

Previous Issue Date 03/25/2021

Revision Date 04/13/2021

Version 1.2

SAFETY DATA SHEET

WT-1000

Section 1. Identification

GHS product identifier : WT-1000

Chemical name : Mixture of polycarboxylic acids and a phosphonic acid.

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

Identified uses	
	Antiscalant
Uses advised against	
Reason	: None identified.

Manufacturer Address

Anderson Chemical Company, 325 South Davis Avenue, Litchfield, MN
55355 (320-693-2477)

Emergency telephone number

Chemtrec 1-800-424-9300

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** : CORROSIVE TO METALS - Category 1
SERIOUS EYE DAMAGE - Category 1

GHS label elements

Hazard pictograms :



- Signal word** : Danger
- Hazard statements** : May be corrosive to metals.
Causes serious eye damage.

Precautionary statements

- General** : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
- Prevention** : Wear eye or face protection. Keep only in original container.
- Response** : Absorb spillage to prevent material damage. 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 physician.
- Storage** : Store in a corrosion resistant container with a resistant inner liner.
- Disposal** : Not applicable.
- Hazards not otherwise classified** : None known.

Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Chemical name** : Mixture of polycarboxylic acids and a phosphonic acid.
- Other means of identification** : WT-1000

Ingredient name	%	CAS number
Polycarboxylic acid	Proprietary	-
Polycarboxylic acid.	Proprietary	-
Phosphonic acid, P,P'-(1-hydroxyethylidene)bis-	1 - 5	2809-21-4

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

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

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

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : 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. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. 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.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

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Eye contact	:	Adverse symptoms may include the following: pain, watering, redness
Inhalation	:	No specific data. Adverse symptoms may include the following:, respiratory tract irritation
Skin contact	:	Adverse symptoms may include the following: pain or irritation, redness, blistering may occur
Ingestion	:	Adverse symptoms may include the following: stomach pains, nausea or vomiting

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

Notes to physician	:	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	:	No specific treatment.
Protection of first-aiders	:	No action shall be taken involving any personal risk or without suitable training. 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 dry chemical, CO ₂ , water spray (fog) or foam. Dry sand or other suitable absorbent.
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. Use water spray to keep fire-exposed containers cool.
Hazardous thermal decomposition products	:	In a fire, decomposition may produce toxic gases/fumes. Decomposition products may include the following materials:, carbon dioxide, carbon monoxide, phosphorus oxides, nitrogen oxides, sulfur 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.
Remark	:	Not applicable.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

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- 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).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Absorb spillage to prevent material damage. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Absorb spillage to prevent material damage. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). The spilled material may be neutralized with sodium carbonate, sodium bicarbonate or sodium hydroxide. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. 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. Keep away from alkalis. Empty containers retain product residue and can be hazardous. Do not reuse container. Absorb spillage to prevent material damage.
- 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 in a corrosion resistant container with a resistant inner liner. Store locked up. Separate from alkalis. 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. Keep away from food, drink and animal feeding stuffs. Keep away from: alkalis acids reducing agents oxidizing agents aluminium Cyanides

Storage temperature

- : Do not store above the following temperature: 50 °C

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

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

Section 9. Physical and chemical properties
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Appearance

- Physical state** : liquid
- Color** : Pale color. Light Yellow.
- Odor** : slight, acidic
- Odor threshold** : Not available.
- pH** : < 2
- Melting point** : < -5 °C (< 23 °F)
- Boiling point** : 100 - 102 °C (212 - 216 °F)
- Flash point** : Not available.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : **Lower:** Not available.
Upper: Not available.
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Relative density** : 1.14 - 1.17
- Solubility** : Miscible in water.
- Solubility in water** : Water-soluble liquid
- Partition coefficient: n-octanol/water** : < 0
- Auto-ignition temperature** : Not available.

Decomposition temperature	:	Not available.
Viscosity	:	Dynamic: Not available. Kinematic: 9 - 15 mm ² /s @ 25 °C (77 °F)
Flow time (ISO 2431)	:	Not available.

Section 10. Stability and reactivity

Reactivity	:	Keep away from the following materials to prevent strong exothermic reactions: alkalis
Chemical stability	:	Stable under recommended storage and handling conditions (see Section 7).
Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	:	Keep away from heat and direct sunlight.
Incompatible materials	:	Reactive or incompatible with the following materials: strong alkalis, oxidizing agents, reducing agents, metals
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced., In a fire, decomposition may produce toxic gases/fumes., Decomposition products may include the following materials:, carbon monoxide, carbon dioxide, oxides of nitrogen, phosphorus oxides, sulfur oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Phosphonic acid, P,P'-(1-hydroxyethylidene)bis-				
	LD50 Oral	Rat	2,400 mg/kg	-
	LD50 Dermal	Rabbit	> 6,000 mg/kg	-
WT-1000				
	LD50 Oral	Rat	2,400 mg/kg	-

Conclusion/Summary : Conclusive but not sufficient for classification.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
WT-1000	Skin - Irritation score 404 Acute Dermal	Mammal	-		-

	Irritation/Corrosion				
Remarks:	Non-irritant to skin.				
Phosphonic acid, P,P'-(1-hydroxyethylidene)bis-	Skin - Moderate irritant	Rabbit	-	24 hrs	168 hrs
	Eyes - Cornea opacity	Rabbit	90	24 hrs	168 hrs

Conclusion/Summary

- Skin** : Non-irritating to the skin.
Eyes : Causes serious eye damage.
Respiratory : No known significant effects or critical hazards.

Sensitization**Conclusion/Summary**

- Skin** : Not sensitizing
Respiratory : No known significant effects or critical hazards.

Mutagenicity

Product/ingredient name	Test	Experiment	Result
Phosphonic acid, P,P'-(1-hydroxyethylidene)bis-	471 Bacterial Reverse Mutation Test	Subject: Bacteria Experiment: In vitro	Negative

- Conclusion/Summary** : No known significant effects or critical hazards.

Carcinogenicity

Product/ingredient name	Result	Species	Dose	Exposure
Phosphonic acid, P,P'-(1-hydroxyethylidene)bis-	Negative - Oral - NOAEL	Rat	384 mg/kg Repeated dose	104 weeks Repeated dose; 7 days per week Repeated dose

- Conclusion/Summary** : No known significant effects or critical hazards.

Reproductive toxicity

- Conclusion/Summary** : No known significant effects or critical hazards.

Teratogenicity

- Conclusion/Summary** : No known significant effects or critical hazards.

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

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following: pain, watering, redness
Inhalation : No specific data. Adverse symptoms may include the following: respiratory tract irritation
Skin contact : Adverse symptoms may include the following: pain or irritation, redness, blistering may occur
Ingestion : Adverse symptoms may include the following: stomach pains, nausea or vomiting

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

Product/ingredient name	Result	Species	Dose	Exposure
Phosphonic acid, P,P'-(1-hydroxyethylidene)bis-	NOAEL Oral	Rat	30 mg/kg Repeated dose	28 days Repeated dose; 7 days per week Repeated dose
	NOAEL Oral	Dog - Male	1,746 mg/kg Repeated dose 409 Repeated Dose 90-Day Oral Toxicity Study in Non-Rodents	90 days Repeated dose; 7 days per week Repeated dose
	NOAEL Oral	Rat - Female	1,724 mg/kg Repeated dose 408 Repeated Dose 90-Day	90 days Repeated dose; 7 days per week Repeated dose

			Oral Toxicity Study in Rodents	
	NOAEL Oral	Dog - Female	1,620 mg/kg 409 Repeated Dose 90-Day Oral Toxicity Study in Non-Rodents	90 days Repeated dose; 7 days per week Repeated dose
	NOAEL Oral	Rat - Male	1,583 mg/kg Repeated dose 408 Repeated Dose 90-Day Oral Toxicity Study in Rodents	90 days Repeated dose; 7 days per week Repeated dose

Conclusion/Summary : No known significant effects or critical hazards.

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

Numerical measures of toxicity

Acute toxicity estimates

N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
WT-1000			
	Acute LC50 > 1,000 mg/l	Fish	96 h
	Acute LC50 > 1,000 mg/l Marine water	Flatfish, flounder	96 h
	Acute LC50 695 mg/l Fresh water	Fathead minnow	96 h
	Acute EC50 > 1,000 mg/l	Water flea	48 h
	Acute LC50 707 mg/l	Daphnia	48 h
Remarks - Acute - Aquatic invertebrates.:	Conclusive but not sufficient for classification.		
	Acute IC50 > 100 mg/l	Marine algae	72 h
	Acute IC50 > 100 mg/l	Algae	72 h

Conclusion/Summary : Conclusive but not sufficient for classification.

Persistence and degradability

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Product/ingredient name	Test	Result	Dose	Inoculum
Phosphonic acid, P,P'-(1-hydroxyethylidene)bis-	301D Ready Biodegradability - Closed Bottle Test	22.88 % - 5 d	120 mg/l	Activated sludge
	302A Inherent Biodegradability: Modified SCAS Test	10.2 % - 1 d	-	Activated sludge
	302A Inherent Biodegradability: Modified SCAS Test	7.0 % - 3 d	-	Activated sludge
	302B Inherent Biodegradability: Zahn-Wellens/EMPA Test	23 - 33 % - 30 d	500 mg/l	Activated sludge

Conclusion/Summary : Not readily biodegradable.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Phosphonic acid, P,P'-(1-hydroxyethylidene)bis-			
	-	17 d (7 %)	Not readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Phosphonic acid, P,P'-(1-hydroxyethylidene)bis-	-3.5	71.00	low
WT-1000	< 0	-	low

Mobility in soil

Soil/water partition coefficient (KOC) : 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	TDG Classification	Mexico Classification	IMDG	IATA
UN number	UN3265	UN3265	UN3265	UN3265	UN3265
UN proper shipping name	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (polycarboxylic acids and a phosphonic acid)	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (polycarboxylic acids and a phosphonic acid)	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (polycarboxylic acids and a phosphonic acid)	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (polycarboxylic acids and a phosphonic acid)	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (polycarboxylic acids and a phosphonic acid)
Transport hazard class(es)	8 	8 	8 	8 	8 
Packing group	III	III	III	III	III
Environmental hazards	No.	No.	No.	No.	No.

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

Clean Air Act Section 112(b) : Not listed

Hazardous Air Pollutants (HAPs)

Clean Air Act Section 602 Class I : Not listed

Substances**Clean Air Act Section 602 Class II** : Not listed**Substances****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** : CORROSIVE TO METALS - Category 1
SERIOUS EYE DAMAGE - Category 1**Composition/information on ingredients**

Name	%	Classification
Polycarboxylic acid	Proprietary	CORROSIVE TO METALS - Category 1 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2
Polycarboxylic acid.	Proprietary	CORROSIVE TO METALS - Category 1 EYE IRRITATION - Category 2A
Phosphonic acid, P,P'-(1-hydroxyethylidene)bis-	1 - 5	CORROSIVE TO METALS - Category 1 ACUTE TOXICITY - Category 4 - oral SERIOUS EYE DAMAGE - Category 1

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.**California Prop. 65**

This product does not require a Safe Harbor warning under California Prop. 65.

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International regulations**Chemical Weapon Convention List Schedules I, II & III Chemicals****Chemical Weapons Convention List Schedule I Chemicals**

None of the components are listed.

Chemical Weapons Convention List Schedule II Chemicals

None of the components are listed.

Chemical Weapons Convention List Schedule III Chemicals

None of the components are listed.

Montreal Protocol

None of the components are listed.

Stockholm Convention on Persistent Organic Pollutants**Annex A - Elimination - Production**

None of the components are listed.

Annex A - Elimination - Use

None of the components are listed.

Annex B - Restriction - Production

None of the components are listed.

Annex B - Restriction - Use

None of the components are listed.

Annex C - Unintentional - Production

None of the components are listed.

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

None of the components are listed.

Rotterdam Convention on Prior Informed Consent (PIC) - Pesticide

None of the components are listed.

Rotterdam Convention on Prior Informed Consent (PIC) -Severely hazardous pesticide

None of the components are listed.

UNECE Aarhus Protocol on POPs and Heavy Metals**Heavy metals - Annex 1**

None of the components are listed.

POPs - Annex 1 - Production

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None of the components are listed.

POPs - Annex 1 - Use

None of the components are listed.

POPs - Annex 2

None of the components are listed.

POPs - Annex 3

None of the components are listed.

Inventory list

Australia	:	All components are listed or exempted.
Canada	:	All components are listed or exempted.
China	:	All components are listed or exempted.
Europe	:	All components are listed or exempted.
Japan	:	Japan inventory (ENCS): All components are listed or exempted. Japan inventory (ISHL): All components are listed or exempted.
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	:	All components are listed or exempted.
United States	:	All components are listed or exempted.
Viet Nam	:	All components are listed or exempted.

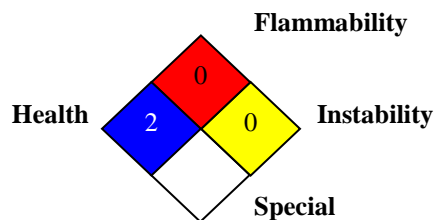
Section 16. Other information

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

Health	/	3
Flammability		0
Physical hazards		4

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
CORROSIVE TO METALS - Category 1	Expert judgment
SERIOUS EYE DAMAGE - Category 1	Expert judgment

History

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Prepared by	: POLLAD
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	: Not available.

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.