

# SAFETY DATA SHEET

## 1. Chemical Product and Company Identification

Product Name: **TubeGuard-BLRX**  
A Boiler Corrosion Inhibitor

Date: February 20, 2014

Distributor Identification:

Goodway Technologies Corp  
420 West Ave  
Stamford, CT 06902

Contact Information:

1-800-424-9300 (For Emergencies – CHEMTREC)  
1-800-243-7932 (For product information)

## 2. Hazards Identification

### EMERGENCY OVERVIEW

**DANGER: STRONG OXIDIZER. CONTACT WITH OTHER MATERIAL MAY CAUSE A FIRE. HARMFUL IF SWALLOWED. CAUSES EYE, SKIN, AND RESPIRATORY TRACT IRRITATION. MAY CAUSE METHEMOGLOBINEMIA. MAY CAUSE ADVERSE REPRODUCTIVE AND FETAL EFFECTS IN ANIMALS.**

**TARGET ORGANS:** Blood, cardiovascular system, smooth muscle.

**Do not get in eyes, on skin, or on clothing. Do not breathe vapor or mist. Keep container tightly closed. Wash thoroughly after handling. Use only with adequate ventilation. Avoid contact with heat, reducing agents, organic materials.**

### POTENTIAL HEALTH EFFECTS

**EYES:** Causes eye irritation. May cause conjunctivitis. May cause permanent corneal opacification.

**SKIN:** Causes skin irritation.

**INGESTION:** Harmful if swallowed. May cause methemoglobinemia, cyanosis (blush discoloration of skin due to deficient oxygenation of the blood), convulsions, and death. Causes digestive tract irritation. Ingestion may cause weakness, muscular incoordination, fine tremors, loss of reflexes, convulsions and possible death from circulatory collapse. Ingestion may cause a decrease in blood pressure, rapid pulse and visual disturbances.

**INHALATION:** May be fatal if inhaled. May cause methemoglobinemia, cyanosis (blush discoloration of the skin due to deficient oxygenation of the blood), convulsions, tachycardia, dyspnea (labored breathing), and death.

**CHRONIC:** May cause reproductive and fetal effects. Sodium nitrite may react with secondary or tertiary amines to form nitrosamines (certain nitrosamines are cancer suspect agents).

**GENERAL INFORMATION:** Read the entire SDS for a more thorough evaluation of the hazards.

## 3. Composition/Information on Ingredients

INGREDIENT(S)	CAS Number	Weight %
Sodium Nitrite	7632-00-0	60-70
Sodium Tetraborate	1303-96-4	1-5

## 4. First Aid Measures

**EYE CONTACT:** Get medical attention immediately. . Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. After 15 minutes check for and remove any contact lenses. Continue to rinse for at least 15 minutes.

**SKIN CONTACT:** Get medical attention immediately. Wash with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 15 minutes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Destroy contaminated shoes.

**INHALATION:** Get medical aid immediately. Remove from exposure and move to fresh air immediately and keep in position comfortable for breathing. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

**INGESTION:** Get medical attention immediately. Do NOT induce vomiting. If victim is conscious and alert, wash out mouth with water then give water. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep airway clear.

**NOTES TO PHYSICIAN:** Absorption of sodium nitrite into the body leads to the formation methemoglobin which, in sufficient concentration causes cyanosis.

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## 5. Fire Fighting Measures

**NOTE:** Solid product. Product will melt and may intensify fire.

**General information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. May react with reducing agents.

**Extinguishing Media:** Use agents appropriate for surrounding fire such as water spray or foam. Do NOT use straight streams of water.

## 6. Accidental Release Measures

**IN CASE OF SPILL OR OTHER RELEASE:** Remove sources of ignition. Ventilate area. Use appropriate personal protective equipment as indicated in Section 8 of the SDS when risk assessment indicates this is necessary. Use non-sparking tools and equipment. Keep away from combustible materials such as paper or wood. Sweep or shovel spilled materials into suitable containers. Dispose of in accordance with all local, state and federal requirements. Do not allow product or residues to enter waterway or any source of drinking water.

## 7. Handling and Storage

**HANDLING:** Use appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Keep in the original container. Store and use away from heat, sparks, open flame or any other ignition source. Do not reuse container.

**STORAGE:** Store in accordance with local regulations. Store in a segregated and approved area. Do not store on wooden floors. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Separate from reducing materials and acids. Keep container tightly closed and sealed until ready for use.

## 8. Exposure Controls / Personal Protection

**ENGINEERING CONTROLS:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower (ANSI Z358.1). Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.

COMPONENT	CAS NUMBER	ACGIH TWA	ACGIH STEL	ACGIH CEILING	OSHA FINAL PEL TWA	IDLH
Sodium Tetraborate	1303-96-4	2mg/m <sup>3</sup>	6mg/m <sup>3</sup>	-	10mg/m <sup>3</sup>	-

## PERSONAL PROTECTIVE EQUIPMENT

**Eyes:** Wear chemical splash goggles that meet the requirements of 29 CFR 1910.133 or European Standard EN 166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure(29CFR1910.138 or EN 374).

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

## 9. Physical and Chemical Properties

**FORM:** Solid

**ODOR:** Mild

**COLOR:** Tan to brown

**pH:** ~9.5@1%

**SOLUBILITY IN WATER:** Complete over time in water

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## 10. Stability and Reactivity

**STABILITY:** The product is stable under normal conditions of storage and use. Sodium nitrite slowly oxidizes to sodium nitrate when exposed to air.

**INCOMPATIBILITY WITH VARIOUS SUBSTANCES:** Reactive or incompatible with the following materials: reducing materials, acids, ammonium salts, organic matter, amines, cyanides, chlorates.

**HAZARDOUS POLYMERIZATION:** Under normal conditions of storage and use, hazardous polymerization will not occur.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Decomposition products may include the following materials: carbon dioxide, carbon monoxide, sodium oxide, oxides of nitrogen (toxic and irritating).

## 11 Toxicological Information

**TOXICITY:** No Data Available For Product

### Carcinogenicity

Product/Ingredient Name	ACGIH	IARC	NTP
	-	-	-

## 12. Ecological Information

**ENVIRONMENTAL INFORMATION:** No Data Available For Product.

## 13. Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. U.S. EPA guidelines for the classifications are listed in 40CFR 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

## 14. Transportation Information

**U.S. DOT Bill of Lading Description:** UN 3087, Oxidizing solid, toxic, n.o.s. (sodium nitrite) 5.1(6.1),III

## 15. Regulatory Information

### INTERNATIONAL INVENTORIES

All components of this product are listed on the following inventories: U.S.A. (TSCA), Canada (DSL).

### U.S. REGULATIONS

**CALIFORNIA PROPOSITION 65:** None of the components of this product are listed.

### STATE RIGHT TO KNOW (RTK)

INGREDIENT(S)	CAS#	MA	NJ	PA	MN
Sodium Nitrite	7632-00-0	X	X	X	-
Sodium Tetraborate	1303-96-4	X	X	X	-

### CERCLA/SARA 302

INGREDIENT(S)	CAS#	Weight %	CERCLA/SARA RQ (lbs)	Section 302 TPQ (lbs)	Section 313
Sodium Nitrite	7632-00-0	60-70	100	-	-

### SARA 311/312 Hazard Categories

<b>Immediate:</b>	<b>X</b>
<b>Delayed:</b>	<b>X</b>
<b>Fire:</b>	<b>-</b>
<b>Reactivity:</b>	<b>X</b>
<b>Sudden Release of Pressure:</b>	<b>-</b>

### SARA 313:

This material contains sodium nitrite (CAS 7632-00-0), which is subject to the reporting requirements of SARA 313 title III and 40CFR Part 373.

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## Clean Air Act:

This material does not contain any hazardous air pollutants.

## Clean Water Act:

COMPONENT(S)	HAZARDOUS SUBSTANCE	REPORTABLE QUANTITIES	TOXIC POLLUTANTS	PRIORITY POLLUTANTS
Sodium Nitrite	YES	100 lbs.	-	-

## European/International Regulations

### European Labeling in Accordance with EC Directives

#### Hazard Symbols:

O T N

#### Risk Phrases:

R 25 Toxic if swallowed.  
R 8 Contact with combustible material may cause fire.  
R 50 Very toxic to aquatic organisms.

#### Safety Phrases:

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

#### WMHIS (Canada)

Class C: Oxidizing material  
Class D-1B: Material causing immediate and serious toxic effects (Toxic).  
Class D-2B: Material causing other toxic effects.



## 16. Other Information

### Hazardous Material

#### Information System (U.S.A.)

Health: 3

Flammability: 0

Reactivity: 1

### National Fire Protection

#### Association (U.S.A.)

Health: 3

Flammability: 0

Reactivity: 1

**HMIS and NFPA use a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of 0 means that the substance possesses essentially no hazard; a rating of 4 indicates high hazard.**

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Goodway Technologies Corp. be liable for any claims, losses, or damages of any third party or for lost profits or any special, incidental consequential or exemplary damages, howsoever arising, even if Goodway Technologies Corp. has been advised of the possibility of such damages.*