes may cause temporary irritation. | | |
| Respiratory or skin sensitizatio | n | | | |
| Respiratory sensitization | Not a respira | atory sensitizer. | | |
| Skin sensitization | This product | t is not expected to cause sl | kin 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 classifia | ble as to carcinogenicity to l | humans. | |
| IARC Monographs. Overall | Evaluation of | Carcinogenicity | | |
| Not listed. OSHA Specifically Regulate Not listed. US. National Toxicology Pre 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 classifie | Not classified. | | |
| Aspiration hazard | Prolonged inhalation may be harmful. | | | |
| Chronic effects | Prolonged in | Prolonged inhalation may be harmful. | | |
| 12. Ecological information | n | | | |
| 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 | | Species | Test Results | |
| DEFOAMER II | | | | |
| Aquatic | | | | |
| Fish | LC50 | Fish | 2565.6912 mg/l, 96 hours estimated | |
| Persistence and degradability | No data is a | vailable on the degradability | of this product. | |

| Bioaccumulative potential | |
|---------------------------|---|
| 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. Do not contaminate ponds, waterways or ditches with chemical or used container. 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.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

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

15. Regulatory information

| US federal regulations | Communication | not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Standard, 29 CFR 1910.1200. are on the U.S. EPA TSCA Inventory List or Exempt. |
|---|-----------------------|---|
| Toxic Substances Contro | ol Act (TSCA) | One or more components of the mixture are not on the TSCA 8(b) inventory or are designated "inactive". |
| TSCA Section 12(b) I Not regulated. | Export Notification (| 40 CFR 707, Subpt. D) |
| CERCLA Hazardous Sub Not listed. SARA 304 Emergency rel | · | 302.4) |
| Not regulated. OSHA Specifically Regula Not listed. | ated Substances (29 | CFR 1910.1001-1053) |
| Superfund Amendments and SARA 302 Extremely haz Not listed. | | t of 1986 (SARA) |
| SARA 311/312 Hazardous chemical | a No | |
| SARA 313 (TRI reporting) Not regulated. | | |
| Other federal regulations | | |
| Clean Air Act (CAA) Secti Not regulated. | on 112 Hazardous A | Air Pollutants (HAPs) List |

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act Not regulated. (SDWA)

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

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | 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 | 03-05-2015 |
|----------------------|---|
| Revision date | 03-06-2020 |
| Version # | 03 |
| HMIS® ratings | Health: 0 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 | Product and Company Identification: Product and Company Identification Composition / Information on Ingredients: Ingredients Composition/information on ingredients: Component information Physical & Chemical Properties: Multiple Properties Physical and chemical properties: Appearance Physical and chemical properties: Color Physical and chemical properties: Odor Stability and reactivity: Conditions to avoid Toxicological Information: Toxicological Data Regulatory information: California Proposition 65 Regulatory information: Safe Drinking Water Act (SDWA) Regulatory information: Toxic Substances Control Act (TSCA) |



SAFETY DATA SHEET

1. Identification

| Product identifier | Suprox - GLASS & FLOOR | | |
|--|------------------------|--|--|
| Other means of identification | | | |
| SDS number | 548N-84A | | |
| Product code | HIL00839 | | |
| Recommended use | General 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 | 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. Get medical attention if you feel unwell. |
| Storage | Store away from incompatible materials. Keep container tightly closed. |
| 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. |

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|--|--------------------------|-------------|-----------|
| *Complex Surfactant Blend | | Proprietary | 5 - < 10 |
| Hydrogen Peroxide | | 7722-84-1 | 5 - < 10 |
| Fragrance | | 8008-57-9 | < 0.3 |
| Other components below reportable levels | | | 80 - < 90 |

Other components below reportable levels

*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. |
| Eine Kinheime | Neve containers from fire area if you can do as without risk |

Fire fighting Move containers from fire area if you can do so without risk. equipment/instructions Use standard firefighting procedures and consider the hazards of other involved materials. **Specific methods**

No unusual fire or explosion hazards noted.

General fire hazards

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. |
| 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 | 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 incompatibilitiesStore in tightly closed container. 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.

| Components | Туре | Value |
|--------------------------------------|--|---|
| Hydrogen Peroxide (CAS 7722-84-1) | PEL | 1.4 mg/m3 |
| | | 1 ppm |
| US. ACGIH Threshold Limi | t Values | |
| Components | Туре | Value |
| Hydrogen Peroxide (CAS 7722-84-1) | TWA | 1 ppm |
| US. NIOSH: Pocket Guide f | to Chemical Hazards | |
| Components | Туре | Value |
| Hydrogen Peroxide (CAS 7722-84-1) | TWA | 1.4 mg/m3 |
| | | 1 ppm |
| logical limit values | No biological exposure limits noted | for the ingredient(s). |
| propriate engineering strols | 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. Provide eyewash station. | |
| vidual protection measures | s, such as personal protective equip | ment |
| Eye/face protection | Avoid contact with eyes. Chemical s | safety goggles when working with concentrate. |
| Skin protection | | |
| Hand protection | Use protective gloves when dealing are recommended. | with the concentrate. Nitrile, butyl rubber or neoprene glove |
| Other | Avoid contact with the skin. Wear ap clothing and gloves. | ppropriate chemical resistant clothing. Wear suitable protect |
| Respiratory protection | No personal respiratory protective equipment normally required. If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. | |
| Thermal hazards | None known. | |
| | 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. | |

| Appearance | Clear, yellow liquid (yellow color fades with age) |
|----------------|--|
| Physical state | Liquid. |
| Form | Liquid. |
| Color | Colorless to light yellow |
| Odor | Citrus odor |
| Odor threshold | Not Available |
| pН | 3.50 - 4.60 |
| | 6.50 - 7.50 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 |
| Flammability (solid, gas) | Not applicable. |
| Upper/lower flammability or expl | osive limits |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | 17.6 mm Hg |
| Vapor density | 0.62 Air=1 |
| Relative density | 1.027 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 | 8.55 lb/gal |
| Explosive properties | Not explosive. |
| Oxidizing properties | Not oxidizing. |
| Percent volatile | 92 - 94 % |
| VOC | 0 % |
| | |

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 | 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 e | 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 Suprox - GLASS & FLOOR | Expected to be a low ingestion hazard. 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 known. | |
| Skin corrosion/irritation | Prolonged skin contact may cause temporary irritation. | |
| Serious eye damage/eye irritation | Causes serious eye damage. | |

| Respiratory or skin sensitization | 1 | | | | |
|---|---|--|--|--|--|
| 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 I | Evaluation of Carcinogenicity | | | | |
| Hydrogen Peroxide (CAS 7722-84-1) 3 Not classifiable as to carcinogenicity to humans. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052) | | | | | |
| Not regulated. US. National Toxicology Pro Not listed. | ogram (NTP) Report on Carcinogens | | | | |
| 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 | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. 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 Not established. Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

| US federal regulations | This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. |
|------------------------|---|
| TSCA Section 12(b) Exp | ort 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

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

| Chemical name | CAS number | Reportable quantity (pounds) | Threshold planning quantity (pounds) | Threshold planning quantity, lower value (pounds) | Threshold planning quantity, upper value (pounds) |
|--|------------------|------------------------------------|---|--|--|
| Hydrogen Peroxide | 7722-84-1 | 1000 | 1000 | | |
| SARA 311/312 Hazardous chemical | Yes | | | | |
| Classified hazard categories | Serious eye | e damage or eye | e irritation | | |
| SARA 313 (TRI reporting) Not regulated. | i | | | | |
| ther federal regulations | | | | | |
| Clean Air Act (CAA) Secti | ion 112 Hazard | ous Air Pollutai | nts (HAPs) List | | |
| Not regulated. Clean Air Act (CAA) Sect | ion 112(r) Accid | lental Release | Prevention (40 CFR 6 | 8.130) | |
| Not regulated. | | | · | · | |
| Safe Drinking Water Act (SDWA) | Not regulate | ed. | | | |
| S state regulations | | | | | |
| California Proposition 65 | | | | | |
| California Safe Drinkin is not known to contair more information go to | any chemicals | currently listed a | Act of 2016 (Proposition as carcinogens or repro | | |
| ternational Inventories | | | | | |
| Country(s) or region | Inventory r | name | | | On inventory (yes/no)* |
| Canada | Domestic S | ubstances List (| DSL) | | Yes |
| Canada | Non-Domes | stic Substances | List (NDSL) | | No |
| United States & Puerto Ric | o Toxic Subs | tances Control A | Act (TSCA) Inventory | | Yes |
| *A "Yes" indicates that all com A "No" indicates that one or m | | | | | |

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 |
|---------------------|---|
| Revision date | 05-22-2019 |
| Version # | 02 |
| 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 |

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