

FREMONT

WATER SOLUTIONS

FREMONT 9550 Closed System 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: 08/21/2007

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

1.1. Product identifier

Trade name : Fremont 9550 Closed System Treatment
Product form : Mixture

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

Use of the substance/mixture : Oxidizer

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

GHS-US classification

Ox. Sol. 3 H272
Acute Tox. 3 (Oral) H301
Eye Dam. 1 H318
Repr. 1B H360

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US)



GHS03



GHS05



GHS06



GHS08

Signal word (GHS-US)

: **Danger**

Hazard statements (GHS-US)

: H272 - May intensify fire; oxidiser
H301 - Toxic if swallowed
H318 - Causes serious eye damage
H360 - May damage fertility or the unborn child

Precautionary statements (GHS-US)

: P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P210 - Keep away from open flames. - No smoking
P220 - Keep/Store away from combustible materials
P221 - Take any precaution to avoid mixing with combustible materials
P264 - Wash hands, forearms and face thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P280 - Wear eye protection, protective gloves
P301+P310 - IF SWALLOWED: Immediately call a doctor, a POISON CENTER
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
P310 - Immediately call a doctor, a POISON CENTER
P321 - Specific treatment (see Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work on this label)
P330 - Rinse mouth
P370+P378 - In case of fire: Use carbon dioxide (CO₂), extinguishing powder, foam to extinguish
P405 - Store locked up

FREMONT 9550 Closed System Treatment

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P501 - Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste

2.3. Other hazards

No additional information available

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	%
Sodium nitrite	(CAS No) 7632-00-0	40 - 70
Boric acid, disodium salt, pentahydrate	(CAS No) 12179-04-3	10 - 30
Sodium carbonate	(CAS No) 497-19-8	7 - 13
Sodium tungstate	(CAS No) 13472-45-2	1 - 5
Tetrasodium EDTA	(CAS No) 64-02-8	1 - 5
1,2,3-Benzotriazole	(CAS No) 95-14-7	1 - 5

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: If exposed or concerned, get medical attention/advice. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an unconscious person.
First-aid measures after inhalation	: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if breathing is affected. If breathing is difficult, supply oxygen.
First-aid measures after skin contact	: IN ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water for at least 15 minutes. Get medical attention immediately.
First-aid measures after eye contact	: IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do so. Get medical attention immediately. Continue rinsing.
First-aid measures after ingestion	: IF SWALLOWED: rinse mouth thoroughly. Do not induce vomiting without advice from poison control center or medical professional. Get medical attention immediately.

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

Symptoms/injuries	: Toxic if swallowed. Causes serious eye damage. May damage fertility or the unborn child.
Symptoms/injuries after inhalation	: May cause respiratory irritation.
Symptoms/injuries after skin contact	: May cause skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye damage.
Symptoms/injuries after ingestion	: Toxic if swallowed.
Chronic symptoms	: May damage fertility. May damage the unborn child.

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 : Carbon dioxide. Foam. Dry powder. Sand. Water spray.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: May intensify fire; oxidiser.
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. Prevent human exposure to fire, fumes, smoke and products of combustion.
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).
------------------	---

FREMONT 9550 Closed System Treatment

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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. Sweep or shovel spills into appropriate container for disposal.
Methods for cleaning up : Product may create slip hazard. Neutralize residue with weak acid and flush to drain with plenty of water. 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). Wash spill area thoroughly with plenty of soap and water. If slipperiness remains, apply additional dry-sweeping compound.

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 vapour. Do not breathe vapors. Keep away from sources of ignition - No smoking. Avoid spilling the product, as this might cause danger of slippage and falls.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in dry, well-ventilated area. Keep container closed when not in use.
Incompatible materials : Strong acids. Reducing agents.
Storage temperature : room temperature

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Sodium nitrite (7632-00-0)	
Remark (ACGIH)	OELs not established
Remark (OSHA)	OELs not established
Sodium carbonate (497-19-8)	
Remark (ACGIH)	OELs not established
Remark (OSHA)	OELs not established
Boric acid, disodium salt, pentahydrate (12179-04-3)	
ACGIH TWA (mg/m³)	2 TWA (inhalable fraction, listed under Borate compounds, inorganic)
ACGIH STEL (mg/m³)	6 STEL (inhalable fraction, listed under Borate compounds, inorganic)
OSHA PEL (TWA) (mg/m³)	10 Vacated
Sodium tungstate (13472-45-2)	
Remark (ACGIH)	OELs not established
Remark (OSHA)	OELs not established
Tetrasodium EDTA (64-02-8)	
Remark (ACGIH)	OELs not established
Remark (OSHA)	OELs not established
1,2,3-Benzotriazole (95-14-7)	
Remark (ACGIH)	OELs not established
Remark (OSHA)	OELs not established

8.2. Exposure controls

Appropriate engineering controls : Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment with flammable materials. Ensure adequate ventilation, especially in confined areas.

FREMONT 9550 Closed System Treatment

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Personal protective equipment

: Gloves. Wear chemical goggles and face shield in combination. Protective clothing.



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: Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl. Suitable gloves for this specific application can be recommended by the glove supplier.

Eye protection

: Wear eye protection, including chemical splash goggles and a face shield when possibility exists for eye contact due to spraying liquid or airborne particles. Chemical goggles and face shield must be worn in combination.

Skin and body protection

: Wear long sleeves, and chemically impervious PPE/coveralls to minimize bodily exposure.

Respiratory protection

: Use NIOSH-approved dust/particulate respirator. Where vapor, mist, or dust exceed PELs or other applicable OELs, use NIOSH-approved respiratory protective equipment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Granular powder.
Color	: White.
Odor	: Odorless
Odor Threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Water: Moderate
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
Oxidising 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). May intensify fire; oxidizer.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Chlorine. Hyposulfites. Permanganate. Alum and ammonium salts. Reducing agents.

FREMONT 9550 Closed System Treatment

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂). Nitrogen oxides. Sulfur oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Toxic if swallowed.

Sodium nitrite (7632-00-0)	
LD50 oral rat	85 mg/kg
LC50 inhalation rat (mg/l)	5.5 mg/l/4h
ATE CLP (oral)	85.000 mg/kg bodyweight
ATE CLP (vapours)	5.500 mg/l/4h
ATE CLP (dust,mist)	5.500 mg/l/4h
Sodium carbonate (497-19-8)	
LD50 oral rat	4090 mg/kg
LD50 dermal rat	2210 mg/kg mouse
LC50 inhalation rat (mg/l)	2300 mg/m ³ 2 h; (dust)
Tetrasodium EDTA (64-02-8)	
LD50 oral rat	1658 mg/kg
1,2,3-Benzotriazole (95-14-7)	
LD50 oral rat	500 - 965 mg/kg
LC50 inhalation rat (mg/l)	1910 mg/m ³ 3 h
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: May damage fertility or the unborn child.
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	: May cause skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye damage.
Symptoms/injuries after ingestion	: Toxic if swallowed.
Chronic symptoms	: May damage fertility. May damage the unborn child.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No information available.

Sodium nitrite (7632-00-0)	
LC50 fishes 1	0.19 mg/l 96 Hr Oncorhynchus mykiss [flow-through] (juvenile)
LC50 fish 2	0.092 - 0.13 mg/l 96 Hr Oncorhynchus mykiss [flow-through]

12.2. Persistence and degradability

Fremont 9550 Closed System Treatment	
Persistence and degradability	No 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.

FREMONT 9550 Closed System Treatment

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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 DOT

Transport document description : UN1500, SODIUM NITRITE, 5.1 (6.1), PGIII

UN-No.(DOT) : 1500

DOT NA no. : UN1500

Proper Shipping Name (DOT) : Sodium nitrite

Department of Transportation (DOT) Hazard Classes : 5.1 - Class 5.1 - Oxidizer 49 CFR 173.128

Hazard labels (DOT) : 5.1 - Oxidizer
6.1 - Poison inhalation hazard



Packing group (DOT) : III - Minor Danger

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 25 kg

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 100 kg

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 : 56 - Stow "separated from" ammonium compounds, 58 - Stow "separated from" cyanides

Additional information

Other information : No supplementary 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 9550 Closed System Treatment

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

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

Sodium nitrite (7632-00-0)

Listed on United States SARA Section 313

RQ (Reportable quantity, section 304 of EPA's List of Lists) : 100 lb

SARA Section 313 - Emission Reporting : 1 % de minimis concentration

15.2. International regulations

No additional information available.

15.3. US State regulations

California Proposition 65

This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

Sodium nitrite (7632-00-0)

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

Boric acid, disodium salt, pentahydrate (12179-04-3)

U.S. - Massachusetts - Right To Know List

1,2,3-Benzotriazole (95-14-7)

U.S. - Massachusetts - Right To Know List

FREMONT 9550 Closed System Treatment

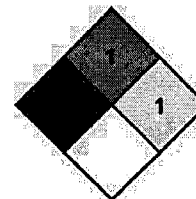
Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 16: Other information

Indication of changes : Revision 1.0: New SDS Created.
Revision date : 12/10/2014
Other information : Author: BCS.

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 : 1 - Must be preheated before ignition can occur.
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.



HMIS III Rating

Health : 2
Flammability : 1
Physical : 1
Personal Protection :

FREMONT'S PRODUCTS ARE SOLD "AS IS." FREMONT MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO ITS PRODUCTS OR RELATED SERVICES. ALL SUCH EXPRESS AND IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE SPECIFICALLY DISCLAIMED.

