

**447-LM****1 PRODUCT AND COMPANY IDENTIFICATION**

**Product Identifier:** 447-LM  
**Common Name:** MIXTURE  
**SDS Number:** 0301  
**Product Code:** BT0079  
**Revision Date:** 3/25/2015  
**Version:** 3  
**Internal ID:** 300C  
**Product Use:** Closed Loop Water Treatment Additive, Corrosion and Scale Inhibitor  
**Supplier Details:** U. S. Water Services  
12270 43rd St. NE  
St. Michael, MN 55376

**Contact:** Non-emergency #: 866-663-7632  
**Email:** SDS@uswaterservices.com  
**Web:** www.uswaterservices.com

**EMERGENCY RESPONSE: (ChemTel)**  
**US & Canada: 800-255-3924**  
**International: +01-813-248-0585**

**2 HAZARDS IDENTIFICATION****Classification of the substance or mixture****GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):**

Health, Acute toxicity, 5 Dermal  
Health, Acute toxicity, 3 Oral  
Health, Serious Eye Damage/Eye Irritation, 2 A  
Environmental, Hazards to the aquatic environment - Acute, 1

**GHS Label elements, including precautionary statements**

**GHS Signal Word:** **DANGER**

**GHS Hazard Pictograms:****GHS Hazard Statements:**

H313 - May be harmful in contact with skin  
H301 - Toxic if swallowed  
H319 - Causes serious eye irritation  
H400 - Very toxic to aquatic life

**GHS Precautionary Statements:**

P302+352 - IF ON SKIN: Wash with soap and water.  
P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical advice.

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P301+310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P501 - Dispose of contents/container in accordance with local and federal regulations.

P273 - Avoid release to the environment.

**Hazards not otherwise classified (HNOC) or not covered by GHS**

PPE recommendation is advisory only and based on typical use conditions. An industrial hygienist or safety officer familiar with the specific situation of anticipated use must determine actual PPE required when using this product (29 CFR 1910.132)

**3 COMPOSITION/INFORMATION ON INGREDIENTS****Ingredients:**

Cas#	%	Chemical Name
7632-00-0	30-40%	Sodium nitrite
1303-96-4	2-10%	Borates, tetra, sodium salts (decahydrate)
1310-58-3	<2%	Potassium hydroxide

**4 FIRST AID MEASURES**

- Inhalation:** Remove from contamination. If person has stopped breathing administer artificial respiration. Seek medical attention.
- Skin Contact:** Wash off with soap and plenty of water. Remove contaminated garments and wash or destroy. Seek medical attention if irritation develops.
- Eye Contact:** Flush eyes with plenty of running water for at least 15 minutes. Seek immediate medical attention.
- Ingestion:** If conscious, give plenty of water. Seek immediate medical attention. Do not induce vomiting unless directed to do so by medical personnel.

**Most important symptoms & effects (acute & delayed):** No data available

**Indication of need for immediate medical attention:** No data available

**Special treatment needs:** No data available

**5 FIRE FIGHTING MEASURES**

- Flammability:** Non flammable
- Flash Point:** None
- Flash Point Method:** Pensky Martens Closed cup
- Burning Rate:** Not applicable
- Autoignition Temp:** Not applicable
- LEL:** Not applicable
- UEL:** Not applicable

**Extinguishing Media:**

**Suitable:** Use extinguishing media suitable for surrounding fire.

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**Unsuitable:** No information available

**Hazardous combustion products:** Thermal decomposition under fire conditions may produce toxic nitrogen oxide fumes.

**Unusual Fire or Explosion Hazards:** None known

**Special protective equipment/precautions:** Wear self-contained breathing apparatus

**6****ACCIDENTAL RELEASE MEASURES**

**Personal Precautions, Protective equipment, emergency procedures:** Avoid contact with the material. See section 8 of SDS for PPE recommendations

**Environmental Precautions:** Keep runoff from entering drains or waterways

**Spill/Leak procedures:** Contain spill or leak. Dike area if necessary to prevent spill from spreading or entering sewers and waterways. Recover as much as possible then absorb remainder with inert material. Place into closed container for disposal.

**Regulatory Requirements:** Dispose of recovered material in accordance with all applicable state and federal regulations.

**7****HANDLING AND STORAGE**

**Handling Precautions:** Avoid contact with eyes, skin, or clothing. Do not taste or swallow. Do not inhale vapor or mist. Use with adequate ventilation. Do not mix with acids as toxic fumes may be produced. For industrial use only!

**Storage Requirements:** Keep away from children. Store in closed containers away from temperature extremes and incompatible materials. Store in properly labeled containers in accordance with all local, state and federal guidelines.

**8****EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Engineering Controls:** Provide local exhaust ventilation as needed to control misting.

**Personal Protective Equipment:** HMIS PP, C | Safety Glasses, Gloves, Apron

Respiratory protection: Not required under normal use conditions. If needed use MSHA/NIOSH approved respirator. Seek professional advice prior to respirator selection and use. Follow all requirements of OSHA respirator regulations (29 CFR 1910.134)

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

General Hygiene: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, using the toilet, or applying cosmetics.

PPE recommendation is advisory only and based on typical use conditions. An industrial hygienist or safety officer familiar with the specific situation of anticipated use must determine actual PPE required when using this product (29 CFR 1910.132)

**Exposure Limits:**

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<b>Ingredient</b>	<b>CAS #</b>	<b>NIOSH (REL)</b>	<b>OSHA (PEL)</b>
<b>Sodium Nitrite</b>	<b>7632-00-0</b>	<b>NE</b>	<b>NE</b>
Sodium Tetraborate Decahydrate	1303-96-4	5mg/m <sup>3</sup>	15mg/m <sup>3</sup> (total dust) 5mg/m <sup>3</sup> (resp. dust)
Sodium Metaborate Dihydrate	16800-11-6	5mg/m <sup>3</sup>	15mg/m <sup>3</sup> (total dust) 5mg/m <sup>3</sup> (resp. dust)
Potassium Hydroxide	1310-58-3	2mg/m <sup>3</sup> (C)	NE
Sodium Tolytriazole	64665-57-2	NE	NE

\*NE = "Not Established"

C = Ceiling

**9****PHYSICAL AND CHEMICAL PROPERTIES**

Color, Physical State: Clear, colorless to yellow liquid      Odor: Slightly Pungent  
Odor Threshold: No data available      Melting/Freezing point: -3°F  
Boiling Point: No data available      Flash Point: Non flammable, Pensky-Martens closed cup  
Flammability (gas/solid): No data available      Ignition Temperature: No data available  
Upper/Lower Limits of flammability: No data available      Decomposition temperature: No data available  
Vapor pressure: No data available      Vapor density: Similar to water  
Viscosity: No data available      Evaporation rate: No data available  
Water Solubility: Complete      Partition coefficient: No data available  
Density (lbs/gal): 11.20      pH value: 11-12

**10****STABILITY AND REACTIVITY**

**Stability:** Product is stable under normal storage and use conditions.  
**Conditions to Avoid:** Avoid temperature extremes. Protect from freezing  
**Materials to Avoid:** Acids, ammonium compounds, cyanides, thiocyanates, thiosulfates. Contact with acids causes release of toxic oxides of nitrogen.  
**Hazardous Decomposition:** None under normal storage and use conditions. See chemical incompatibilities above.  
**Hazardous Polymerization:** May release toxic products under fire conditions. See section 5.  
Will not occur.

**11****TOXICOLOGICAL INFORMATION****Exposure Routes & Acute Toxicity:**

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Oral ( LD 50): No testing has been conducted on this product. However, the following data is available for sodium nitrite, which comprises 38-39% of this product: Oral LD50 (Rat) 88mg/kg (moderately toxic).

Inhalation ( LC 50): No data available

Skin irritation: No data available

Eye irritation: No data available

**DELAYED (SUBCHRONIC AND CHRONIC) EFFECTS:**

Embryotoxicity: No data available

NOEL : No data available

NOEL : No data available

28-day Inhalation Study: No data available

90-day Inhalation Study : No data available

Dose levels: No data available

**Toxicity Data:**

Eye Effects: No data available

Skin Effects: No data available

Acute Inhalation Effects: No data available

Ingestion: No data available

Carcinogenicity: No carcinogenic effects are known for the components of this product

Mutagenicity: No mutagenic effects are known for the components of this product

Teratogenicity: No teratogenic effects are known for the components of this product

**12 ECOLOGICAL INFORMATION****Ecotoxicity (aquatic & terrestrial):**

SPECIES	ACUTE LC <sub>50</sub> 48hr	ACUTE LC <sub>50</sub> 96hr	ACUTE Survival NOEC	ACUTE Survival LOEC
Fathead minnow ( <i>Pimephales promelas</i> )	-	58.0 mg/L	60 mg/L	120 mg/L
Water Flea ( <i>Daphnia magna</i> )	14.0 mg/L	-	7.5 mg/L	15mg/L

**Elimination** (persistence and degradability): No data available

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**Other adverse effects:** No data available



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**SARA TITLE III –CERCLA LIST:** This product contains the following CERCLA Listed hazardous substances.

	<u>CAS #</u>	<u>Percent</u>	<u>RQ</u>
Sodium Nitrite	7632-00-0	38 – 39	100 lbs
Potassium Hydroxide	1310-58-3	< 2	1,000 lbs

**SARA TITLE III-TOXIC CHEMICAL LIST (Sec. 313):** This product contains the following chemicals subject to routine annual chemical release reporting.

	<u>CAS #</u>	<u>Percent</u>	<u>RQ</u>
Sodium Nitrite	7632-00-0	38 – 39	100 lbs

**16 OTHER INFORMATION**

HMIS III: Health = 3, Fire = 0, Physical Hazard = 0  
HMIS PPE: C - Safety Glasses, Gloves, Apron

HMIS	
HEALTH	<input type="text" value="3"/>
FLAMMABILITY	<input type="text" value="0"/>
PHYSICAL HAZARD	<input type="text" value="0"/>
PERSONAL PROTECTION	<input type="text" value="C"/>

**Author:** U.S. Water Services

**Revision Notes:** Updated to GHS format

**Disclaimer:**

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