# SAFETY DATA SHEET

**CALBLEND® S**

## Section 1. Identification

**Product identifier** : **CALBLEND® S**
**Product code** : 313S02
**Product type** : Liquid.

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

| Identified uses |
| --- |
| Surfactant |

**Uses advised against**
Not applicable.

**Manufacturer**

**Company name** : **Pilot Chemical Company**
**Address** : 9075 Centre Pointe Dr. Suite 400
West Chester, OH
45069, USA
**Telephone number** : 513-326-0600, 1-800-707-4568
**Email** : sdsinfo@pilotchemical.com
**Emergency telephone number INTL** : 1-800-424-9300, 1-703-527-3887
**Chemtrec US** : +1 703-741-5970

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
**Classification of the substance or mixture** : SKIN IRRITATION - Category 2
SERIOUS EYE DAMAGE - Category 1
AQUATIC HAZARD (ACUTE) - Category 2
AQUATIC HAZARD (LONG-TERM) - Category 3

**GHS label elements**

**Hazard pictograms** :

**Signal word** : Danger
**Hazard statements** : Causes skin irritation.
Causes serious eye damage.
Toxic to aquatic life.
Harmful to aquatic life with long lasting effects.

**Precautionary statements**

**Prevention** : Wear protective gloves. Wear eye or face protection. Avoid release to the environment. Wash thoroughly after handling.
**Response** : IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice or attention. Take off contaminated clothing and wash it before reuse. 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.
**Storage** : Not applicable.

## Section 2. Hazards identification

**Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Supplemental label elements** : Product must be stored at ambient temperature (~65 – 78°F or ~18 – 26°C) 1,4-dioxane levels in the product may change as a result of time, temperature, pH and other product ingredients. Storage of product above ambient temperature can generate, affect or increase 1,4-dioxane levels in the product. Pilot strongly encourages customers to test their final formulations for 1,4-dioxane levels.

**Hazards not otherwise classified** : None known.

**Hazards identified when used** : No known significant effects or critical hazards.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

| Ingredient name | Synonyms | % | Identifiers |
|---|---|---|---|
| Sulfuric acid, mono-C10-16-alkyl esters, sodium salts | | ≥10 - ≤25 | CAS: 68585-47-7; (Alt CAS 151-21-3) |
| Alcohols, C10-16, ethoxylated, sulfates, sodium salts | | ≤10 | CAS: 68585-34-2 |

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

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.**

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

## Section 4. First aid measures

**Description of necessary first aid measures**

**Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

**Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Skin contact** : Get medical attention immediately. Call a poison center or physician. Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Most important symptoms/effects, acute and delayed**

**Potential acute health effects**

# Section 4. First aid measures

**Eye contact** : Causes serious eye damage.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : Causes skin irritation.

**Ingestion** : No known significant effects or critical hazards.

**Over-exposure signs/symptoms**

**Eye contact** : Adverse symptoms may include the following:
pain
watering
redness

**Inhalation** : No specific data.

**Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

**Ingestion** : Adverse symptoms may include the following:
stomach pains

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

**Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments** : No specific treatment.

**For emergency responders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

**See toxicological information (Section 11)**

# Section 5. Fire-fighting measures

**Extinguishing media**

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic to aquatic life. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
sulfur oxides
metal oxide/oxides

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

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

# Section 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

**Methods and materials for containment and cleaning up**

**Small spill** : Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

# Section 7. Handling and storage

**Precautions for safe handling**

**Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

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

**Conditions for safe storage, including any incompatibilities**

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

Product must be stored at ambient temperature (~65 – 78°F or ~18 – 26°C) 1,4-dioxane levels in the product may change as a result of time, temperature, pH and other product ingredients. Storage of product above ambient temperature can generate, affect or increase 1,4-dioxane levels in the product. Pilot strongly encourages customers to test their final formulations for 1,4-dioxane levels.

# Section 8. Exposure controls/personal protection

## Control parameters

### Occupational exposure limits

| Ingredient name | Exposure limits |
|---|---|
| Sulfuric acid, mono-C10-16-alkyl esters, sodium salts | None. |
| Alcohols, C10-16, ethoxylated, sulfates, sodium salts | None. |

### Biological exposure indices

No exposure indices known.

**Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

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

### Individual protection measures

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

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

### Skin protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

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

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

**Respiratory protection** : In case of insufficient ventilation, wear suitable respiratory equipment.

# Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### Appearance

**Physical state** : Liquid. [Clear.]

**Color** : Colorless to light yellow.

**Odor** : Soap. [Slight]

**Odor threshold** : Not available.

**pH** : 7 to 8 [Conc. (% w/w): 10%]

**Melting point/freezing point** : Not available.

# Section 9. Physical and chemical properties

**Boiling point or initial boiling point and boiling range** : 100°C (212°F)

**Flash point** : None.

**Evaporation rate** : Not available.

**Flammability** : Not available.

**Lower and upper explosion limit/flammability limit** : Not available.

**Vapor pressure** :

| | Vapor Pressure at 20˚C | | | Vapor pressure at 50˚C | | |
|---|---|---|---|---|---|---|
| **Ingredient name** | **mm Hg** | **kPa** | **Method** | **mm Hg** | **kPa** | **Method** |
| water | 17.5 | 2.3 | | | | |

**Relative vapor density** : Not available.

**Relative density** : 1.05

**Solubility in water** : Not available.

**Miscible with water** : Yes.

**Partition coefficient: n-octanol/water** : Not applicable.

**Auto-ignition temperature** : Not available.

**Decomposition temperature** : Not available.

**Viscosity** : Dynamic (room temperature): <1000 mPa·s (<1000 cP)
Kinematic (room temperature): Not available.
Kinematic (40°C (104°F)): Not available.

**Particle characteristics**

**Median particle size** : Not applicable.

# Section 10. Stability and reactivity

**Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** : The product is stable.

**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid** : No specific data.

**Incompatible materials** : No specific data.

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

# Section 11. Toxicological information

**Information on toxicological effects**

**Acute toxicity**

| Product/ingredient name | Result |
|---|---|
| Sulfuric acid, mono-C10-16-alkyl esters, sodium salts | **Rat - Dermal - LD50**<br>>2000 mg/kg<br>**Rat - Oral - LD50**<br>977 to 1427 mg/kg |
| Alcohols, C10-16, ethoxylated, sulfates, sodium salts | **Rat - Dermal - LD50**<br>>2000 mg/kg<br>**Rat - Oral - LD50** |

# Section 11. Toxicological information

2870 mg/kg

**Skin corrosion/irritation**

Not available.

**Serious eye damage/eye irritation**

Not available.

**Respiratory corrosion/irritation**

Not available.

**Respiratory or skin sensitization**

Not available.

**Germ cell mutagenicity**

Not available.

**Carcinogenicity**

Not available.

**Reproductive toxicity**

Not available.

**Specific target organ toxicity (single exposure)**

| Product/ingredient name | Result |
|---|---|
| Sulfuric acid, mono-C10-16-alkyl esters, sodium salts | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 |

**Specific target organ toxicity (repeated exposure)**

Not available.

**Aspiration hazard**

Not available.

**Information on the likely routes of exposure**

Not available.

**Potential acute health effects**

**Eye contact** : Causes serious eye damage.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : Causes skin irritation.

**Ingestion** : No known significant effects or critical hazards.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Eye contact** : Adverse symptoms may include the following:
pain
watering
redness

**Inhalation** : No specific data.

# Section 11. Toxicological information

**Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

**Ingestion** : Adverse symptoms may include the following:
stomach pains

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

**Short term exposure**

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

**Long term exposure**

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

**Potential chronic health effects**

Not available.

**General** : No known significant effects or critical hazards.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Reproductive toxicity** : No known significant effects or critical hazards.

**Numerical measures of toxicity**

**Acute toxicity estimates**

| Product/ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|---|---|---|---|---|---|
| CALBLEND® S | 4078.7 | 39532.5 | N/A | N/A | N/A |
| Sulfuric acid, mono-C10-16-alkyl esters, sodium salts | 977 | N/A | N/A | N/A | N/A |
| Alcohols, C10-16, ethoxylated, sulfates, sodium salts | 2870 | 2500 | N/A | N/A | N/A |

# Section 12. Ecological information

**Toxicity**

| Product/ingredient name | Result |
|---|---|
| Sulfuric acid, mono-C10-16-alkyl esters, sodium salts | **Acute - LC50**<br>Fish - *Oncorhynchus mykiss*<br>3.6 mg/l [96 hours]<br>**Acute - EC50**<br>Daphnia<br>4.7 mg/l [48 hours]<br>**Acute - EC50**<br>Algae - *Desmodesmus subspicatus*<br>20 mg/l [72 hours]<br>**Chronic - NOEC**<br>Fish - *Pimephales promelas*<br>>1.357 mg/l [42 days]<br>**Chronic - NOEC**<br>Crustaceans - *Ceriodaphnia dubia*<br>0.508 mg/l [7 days]<br>**Chronic - EC10** |

## Section 12. Ecological information

| | |
|---|---|
| | Algae - *Desmodesmus subspicatus*<br>5.4 mg/l [72 hours]<br>**Chronic - NOEC**<br>Daphnia<br>0.88 to 1.2 mg/l [7 days]<br>**Acute - EC50 - Fresh water**<br>Crustaceans - Water flea - *Ceriodaphnia dubia* - Neonate<br>Age: <24 hours<br>1.37 mg/l [48 hours]<br>Effect: Intoxication |
| Alcohols, C10-16, ethoxylated, sulfates, sodium salts | **Acute - EC50**<br>Algae<br>27 mg/l [72 hours]<br>**Acute - LC50 - Fresh water**<br>Fish - Zebra danio - *Danio rerio*<br>7.1 mg/l [96 hours]<br>**Acute - EC50 - Fresh water**<br>Crustaceans - Water flea - *Ceriodaphnia dubia* - Neonate<br>Age: <24 hours<br>3.43 mg/l [48 hours]<br>Effect: Intoxication<br>**Chronic - NOEC**<br>Daphnia<br>0.27 mg/l [21 days]<br>**Chronic - NOEC**<br>Fish<br>1 mg/l [45 days] |

**Persistence and degradability**

Expected to be readily biodegradable

**Bioaccumulative potential**

Not available.

**Mobility in soil**

**Soil/Water partition coefficient** : Not available.

**Other adverse effects**

No known significant effects or critical hazards.

## Section 13. Disposal considerations

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

# Section 14. Transport information

| | DOT Classification | IMDG | IATA |
|---|---|---|---|
| **UN number** | Not regulated. | Not regulated. | Not regulated. |
| **UN proper shipping name** | - | - | - |
| **Transport hazard class(es)** | - | - | - |
| **Packing group** | - | - | - |
| **Environmental hazards** | No. | No. | No. |

**Additional information**

**Reportable quantity substance (Products)** : Not applicable.

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

**Transport in bulk according to IMO instruments** : Not available.

# Section 15. Regulatory information

**U.S. Federal regulations**

**TSCA 8(a) PAIR**: Sodium bisulfite, solution

**TSCA 8(a) CDR Exempt/Partial exemption**: Not determined

**Clean Water Act (CWA) 311**: sodium hydroxide; Sodium bisulfite, solution

**TSCA 12(b) - Chemical export notification**

Not applicable.

**EPA**

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

**SARA 302/304**

**Composition/information on ingredients**

No products were found.

**SARA 304 RQ** : Not applicable.

**SARA 311/312**

**Classification** : SKIN IRRITATION - Category 2
SERIOUS EYE DAMAGE - Category 1

# Section 15. Regulatory information

**Composition/information on ingredients**

| Name | % | Classification |
|---|---|---|
| Sulfuric acid, mono-C10-16-alkyl esters, sodium salts | ≥10 - ≤25 | ACUTE TOXICITY (oral) - Category 4<br>SKIN IRRITATION - Category 2<br>SERIOUS EYE DAMAGE - Category 1<br>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 |
| Alcohols, C10-16, ethoxylated, sulfates, sodium salts | ≤10 | SKIN IRRITATION - Category 2<br>SERIOUS EYE DAMAGE - Category 1 |

**SARA 313**

| | Product name | CAS number | % |
|---|---|---|---|
| **Form R - Reporting requirements** | trisodium nitrilotriacetate | 5064-31-3 | ≤0.1 |
| **Supplier notification** | trisodium nitrilotriacetate | 5064-31-3 | ≤0.1 |

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

**State regulations**

**Massachusetts** : None of the components are listed.

**New York** : None of the components are listed.

**New Jersey** : None of the components are listed.

**Pennsylvania** : None of the components are listed.

Pilot Chemical does not provide Proposition 65 information on our safety data sheets. Proposition 65 statements are available upon request by contacting reginfo@pilotchemical.com

**International regulations**

**Chemical Weapon Convention List Schedules I, II & III Chemicals**

Not listed.

**Montreal Protocol**

Not listed.

**Stockholm Convention on Persistent Organic Pollutants**

Not listed.

**Rotterdam Convention on Prior Informed Consent (PIC)**

Not listed.

**UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

**Inventory list**

**Australia** : All components are listed or exempted.

**Canada DSL** : All components are listed or exempted.

**China** : All components are listed or exempted.

**Eurasian Economic Union** : **Russian Federation inventory**: All components are listed or exempted.

**Japan** : **Japan inventory (CSCL)**: All components are listed or exempted.
**Japan inventory (ISHL)**: Not listed.

**New Zealand** : All components are listed or exempted.

**Philippines** : All components are listed or exempted.

**Republic of Korea** : All components are listed or exempted.

**Taiwan** : All components are listed or exempted.

**Thailand** : All components are listed or exempted.

**Turkey** : Not listed.

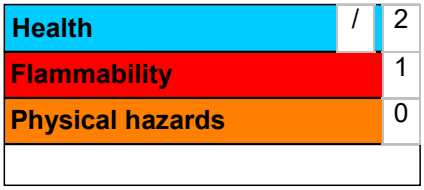
**United States** : All components are active or exempted.

## Section 15. Regulatory information

**Viet Nam** : All components are listed or exempted.

## Section 16. Other information

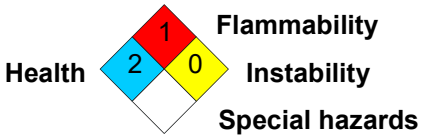
**Hazardous Material Information System (U.S.A.)**




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

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

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




**Procedure used to derive the classification**

| Classification | Justification |
|---|---|
| SKIN IRRITATION - Category 2 | Calculation method |
| SERIOUS EYE DAMAGE - Category 1 | Calculation method |
| AQUATIC HAZARD (ACUTE) - Category 2 | Calculation method |
| AQUATIC HAZARD (LONG-TERM) - Category 3 | Calculation method |

**History**

**Date of revision** : 5/1/2025

**Date of issue** : No previous validation

**Version** : 5

**Prepared by** : Product Safety & Regulatory Specialist

**Key to abbreviations** : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group
UN = United Nations

**References** : OSHA Hazard Communication Standard

**Indicates information that has changed from previously issued version.**

**Notice to reader**

**To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.**
**Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.**

## Section 16. Other information

**The Pilot Chemical Corp. product referred to in this document is sold pursuant to Pilot Chemical Corp.'s Standard Terms and Conditions ("Terms"); however, the information contained in this document shall not be considered part of said Terms. Although the information is believed to be accurate and reliable as of the date compiled, PILOT CHEMICAL CORP. MAKES NO GUARANTEE, REPRESENTATION, OR WARRANTY, EXPRESS OR IMPLIED, REGARDING THE ACCURACY, RELIABILITY, SUFFICIENCY, SUITABILITY, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF ANY INFORMATION IN THIS DOCUMENT OR THE PRODUCT TO WHICH THIS DOCUMENT RELATES. Users should make their own investigations, tests and determinations as to the information's completeness and the product's suitability for their particular purposes. It is the user's responsibility to ensure that all activities comply with applicable laws. Pilot Chemical Corp. makes no warranty or representation that the information or product may be used without infringing the intellectual property rights of Pilot Chemical Corp or others. This document is provided gratuitously for guidance only and Pilot Chemical Corp. assumes no liability for its use.**