

# FREMONT

## WATER SOLUTIONS

### FREMONT 9149 pH Adjust/Alkalinity Control Additive

#### 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: 01/03/2011

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

##### 1.1. Product identifier

Trade name : FREMONT 9149 pH Adjust/Alkalinity Control Additive  
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

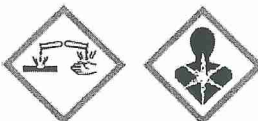
###### Classification (GHS-US)

Skin Corr. 1A H314  
Carc. 1A H350

##### 2.2. Label elements

###### GHS-US labeling

Hazard pictograms (GHS-US)



GHS05

GHS08

Signal word (GHS-US)

: **Danger**

Hazard statements (GHS-US)

: H314 - Causes severe skin burns and eye damage  
H350 - May cause cancer (Inhalation)

Precautionary statements (GHS-US)

: P201 - Obtain special instructions before use  
P202 - Do not handle until all safety precautions have been read and understood  
P260 - Do not breathe mist, vapors  
P264 - Wash skin and clothing thoroughly after handling  
P280 - Wear eye protection, face protection, protective clothing, protective gloves  
P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting  
P310 - Immediately call a POISON CENTER or doctor/physician  
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P308+P313 - IF exposed or concerned: Get medical advice/attention  
P321 - Specific treatment (see first aid instructions on this label)  
P363 - Wash contaminated clothing before reuse  
P405 - Store locked up  
P501 - Dispose of contents/container to licensed waste handling facility

##### 2.3. Other hazards

No additional information available

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### 2.4. Unknown acute toxicity (GHS-US)

No data available

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%
Sulfuric acid	(CAS No) 7664-93-9	30 - 60

## 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. Call a POISON CENTER or doctor/physician.
- First-aid measures after skin contact : IF ON SKIN: Immediately rinse with plenty of water (for at least 15 minutes). 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). Get medical advice/attention.
- First-aid measures after ingestion : IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Causes severe skin burns and eye damage.
- Symptoms/injuries after inhalation : Respiratory effects of acute exposure include irritation of the nose and throat, coughing, sneezing, reflex bronchospasm, dyspnea and pulmonary edema.
- Symptoms/injuries after skin contact : Highly corrosive to skin.
- Symptoms/injuries after eye contact : Causes serious eye burns.
- Symptoms/injuries after ingestion : Severe irritation or burns to the mouth, throat, esophagus, and stomach.
- Chronic symptoms : Strong inorganic acid mists containing sulfuric acid are carcinogenic to humans.

### 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 substance or mixture

- Fire hazard : Not flammable.
- Explosion hazard : Potentially explosive hydrogen gas can be generated inside metal drums and storage tanks.
- 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.

### 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.

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### 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. Do not use wood shavings or paper products to absorb spilled material. Product may react violently with organic material releasing heat. 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

Sulfuric acid (7664-93-9)	
ACGIH TWA (mg/m <sup>3</sup> )	0.2 mg/m <sup>3</sup> thoracic fraction
OSHA PEL (TWA) (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>

### 8.2. Exposure controls

- Personal protective equipment : Gloves. Protective goggles. Face shield. Protective clothing. Respiratory protection of the dependent type.



- 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 : In case of insufficient ventilation, wear suitable respiratory equipment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Appearance : Clear.
- Color : No data available
- Odor : Slight.
- Odor Threshold : No data available
- pH : 1 (1% solution)
- 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

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Vapor pressure : No data available  
Relative vapor density at 20 °C : No data available  
Relative density : 1.4  
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

Contact with metallic substances may release flammable hydrogen gas.

### 10.4. Conditions to avoid

Sparks. Heat. Open flame.

### 10.5. Incompatible materials

Strong bases. Soft metals (aluminum, copper, brass). Organic materials. Strong oxidizing agents. Reducing agents.

### 10.6. Hazardous decomposition products

Thermal decomposition generates : Sulfur oxides. Carbon oxides (CO, CO<sub>2</sub>). Hydrogen gas.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

Sulfuric acid (7664-93-9)	
LD50 oral rat	2140 mg/kg
LC50 inhalation rat (mg/l)	510 mg/m <sup>3</sup> 2 h; Inhalation LC50 Mouse 320 mg/m <sup>3</sup> 2 h
LC50 inhalation rat (ppm)	347 ppm/1h

Skin corrosion/irritation : Causes severe skin burns and eye damage.  
pH: 1 (1% solution)

Serious eye damage/irritation : Causes severe skin burns and eye damage.  
pH: 1 (1% solution)

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : May cause cancer (Inhalation).

Sulfuric acid (7664-93-9)	
IARC group	1 - Carcinogenic to humans
National Toxicity Program (NTP) Status	2 - Known Human Carcinogens

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 : Respiratory effects of acute exposure include irritation of the nose and throat, coughing, sneezing, reflex bronchospasm, dyspnea and pulmonary edema.

Symptoms/injuries after skin contact : Highly corrosive to skin.

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Symptoms/injuries after eye contact : Causes serious eye burns.  
Symptoms/injuries after ingestion : Severe irritation or burns to the mouth, throat, esophagus, and stomach.  
Chronic symptoms : Strong inorganic acid mists containing sulfuric acid are carcinogenic to humans (IARC).

### SECTION 12: Ecological information

#### 12.1. Toxicity

No additional information available

#### 12.2. Persistence and degradability

##### Sulfuric acid (7664-93-9)

Persistence and degradability : Not established.

#### 12.3. Bioaccumulative potential

##### Sulfuric acid (7664-93-9)

Bioaccumulative potential : Not established.

#### 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

Transport document description : UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (SULFURIC ACID), 8, PGIII  
UN-No.(DOT) : 3264  
DOT NA no. : UN3264

#### 14.2. UN proper shipping name

DOT Proper Shipping Name : Corrosive liquid, acidic, inorganic, n.o.s.  
(Sulfuric acid)  
Department of Transportation (DOT) Hazard Classes : 8 - Class 8 - Corrosive material 49 CFR 173.136  
Hazard labels (DOT) : 8 - Corrosive



DOT Symbols : G - Identifies PSN requiring a technical name  
Packing group (DOT) : III - Minor Danger

#### 14.3. Additional information

Other information : No supplementary information available.

#### Overland transport

No additional information available

#### Transport by sea

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.  
DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"

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### Air transport

DOT Quantity Limitations Passenger aircraft/rail : 5 L  
(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 60 L  
CFR 175.75)

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### FREMONT 9149 pH Adjust/Alkalinity Control Additive

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 Delayed (chronic) health hazard
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#### Sulfuric acid (7664-93-9)

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) :	1000 lb
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SARA Section 302 Threshold Planning Quantity (TPQ)	1000 lb
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SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
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SARA Section 313 - Emission Reporting	1 % de minimis concentration (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size)
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### 15.2. International regulations

#### CANADA

#### Sulfuric acid (7664-93-9)

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

### 15.2.2. National regulations

#### Sulfuric acid (7664-93-9)

Listed on IARC (International Agency for Research on Cancer)

Listed as carcinogen on NTP (National Toxicology Program)

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

#### Sulfuric acid (7664-93-9)

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

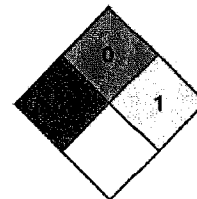
Indication of changes : Revision 1.0 – 15 Apr 2014 - New SDS Created.

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 : 1 - Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.



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### HMIS III Rating

Health	: 3
Flammability	: 0
Physical	: 1
Personal Protection	:

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