

# FREMONT

## WATER SOLUTIONS

### FREMONT 9188 Cooling Water Treatment

#### 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: 01/18/2011

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

##### 1.1. Product identifier

Trade name : FREMONT 9188 Cooling Water Treatment

Product form : Mixture

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

Use of the substance/mixture : Cooling Water Treatment

##### 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

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

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

Skin Irrit. 2 H315

Eye Dam. 1 H318

Skin Sens. 1 H317

##### 2.2. Label elements

###### GHS-US labeling

Hazard pictograms (GHS-US) :



GHS05



GHS07

Signal word (GHS-US) :

**Danger**

Hazard statements (GHS-US) :

H315 - Causes skin irritation  
H317 - May cause an allergic skin reaction  
H318 - Causes serious eye damage

Precautionary statements (GHS-US) :

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  
P310 - Immediately call a POISON CENTER or doctor/physician  
P321 - Specific treatment (see first aid instructions on this label)  
P333+P313 - If skin irritation or rash occurs: 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   |
| Phosphonic acid, reaction products with maleic anhydride, sodium salts | (CAS No) 180513-31-9 | 1 - 5   |
| Tetrasodium EDTA                                                       | (CAS No) 64-02-8     | 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 : Remove to fresh air and keep at rest in a position comfortable for breathing.
- First-aid measures after skin contact : Immediately rinse with plenty of water (for at least 15 minutes). If irritation persists, call a physician.
- First-aid measures after eye contact : Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Get medical advice/attention.
- First-aid measures after ingestion : 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 skin irritation. Causes serious eye damage. May cause an allergic skin reaction.
- Symptoms/injuries after inhalation : May cause headache, nausea and irritation of respiratory tract.
- Symptoms/injuries after skin contact : Causes skin irritation. Prolonged or repeated contact may result in irritative or allergic dermatitis.
- Symptoms/injuries after eye contact : Causes serious eye damage.
- 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. Foam. Dry powder.

#### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : 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 measures

#### 6.1. Personal precautions, protective 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.

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### 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.
- 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

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

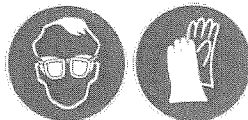
| Maleic acid (110-16-7) |                      |
|------------------------|----------------------|
| Remark (ACGIH)         | OELs not established |
| Remark (US OSHA)       | OELs not established |

| Phosphonic acid, reaction products with maleic anhydride, sodium salts (180513-31-9) |                      |
|--------------------------------------------------------------------------------------|----------------------|
| Remark (ACGIH)                                                                       | OELs not established |
| Remark (US OSHA)                                                                     | OELs not established |

| Tetrasodium EDTA (64-02-8) |                      |
|----------------------------|----------------------|
| 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

- Physical state : Liquid
- Appearance : Clear.
- Color : Amber.

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|                                             |                         |
|---------------------------------------------|-------------------------|
| Odor                                        | : Slight                |
| Odor Threshold                              | : No data available     |
| pH                                          | : 3 - 4 (neat)          |
| Relative evaporation rate (butyl acetate=1) | : No data available     |
| Melting point                               | : No data available     |
| Freezing point                              | : No data available     |
| Boiling point                               | : 100 °C (212 °F)       |
| Flash point                                 | : Nonflammable (T.C.C.) |
| Self ignition temperature                   | : No data available     |
| Decomposition temperature                   | : No data available     |
| Flammability (solid, gas)                   | : No data available     |
| Vapor pressure                              | : No data available     |
| 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, CO<sub>2</sub>). Phosphorus oxides. Nitrogen oxides.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

|                                                          |                                                |
|----------------------------------------------------------|------------------------------------------------|
| <b>1-Hydroxyethane-1,1-diphosphonic acid (2809-21-4)</b> |                                                |
| LD50 oral rat                                            | 2400 mg/kg                                     |
| LD50 dermal rabbit                                       | > 7940 mg/kg                                   |
| <b>Maleic acid (110-16-7)</b>                            |                                                |
| 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) |
| <b>Tetrasodium EDTA (64-02-8)</b>                        |                                                |
| LD50 oral rat                                            | 10 g/kg                                        |
| Skin corrosion/irritation                                | : Causes skin irritation.<br>pH: 3 - 4 (neat)  |

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|                                                    |                                                                                                          |
|----------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| Serious eye damage/irritation                      | : Causes serious eye damage.<br>pH: 3 - 4 (neat)                                                         |
| 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 headache, nausea and irritation of respiratory tract.                                        |
| Symptoms/injuries after skin contact               | : Causes skin irritation. Prolonged or repeated contact may result in irritative or allergic dermatitis. |
| Symptoms/injuries after eye contact                | : Causes serious eye damage.                                                                             |
| Symptoms/injuries after ingestion                  | : May cause a light irritation of the linings of the mouth, throat, and gastrointestinal tract.          |
| Chronic symptoms                                   | : No data available.                                                                                     |

### SECTION 12: Ecological information

#### 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

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

#### 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

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### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

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All chemical substances in this product are listed in the EPA (Environmental Protection Agency) TSCA (Toxic Substances Control Act) Inventory

|                                     |                                 |
|-------------------------------------|---------------------------------|
| SARA Section 311/312 Hazard Classes | Immediate (acute) health hazard |
|-------------------------------------|---------------------------------|

##### 1-Hydroxyethane-1,1-diphosphonic acid (2809-21-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

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

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on SARA Section 313 (Specific toxic chemical listings)

|                                                                |               |
|----------------------------------------------------------------|---------------|
| RQ (Reportable quantity, section 304 of EPA's List of Lists) : | 5000 lb Final |
|----------------------------------------------------------------|---------------|

##### Phosphonic acid, reaction products with maleic anhydride, sodium salts (180513-31-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

##### Tetrasodium EDTA (64-02-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### 15.2. International regulations

##### CANADA

##### 1-Hydroxyethane-1,1-diphosphonic acid (2809-21-4)

Listed on the Canadian DSL (Domestic Substances List) inventory.

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

Listed on the Canadian DSL (Domestic Substances List) inventory.

##### Phosphonic acid, reaction products with maleic anhydride, sodium salts (180513-31-9)

Listed on the Canadian DSL (Domestic Substances List) inventory.

##### Tetrasodium EDTA (64-02-8)

Listed on the Canadian DSL (Domestic Substances List) inventory.

No additional information available

#### 15.2.2. National regulations

##### 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.

##### 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)

##### Phosphonic acid, reaction products with maleic anhydride, sodium salts (180513-31-9)

Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.

##### Tetrasodium EDTA (64-02-8)

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)

#### 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

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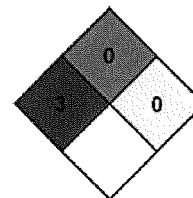
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### SECTION 16: Other information

Indication of changes : Revision 1.0 – 3 Apr 2014 - New SDS Created.  
Other information : Author. JAH.

NFPA health hazard : 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was 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 : 3  
Flammability : 0  
Physical : 0  
Personal Protection :

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