

## Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 02/01/2015 Supersedes: 04/05/2005

#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Trade name Product form : FREMONT 9173 Cooling Water Treatment

: Mixture

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

Use of the substance/mixture

### 1.3. Details of the supplier of the safety data sheet

FREMONT INDUSTRIES, INC. 4400 Valley Industrial Blvd. N. P.O. Box 67 Shakopee, MN 55379-0067

#### 1.4. Emergency telephone number

Emergency number

: (952) 445-4121 CHEMTREC: (800) 424-9300

: Cooling Water Treatment

## **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

## **Classification (GHS-US)**

Skin Irrit. 2H315Eye Irrit. 2AH319Skin Sens. 1H317

#### 2.2. Label elements

#### **GHS-US** labeling

Hazard pictograms (GHS-US)

Signal word (GHS-US) Hazard statements (GHS-US)

Precautionary statements (GHS-US)

GHS07

## : Warning

- : H315 Causes skin irritation H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation
- P261 Avoid breathing mist
- P264 Wash skin and clothing thoroughly after handling
- P272 Contaminated work clothing should not be allowed out of the workplace P280 - Wear eye protection, protective clothing, protective gloves
- P302+P352 IF ON SKIN: Wash with plenty of soap and water
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove
- contact lenses, if present and easy to do. Continue rinsing
- P321 Specific treatment (see first aid instructions on this label)
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention
- P337+P313 If eye irritation persists: Get medical advice/attention
- P362 Take off contaminated clothing and wash before reuse
- P501 Dispose of contents/container to licensed waste handling facility

#### 2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

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## **SECTION 3: Composition/information on ingredients**

3.1. Substance

Not applicable

## 3.2. Mixture

Name	Product identifier	%
1-Hydroxyethane-1,1-diphosphonic acid	(CAS No) 2809-21-4	1 - 5
Maleic acid	(CAS No) 110-16-7	0.1 - 1

## **SECTION 4: First aid measures**

4.1. Description of first aid measures		
First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).	
First-aid measures after inhalation	: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.	
First-aid measures after skin contact	: IF ON SKIN: Immediately rinse with plenty of water (for at least 15 minutes). If skin irritation or rash occurs: Get medical advice/attention.	
First-aid measures after eye contact	: IF IN EYES: Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). If eye irritation persists: Get medical advice/attention.	
First-aid measures after ingestion	: IF SWALLOWED: Rinse mouth, Do NOT induce vomiting, Call a POISON CENTER/doctor/physician if you feel unwell.	
4.2. Most important symptoms and effects, both acute and delayed		
Symptoms/injuries	: Causes serious eye irritation. Causes skin irritation. May cause an allergic skin reaction.	
Symptoms/injuries after inhalation	: May cause respiratory irritation.	
Symptoms/injuries after skin contact	: Prolonged or repeated contact may result in irritative or allergic dermatitis.	
Symptoms/injuries after eye contact	: Causes serious eye irritation.	
Symptoms/injuries after ingestion	: May cause a light irritation of the linings of the mouth, throat, and gastrointestinal tract.	
Chronic symptoms	: No data available.	

## 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures		
5.1. Extinguishing media		
suitable extinguishing media	: Water spray. Carbon dioxide. Alcohol-resistant foam. Dry powder.	
5.2. Special hazards arising from the s	substance or mixture	
Fire hazard	: Product is not flammable.	
Explosion hazard	: Product is not explosive.	
Reactivity	: No dangerous reactions known under normal conditions of use.	
5.3. Advice for firefighters		
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the environment.	
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.	
SECTION 6: Accidental release me	asures	
6.1. Personal precautions, protective e	equipment and emergency procedures	
General measures	: Evacuate area. Keep upwind. Ventilate area. Spill should be handled by trained clean-up crews properly equipped with respiratory equipment and full chemical protective gear (see Section 8).	
6.1.1. For non-emergency personnel		
Protective equipment	: Wear Protective equipment as described in Section 8.	
Emergency procedures	: Evacuate unnecessary personnel.	
6.1.2. For emergency responders		
Protective equipment	: Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air respirator, in case of emergency.	
6.2. Environmental precautions		

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

## 6.3. Methods and material for containment and cleaning up

For containment	: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or
	streams.

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Methods for cleaning up	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Place in
	a suitable container for disposal in accordance with the waste regulations (see Section 13).

### 6.4. Reference to other sections

No additional information available

## **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Precautions for safe handling

: Do not handle until all safety precautions have been read and understood. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not breathe mists. Keep away from sources of ignition - No smoking.

## 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

: Keep only in the original container in a cool, well ventilated place away from : Heat sources. Keep container closed when not in use.

## 7.3. Specific end use(s)

No additional information available

## **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

Maleic acid (110-16-7)	
Remark (ACGIH)	OELs not established
Remark (US OSHA)	OELs not established

1-Hydroxyethane-1,1-diphosphonic acid (2809-21-4)		
Remark (ACGIH)	OELs not established	
Remark (US OSHA)	OELs not established	

### 8.2. Exposure controls

Personal protective equipment

: Safety glasses. Gloves.



Hand protection	: Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Natural rubber ("latex"), Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl.
Eye protection	: Eye protection, including both chemical splash goggles and face shield, must be worn when possibility exists for eye contact due to spraying liquid or airborne particles.
Skin and body protection	: Corrosionproof clothing.
Respiratory protection	: Where excessive vapor, mist, or dust may result, use approved respiratory protection equipment.

## **SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and chemical properties			
Physica	state	:	Liquid
Appeara	ince	:	Clear.
Color		:	Blue.
Odor		:	Sweet.
Odor Th	reshold	:	No data available
рН		:	4.8 (at 1%)
Relative	evaporation rate (butyl acetate=1)	:	No data available
Melting	point	:	No data available
Freezing	g point	:	No data available
Boiling p	point	:	100 °C (212 °F)
Flash po	bint	:	Nonflammable (T.C.C.)
Self igni	tion temperature	:	No data available
Decomp	osition temperature	:	No data available
Flamma	bility (solid, gas)	:	No data available
Vapor p	ressure	:	No data available

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Relative vapor density at 20 °C	: No data available
Relative density	: 1.11
Solubility	: Water: Complete
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

No dangerous reactions known under normal conditions of use.

## 10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

#### 10.3. Possibility of hazardous reactions

None known.

#### 10.4. Conditions to avoid

Sparks. Heat. Open flame.

#### 10.5. Incompatible materials

Strong bases.

## 10.6. Hazardous decomposition products

Thermal decomposition generates : Carbon oxides (CO, CO2). Phosphorus oxides. Nitrogen oxides.

## **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

Acute toxicity

#### : Not classified

Maleic acid (110-16-7)			
LD50 oral rat	708 mg/kg (Source: IUCLID)		
LD50 dermal rabbit	1560 mg/kg (Source: NLM_CIP)		
LC50 inhalation rat (mg/l)	> 720 mg/m <sup>3</sup> 1 h; (Source: NLM_CIP)		
1-Hydroxyethane-1,1-diphosphonic acid (280	1-Hydroxyethane-1,1-diphosphonic acid (2809-21-4)		
LD50 oral rat	2400 mg/kg		
LD50 dermal rabbit	> 7940 mg/kg		
Skin corrosion/irritation	: Causes skin irritation.		
	pH: 4.8 (at 1%)		
Serious eye damage/irritation	: Causes serious eye irritation.		
	pH: 4.8 (at 1%)		
Respiratory or skin sensitization	: May cause an allergic skin reaction.		
Germ cell mutagenicity	: Not classified		
Carcinogenicity	: Not classified		
Reproductive toxicity	: Not classified		
Specific target organ toxicity (single exposure)	: Not classified		
Specific target organ toxicity (repeated exposure)	: Not classified		
Aspiration hazard	: Not classified		
Symptoms/injuries after inhalation	: May cause respiratory irritation.		
Symptoms/injuries after skin contact	: Prolonged or repeated contact may result in irritative or allergic dermatitis.		
Symptoms/injuries after eye contact	: Causes serious eye irritation.		
Symptoms/injuries after ingestion	: May cause a light irritation of the linings of the mouth, throat, and gastrointestinal tract.		

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Chronic symptoms

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: No data available.
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<b>SECTION 12: Ecological information</b>	
12.1. Toxicity	
No additional information available	
12.2. Persistence and degradability	
No additional information available	
12.3. Bioaccumulative potential	
No additional information available	
12.4. Mobility in soil	
No additional information available	
12.5. Other adverse effects	
No additional information available	
SECTION 13: Disposal considerations	
13.1. Waste treatment methods	
	Do not discharge to public wastewater systems without permit of pollution control authorities. No
· · · · · · · · · · · · · · · · · · ·	discharge to surface waters is allowed without an NPDES permit.
Waste disposal recommendations :	Dispose in a safe manner in accordance with local/national regulations. Do not allow the product
	to be released into the environment.
SECTION 14: Transport information	
In accordance with ADR / RID / IMDG / IATA / ADN	I
14.1. UN number	
Not applicable	
14.2. UN proper shipping name	
Not applicable	
14.3. Additional information	
Other information :	No supplementary information available.
Overland transport	
No additional information available	
Transport by sea	
No additional information available	
Air transport	
No additional information available	
SECTION 15: Regulatory information	
15.1. US Federal regulations	
FREMONT 9173 Cooling Water Treatment	
	in the EPA (Environmental Protection Agency) TSCA (Toxic Substances Control Act) Inventory
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
Maleic acid (110-16-7)	
Listed on the United States TSCA (Toxic Substan	
Listed on SARA Section 313 (Specific toxic chem RQ (Reportable guantity, section 304 of EPA's	5000 lb Final
List of Lists) :	
1-Hydroxyethane-1,1-diphosphonic acid (2809	-21-4)
Listed on the United States TSCA (Toxic Substan	
15.2. International regulations	
CANADA	

Maleic acid (110-16-7)

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1-Hydroxyethane-1,1-diphosphonic acid (2809-21-4)	
Listed on the Canadian DSL (Domestic Substances List) inventory.	
No additional information available	

## 15.2.2. National regulations

#### Maleic acid (110-16-7)

Listed on the AICS (the Australian Inventory of Chemical Substances) Listed on Inventory of Existing Chemical Substances (IECSC) Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory. Listed on KECI (Chemical Inventory of Korea)

1-Hydroxyethane-1,1-diphosphonic acid (2809-21-4) Listed on Inventory of Existing Chemical Substances (IECSC) Listed on the AICS (the Australian Inventory of Chemical Substances) Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory. Listed on the Korean ECL (Existing Chemical List) inventory.

#### 15.3. US State regulations

Maleic acid (110-16-7)	
U.S Massachusetts - Right To Know List U.S New Jersey - Right to Know Hazardous Substance List	
U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List	

SECTION 16: Other information	
Indication of changes	: Revision 1.0 – 3 Apr 2014 - New SDS Created.
Other information	: Author. JAH.
NFPA health hazard	: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.
NFPA fire hazard	: 0 - Materials that will not burn.
NFPA reactivity	: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.
HMIS III Rating	
Health	: 2
Flammability	: 0

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Physical

Personal Protection