SAFETY DATA SHEET

ARISTONATE® S-4600

Section 1. Identification

Product identifier : **ARISTONATE® S-4600**
Product code : 586S30
Product type : Liquid.

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

Identified uses
Emulsifiers, Corrosion inhibitor.

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 2

GHS label elements

Hazard pictograms :

Signal word : Danger
Hazard statements : Causes skin irritation.
Causes serious eye damage.
Toxic 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 : Collect spillage. 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.

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
Distillates (petroleum), hydrotreated heavy naphthenic		≥25 - ≤50	CAS: 64742-52-5
Benzenesulfonic acid, dodecyl-, branched, sodium salt		≥10 - ≤20	CAS: 69227-09-4
Benzenesulfonic acid, mono-C10-16-alkyl derivs., sodium salts		≤10	CAS: 68081-81-2

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

Eye contact : Causes serious eye damage.

Section 4. First aid measures

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 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 : No specific data.

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.

Section 6. Accidental release measures

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. Collect spillage.

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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Distillates (petroleum), hydrotreated heavy naphthenic	**NIOSH REL (United States, 10/2020) [OIL MIST MINERAL]** TWA 10 hours: 5 mg/m³. Form: Mist. STEL 15 minutes: 10 mg/m³. Form: Mist. **OSHA PEL (United States, 5/2018) [Oil mist, mineral]** TWA 8 hours: 5 mg/m³. **ACGIH TLV (United States, 1/2024) [Mineral Oil, pure, highly and severely refined]** A4. TWA 8 hours: 5 mg/m³. Form: Inhalable fraction.

Section 8. Exposure controls/personal protection

Benzenesulfonic acid, dodecyl-, branched, sodium salt	None.
Benzenesulfonic acid, mono-C10-16-alkyl derivs., 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. [Oily.]

Color : Clear. Amber.

Odor : Oily.

Odor threshold : Not available.

pH : 10 [Conc. (% w/w): 10%]

Melting point/freezing point : <-20°C (<-4°F)

Boiling point or initial boiling point and boiling range : Not available.

Flash point : Closed cup: >182°C (>359.6°F)

Evaporation rate : Not available.

Flammability : Not available.

Section 9. Physical and chemical properties

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

Vapor pressure :

Ingredient name	Vapor Pressure at 20˚C			Vapor pressure at 50˚C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
Distillates (petroleum), hydrotreated heavy naphthenic	<0.07501	<0.01	ASTM D 5191			

Relative vapor density : Not available.

Relative density : 1.008

Solubility in water : Not available.

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

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Dynamic (room temperature): 3830 mPa·s (3830 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
Distillates (petroleum), hydrotreated heavy naphthenic	**Rat - Oral - LD50** >5000 mg/kg **Rabbit - Dermal - LD50** >2000 mg/kg **Rat - Inhalation - LC50 Dusts and mists** >5.53 mg/l [4 hours]
Benzenesulfonic acid, dodecyl-, branched, sodium salt	**Rat - Dermal - LD50** 1000 to 1600 mg/kg **Rat - Oral - LD50** 520 mg/kg
Benzenesulfonic acid, mono-C10-16-alkyl derivs., sodium salts	**Rat - Dermal - LD50** >2000 mg/kg **Rat - Oral - LD50** 1080 mg/kg

Section 11. Toxicological information

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)

Not available.

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.
Skin contact	:	Adverse symptoms may include the following: pain or irritation redness blistering may occur
Ingestion	:	Adverse symptoms may include the following: stomach pains

Section 11. Toxicological information

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)
ARISTONATE® S-4600	3805.9	4100.3	N/A	N/A	N/A
Distillates (petroleum), hydrotreated heavy naphthenic	N/A	2500	N/A	N/A	N/A
Benzenesulfonic acid, dodecyl-, branched, sodium salt	520	1100	N/A	N/A	N/A
Benzenesulfonic acid, mono-C10-16-alkyl derivs., sodium salts	1080	2500	N/A	N/A	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result
Distillates (petroleum), hydrotreated heavy naphthenic	**Acute - EC50** Daphnia >10000 mg/l [48 hours] **Acute - LC50 - Fresh water** Fish - Fathead minnow - *Pimephales promelas* >100 mg/l [96 hours] **Chronic - NOEC** Daphnia 10 mg/l [21 days]
Benzenesulfonic acid, dodecyl-, branched, sodium salt	**Acute - LC50 - Fresh water** Fish - Bluegill - *Lepomis macrochirus* 1.67 mg/l [96 hours] **Chronic - NOEC** Daphnia 1.41 mg/l [21 days] **Chronic - NOEC** Fish 0.23 mg/l [72 days] **Acute - EC50**

Section 12. Ecological information

	Daphnia - *Daphnia Magna* 0.83 mg/l [48 hours] **Acute - EC50** Algae - *Selenastrum capricornutum* 29 mg/l [96 hours] **Chronic - NOEC** Algae - *Selenastrum capricornutum* 0.58 mg/l [96 hours]
Benzenesulfonic acid, mono-C10-16-alkyl derivs., sodium salts	**Acute - EC50** Algae 7.39 mg/l [96 hours] **Acute - EC50** Daphnia - Daphnia magna 2.9 mg/l [48 hours] **Acute - LC50 - Fresh water** Fish - Bluegill - *Lepomis macrochirus* 1.67 mg/l [96 hours] **Chronic - EC10** Algae 0.268 mg/l [15 days] **Chronic - EC10** Daphnia 0.268 mg/l [21 days] **Chronic - NOEC** Fish - *Oncorhynchus mykiss* 0.23 mg/l [72 days]

Persistence and degradability

Not expected to be readily biodegradable

Bioaccumulative potential

Not available.

Mobility in soil

Soil/Water partition coefficient : Not available.

Other adverse effects

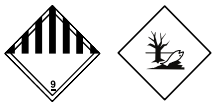
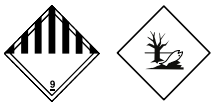
No known significant effects or critical hazards.

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

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	UN3082	UN3082	UN3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (Benzenesulfonic Acid, Dodecyl-,Branched, Sodium Salt)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Benzenesulfonic Acid, Dodecyl-,Branched, Sodium Salt). Marine pollutant	Environmentally hazardous substance, liquid, n.o.s. (Benzenesulfonic Acid, Dodecyl-,Branched, Sodium Salt)
Transport hazard class(es)	9	9 	9 
Packing group	III	III	III
Environmental hazards	No.	Yes.	Yes.

Additional information

Reportable quantity substance (Products) : Not applicable.

DOT Classification : **Limited quantity** Yes.
Packaging instruction Exceptions: 155. Non-bulk: 203. Bulk: 241.
Special provisions 8, 146, 173, 335, 441, IB3, T4, TP1, TP29
Remarks Non-bulk: Not regulated.

IMDG : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
Emergency schedules F-A, S-F
Special provisions 274, 335, 969

IATA : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.
Quantity limitation Passenger and Cargo Aircraft: 450 L. Packaging instructions: 964. Cargo Aircraft Only: 450 L. Packaging instructions: 964. Limited Quantities - Passenger Aircraft: 30 kg. Packaging instructions: Y964.
Special provisions A97, A158, A197, A215

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) CDR Exempt/Partial exemption: Not determined

TSCA 12(b) - Chemical export notification

	One time notification		Annual notification		
Name	**4**	**5**	**5(f)**	**6**	**7**
Alkylarylsulfonic acid, sodium salts	Not listed	Listed	Not listed	Not listed	Not listed

EPA

Section 15. Regulatory information

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

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

Composition/information on ingredients

Name	%	Classification
Benzenesulfonic acid, dodecyl-, branched, sodium salt	≥10 - ≤20	ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1
Benzenesulfonic acid, mono-C10-16-alkyl derivs., sodium salts	≤10	ACUTE TOXICITY (oral) - Category 4 SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1

State regulations

Massachusetts : The following components are listed: OIL MIST, MINERAL

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 : Not listed.

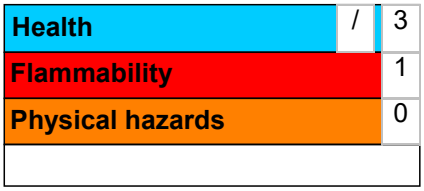
China : All components are listed or exempted.

Section 15. Regulatory information

Eurasian Economic Union	:	**Russian Federation inventory**: Not listed.
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	:	Not listed.
Turkey	:	Not listed.
United States	:	All components are active or exempted.
Viet Nam	:	Not listed.

Section 16. Other information

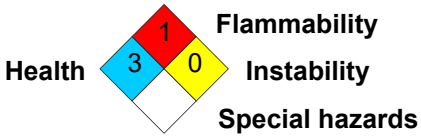
Hazardous Material Information System (U.S.A.)



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 2	Expert judgment

History

Date of revision	:	6/10/2025
Date of issue	:	1/29/2025
Version	:	9
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

Section 16. Other information

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.

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.