

Safety Data Sheet

LOOP-104

1. IDENTIFICATION

Product Name: LOOP-104 **Revised:** 8/19/15
Chemical Name: Nitrite Based Inhibitor
Description: Free flowing, white to off-white granular solid with characteristic odor.
Recommended Use: Closed System Treatment
Restrictions on Use: For industrial use only. Not for use in treating drinking water

COMPANY IDENTIFICATION
TOWER WATER MANAGEMENT
5 SHIRLEY AVENUE
SOMERSET, NJ 08873

PHONE NUMBER: 732/249-0990

EMERGENCY PHONE NUMBERS
CHEMTREC (800) 424-9300
Outside USA: CHEMTREC COLLECT (703) 527-3887

2. HAZARD(S) IDENTIFICATION

GHS Classification:

Oxidizing liquids; Oxidizing solids - Category 3
Serious eye damage/irritation - Category 2A
Skin corrosion/irritation - Category 2
Specific target organ toxicity, single exposure - Category 2
Specific target organ toxicity, single exposure - Category 2
Acute toxicity, oral - Category 3
Hazardous to the aquatic environment, long-term hazard - Category 2

Signal Word: Danger

Symbol(s):



Hazard Statements:

May intensify fire; oxidizer
Causes serious eye irritation
Causes skin irritation
May cause damage to digestive system if swallowed
May cause damage to respiratory system if inhaled
Toxic if swallowed
Toxic to aquatic life with long lasting effects

Precautionary Statements:

Prevention
Keep away from sparks and open flames. No smoking. Keep/Store away from clothing/combustible materials. Take any precaution to avoid mixing with combustibles Do not breathe dusts or mists. Wash hands, forearms, gloves and contaminated surfaces thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves/eye protection/face protection.

Response
In case of fire: Use Any media suitable for the surrounding fire. Flood with water. Heavy water jet advantageous to extinguish.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

IF ON SKIN: Wash with plenty of soap and water. Specific treatment (see First Aid on SDS or on this label). If skin irritation occurs: Get medical advice or attention. Take off contaminated clothing and wash it before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF exposed or concerned: Call a POISON CONTROL CENTER or doctor for treatment advice.
 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF exposed or concerned: Call a POISON CONTROL CENTER or doctor for treatment advice.
 Immediately call a POISON CONTROL CENTER or doctor for treatment advice.
 Collect spillage.

Storage
 Store locked up.

Disposal
 Dispose of contents/container in accordance with local, regional, national and international regulations.

Hazards Not Otherwise Classified: None Known.

Percentages of Components with Unknown Acute Toxicity:

Dermal: 100%
 Inhalation: 100%

3. COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL INGREDIENTS	CAS NO.*	PERCENT (%)**
SODIUM NITRITE	7632-00-0	80% - 90%
BENZOTRIAZOLE	95-14-7	2% - 8%
SODIUM TETRABORATE DECAHYDRATE	1303-96-4	M
ALKALINE CARBONATE SALT	497-19-8	M

Legend: L=<1%; M=1-10%; H=>10%

* Exposure limit and regulatory information in Sections 8 & 15

** Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Eye Contact: Immediately flush eyes with a directed stream of cool, clear water for at least 30 minutes. Forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissues. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Do not allow individual to rub their eyes. Get medical attention urgently, preferably from an ophthalmologist. Do not transport the victim until the recommended flushing period is completed, unless a portable emergency eye wash bottle is immediately available.

Skin Contact: Immediately wash skin with soap and plenty of water while removing contaminated clothing, for at least 15-20 minutes. Call a poison control center or doctor for treatment advice. Do not take contaminated clothing home to be laundered. Shoes and other leather items which cannot be decontaminated should be disposed of properly. Suitable emergency safety shower facility should be immediately available.

Inhalation: Remove victim to fresh air. If individual experiences nausea, headache, dizziness, has difficulty in breathing or is cyanotic, seek medical attention. If not breathing, give artificial respiration via a suitable mechanical device such as a bag and mask. Do not use mouth-to-mouth resuscitation.

Ingestion: Do not induce vomiting. Rinse mouth with copious quantities of water first and get immediate medical attention. Drink several glasses of water. Never give anything by mouth to an unconscious person. If vomiting occurs, keep airways clear.

Note to Physician: There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. Aspiration may cause lung damage. Probable mucosal damage may contraindicate the use of gastric lavage.

Most Important Symptoms/Effects:

Eye Contact: May cause irritation. May cause corneal damage with prolonged contact.

Skin Contact: Prolonged contact may cause irritation.

Inhalation: Inhalation of dust may irritate respiratory tract. Large amounts may cause systemic effects, as nitrites are readily absorbed by lung tissue.

Ingestion: May be toxic. Large amounts can result in acute toxic effects: nausea, conversion of hemoglobin to methemoglobin {producing cyanosis (blue skin)}; a marked fall in blood pressure leading to collapse, coma and, possibly death.

Indication of Immediate Medical Attention and Special Treatment, if Necessary:

Other than acute, none known. See section 11 for toxicological information.

5. FIRE FIGHTING MEASURES

Suitable (and Unsuitable) Extinguishing Media: Any media suitable for the surrounding fire. Flood with water. Heavy water jet advantageous.

Specific Hazards Arising from the Chemical: Product may be irritating to the eyes, skin, and respiratory system. Closed containers may rupture (due to buildup of pressure) when exposed to extreme heat. Solid product will melt and combustion may occur when exposed to fire. Thermal decomposition may release oxides of carbon and nitrogen. The dry nitrite is an oxidizing agent and can supply oxygen to stimulate or accelerate the combustion of other combustibles.

Special Protective Equipment and Precautions for Fire-Fighters: Wear self-contained breathing apparatus and full turn-out gear. Approach fire from upwind direction. If possible, move containers away from fire. Cool fire exposed containers with water spray. If containers rupture or leak, product may evolve irritating or toxic gas under extreme heat. Contain runoff.

6. ACCIDENTAL RELEASE MEASURES

Spill Containment and Clean-up Instructions:

Wear suitable protective equipment found in section 8. Collect spilled material into suitable containers and dispose of in accordance with all local, state and federal requirements. The area may then be flushed with copious quantities of water. Floor may be slippery; use care to avoid falling. This product is toxic to aquatic life. Avoid release of this product into the environment to prevent contamination of soil, sewers, natural waterways and/or groundwater. See Section 12 for Ecological Information.

7. HANDLING AND STORAGE

Handling and Storage:

Store in a cool, dry, well ventilated area, between 10°C and 49°C. Keep containers tightly closed when not in use and follow all recommended safety precautions when handling the material. Keep out of sun and away from heat or open flame. Keep away from incompatible materials. See Section 10 for incompatible materials.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering Controls: General ventilation satisfactory. Local exhaust if dusting occurs.

PERSONAL PROTECTION EQUIPMENT

Respiratory: Not normally required unless dusting occurs. Wear NIOSH approved dust respirator

Eyes and Face: Chemical resistant goggles or face shield.

Hands and Skin: Chemical resistant rubber, neoprene latex or PVC

Other Protective Equipment: Eyewash station in area of use. Wear long sleeve shirt, long pants, and boots.

EXPOSURE GUIDELINES

Exposure Limits:

COMPONENT	TLV
N.A.	

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor:	Free flowing, white to off-white granular solid with characteristic odor.		
Odor Threshold:	N.D.	Vapor Pressure:	N.A.
pH (5% solution):	8.5 - 9.5	Vapor Density:	N.A.
Freeze Point:	N.A.	Specific Gravity(@22°C):	1.3 - 1.5 g/cm ³
Boiling Point:	N.A.	Solubility in Water:	<40%
Flash Point:	None	Partition Coefficient:	N.D. (n-octanol/water)
		Auto-Ignition Temperature:	N.D.
Evaporation Rate:	N.A.	Decomposition Temperature:	N.D.
Flammability (solid, gas):	No	Viscosity:	N.A.
Flammable Limits in Air:	LFL – N.A. UFL – N.A.		

10. STABILITY AND REACTIVITY

Reactivity: Not normally reactive at normal temperatures and pressure.

Chemical Stability: Stable under normal conditions

Possibility of Hazardous Reactions: Will not occur under normal conditions.

Conditions to Avoid: Avoid water, excessive heat, sparks or open flames.

Incompatible Materials: Hazardous reactions can occur with acids, ammonium compounds, reducing agents -particularly cyanides, thiocyanates and thiosulfates, certain combustibles and organics. Product decomposes even by weak acids with evolution of brown fumes of N₂O₃.

Hazardous Decomposition Products: Thermal decomposition may release oxides of carbon and nitrogen. The dry nitrite is an oxidizing agent and can supply oxygen to stimulate or accelerate the combustion of other combustibles.

11. TOXICOLOGICAL INFORMATION

Ingestion Testing: Rat, LD50: 98.9 mg/kg*

Skin Testing: None established for this product.

Inhalation Testing: Rat, LC50: 5.40 mg/kg

*Calculated based on GHS acute toxicity formula.

CHRONIC TOXICITY DATA

Sensitization Testing: None established for this product.

Other Testing: None established for this product.

Routes of Exposure: Eyes, Ingestion, Inhalation, Skin.

Eye Contact: May cause irritation. May cause corneal damage with prolonged contact.

Skin Contact: Prolonged contact may cause irritation.

Inhalation: Inhalation of dust may irritate respiratory tract. Large amounts may cause systemic effects, as nitrites are readily absorbed by lung tissue.

Ingestion: May be toxic. Large amounts can result in acute toxic effects: nausea, conversion of hemoglobin to methemoglobin {producing cyanosis (blue skin)}; a marked fall in blood pressure leading to collapse, coma and, possibly death.

Medical Conditions Aggravated by Exposure: Asthma, bronchitis, emphysema and other lung diseases and chronic nose, sinus and throat conditions. Skin irritation may be aggravated in individuals with existing skin disorders.

Chronic Effects from Repeated Overexposure: Other than short term effects, none established.

12. ECOLOGICAL INFORMATION

Aquatic Toxicity Data:

Invertebrate: Ceriodaphnia dubia, LC50/48hr: 14.6 mg/l*

Fish: Rainbow trout, LC50/96hr: 1.10 mg/l*

*Calculated based on GHS acute aquatic toxicity formula.

Product Fate Data: None established for this product.

Biodegradation Data: None established for this product.

13. DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose of in accordance with local, regional, national and international regulations. Contact the Hazardous Waste representative at the nearest EPA Regional Office for guidance. Container Disposal: Triple rinse container (or equivalent) promptly after emptying and offer for reconditioning if appropriate. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal.

14. TRANSPORT INFORMATION

US DEPARTMENT OF TRANSPORTATION (DOT) INFORMATION

UN/NA ID Number: UN3087

Proper Shipping Name: OXIDIZING SOLID, TOXIC, N.O.S. (CONTAINS SODIUM NITRITE)

Hazard Class: 5.1(6.1)

Packing Group: PGIII

VESSEL TRANSPORT (IMO/IMDG)

UN/NA ID Number: UN3087

Proper Shipping Name: OXIDIZING SOLID, TOXIC, N.O.S. (CONTAINS SODIUM NITRITE)

Hazard Class: 5.1(6.1)

Packing Group: PGIII

Marine Pollutant: Yes

15. REGULATORY INFORMATION

US FEDERAL REGULATIONS

TSCA: All ingredients listed or exempt from listing.

CERCLA and/or SARA RQ:

Reportable Quantity: SODIUM NITRITE (CAS#7632-00-0) - 100lbs. (45 kg)

SARA Section 302 Hazard Class: No ingredients listed in this section.

SARA Section 311/312 Chemicals:

Acute Health Hazard: Yes

Chronic Health Hazard: No

Fire Hazard: Yes

Sudden Release of Pressure Hazard: No

Reactive Hazard: Yes

SARA Section 313 Chemicals: No ingredients listed in this section.

STATE REGULATIONS

This product does not contain any ingredients known to the State of California to cause cancer.

16. OTHER INFORMATION

HAZARD RATING SUMMARY

Hazard Rating System:	NFPA	CODE TRANSLATION
Health:	2	0 = Minimal Hazard
Flammability:	0	1 = Slight Hazard
Reactivity:	1	2 = Moderate Hazard
Special:	OX	3 = Severe Hazard
		4 = Extreme Hazard

Other Precautions: This product has been designed for use in specific types of cooling and heating water circuits and should be used only in accordance with the instructions provided by the technical representative servicing the facility. It may not be used for the treatment of potable water.

SDS REVISION SUMMARY

Revised Date	Revision Notes
8/19/15	GHS Version 1.0: New Product

ABBREVIATION CODE SUMMARY

- N.A. – Not Applicable
- N/A – Not Available
- N.D. – Not Determined
- N.E. – None Established

Disclaimer: The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given.