

FREMONT

WATER SOLUTIONS

FREMONT BWT 4467 Boiler 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: 12/28/2010

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

1.1. Product identifier

Product name : FREMONT BWT 4467 Boiler Water Treatment

Product form : Mixture

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

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

Acute Tox. 4 (Oral) H302

Skin Irrit. 2 H315

Eye Dam. 1 H318

Repr. 2 H361

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US)



GHS05



GHS07



GHS08

Signal word (GHS-US)

: **Danger**

Hazard statements (GHS-US)

: H302 - Harmful if swallowed
H315 - Causes skin irritation
H318 - Causes serious eye damage
H361 - Suspected of damaging 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
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 clothing, protective gloves
P301+P312 - If swallowed: Call a doctor, a POISON CENTER if you feel unwell
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
P308+P313 - If exposed or concerned: Get medical advice/attention
P310 - Immediately call a doctor, a POISON CENTER
P321 - Specific treatment (see first aid instructions on this label)
P330 - Rinse mouth
P332+P313 - If skin irritation occurs: Get medical advice/attention
P362 - Take off contaminated clothing and wash before reuse
P405 - Store locked up
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

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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	%
Sodium nitrite	(CAS No) 7632-00-0	15 - 40
Sodium hydroxide	(CAS No) 1310-73-2	3 - 7
Boric acid (HBO ₂), sodium salt, tetrahydrate	(CAS No) 10555-76-7	1 - 5
2-Amino-2-methyl-1-propanol	(CAS No) 124-68-5	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 : IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water for at least 15 minutes. If irritation develops or persists, get medical attention.
- 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 if you feel unwell.

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

- Symptoms/injuries : Harmful if swallowed. Causes skin irritation. Causes serious eye damage. Suspected of damaging fertility or the unborn child.
- Symptoms/injuries after inhalation : May cause respiratory irritation.
- Symptoms/injuries after skin contact : Causes skin irritation.
- Symptoms/injuries after eye contact : Causes serious eye damage.
- Symptoms/injuries after ingestion : Harmful if swallowed.
- Chronic symptoms : Suspected of damaging fertility. Suspected of damaging 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 : The 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. 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. Self-contained breathing apparatus.

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. Sweep or shovel spills into appropriate container for disposal.
- Methods for cleaning up : Wear suitable protective clothing. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Product may create slip hazard. Wash spill area thoroughly with plenty of soap and water. If slipperiness remains, apply additional dry-sweeping compound. 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. Avoid contact with skin and eyes. Provide good ventilation in process area to prevent formation of vapour. Do not breathe fume, mist, spray, vapours. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in dry, well-ventilated area. 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

Sodium nitrite (7632-00-0)	
Remark (ACGIH)	OELs not established
Remark (OSHA)	OELs not established
Boric acid (HBO2), sodium salt, tetrahydrate (10555-76-7)	
Remark (ACGIH)	OELs not established
Remark (OSHA)	OELs not established
Sodium hydroxide (1310-73-2)	
ACGIH Ceiling (mg/m ³)	2
OSHA PEL (TWA) (mg/m ³)	2
OSHA PEL (Ceiling) (mg/m ³)	2
2-Amino-2-methyl-1-propanol (124-68-5)	
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.
- 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.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: No data available
Odor	: No data available
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	: No data available
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).

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

None known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed.

Sodium nitrite (7632-00-0)	
LD50 oral rat	85 mg/kg (Source: IUCLID)
LC50 inhalation rat (mg/l)	5.5 mg/l/4h (Source: IUCLID)
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 hydroxide (1310-73-2)	
LD50 dermal rabbit	1350 mg/kg
2-Amino-2-methyl-1-propanol (124-68-5)	
LD50 oral rat	2900 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

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Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Suspected of damaging 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	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye damage.
Symptoms/injuries after ingestion	: Harmful if swallowed.
Chronic symptoms	: Suspected of damaging fertility. Suspected of damaging 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]
2-Amino-2-methyl-1-propanol (124-68-5)	
LC50 fishes 1	190 mg/l 96 hr Lepomis macrochirus
EC50 Daphnia 1	193 mg/l 48 hr Daphnia magna
ErC50 (algae)	520 mg/l 72 hr Desmodesmus subspicatus

12.2. Persistence and degradability

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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.

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

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 (Environment Protection Agency) TSCA (Toxic Substances Control Act) Inventory	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
Sodium nitrite (7632-00-0)	
Section 302 (EHS) TPQ	
Section 304 EHS RQ	
CERCLA RQ	100 lbs
Section 313	Listed on US SARA Section 313
Sodium hydroxide (1310-73-2)	
Section 302 (EHS) TPQ	
Section 304 EHS RQ	
CERCLA RQ	1000 lbs
Section 313	Not Listed on US SARA Section 313
Acrylic acid (79-10-7)	
Section 302 (EHS) TPQ	
Section 304 EHS RQ	
CERCLA RQ	5000 lbs
Section 313	Listed on US SARA Section 313

15.2. International regulations

No additional information available

15.2.2. National regulations

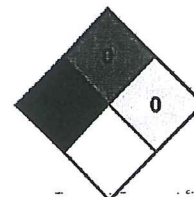
15.3. US State regulations

Sodium nitrite (7632-00-0)	
State or local regulations	
RTK - U.S. - Massachusetts - Right To Know List RTK - U.S. - New Jersey - Right to Know Hazardous Substance List RTK - U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List	
Sodium hydroxide (1310-73-2)	
State or local regulations	
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations RTK - U.S. - Massachusetts - Right To Know List RTK - U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances RTK - U.S. - Pennsylvania - RTK (Right to Know) List	
2-Amino-2-methyl-1-propanol (124-68-5)	
State or local regulations	
RTK - U.S. - Massachusetts - Right To Know List RTK - U.S. - New Jersey - Right to Know Hazardous Substance List RTK - U.S. - Pennsylvania - RTK (Right to Know) List	

SECTION 16: Other information

Indication of changes : Revision 1.0: New SDS Created.
Revision date : 02/23/2015
Other information : Author: BCS.

NFPA health hazard : 2
NFPA fire hazard : 0
NFPA reactivity : 0



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HMIS III Rating

Health	:	2
Flammability	:	0
Physical	:	0
Personal Protection	:	

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