

Material Safety Data Sheet

BWT-323



Date: 21-Nov-2012

Replaces: 01/08

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: BWT-323

Emergency Response No. (800) 255-3924 (Chemtel)

Manufacturer: U.S. Water Services
330 South Cleveland St
Cambridge, MN 55008

Section 2 - Composition/Information on Ingredients

<u>Ingredient Name</u>	<u>CAS Number</u>	<u>% wt</u>	<u>NIOSH REL</u>	<u>Other</u>
Potassium Hydroxide	1310-58-3	< 2	Ceiling 2 mg/m ³	None
Sodium Silicate	1344-09-8	< 5	Not Established	None
Sodium Borate	16800-11-6	< 5	Not established	None
Sodium Nitrite	7632-00-0	< 15	Not established	None
Tolyltriazole	6466-55-72	< 3	Not established	None
Water	7732-18-5	> 70	Not established	None

Section 3 - Hazards Identification

+ + + + Emergency Overview + + + +

HMIS	
H	2
F	1
R	1
PPE	C
+Sec.8	

Potential Health Effects

Primary Entry Routes: Eye, Skin contact, Respiratory.

Acute Effects: Eye contact causes moderate to severe irritation. May cause corneal injury. Large amounts inhaled may cause systemic effects as nitrites are readily absorbed by lung tissue. Ingestion of large amounts may cause nausea, vomiting, cyanosis, convulsions and coma.

Inhalation: Large amounts inhaled may cause systemic effects as nitrites are readily absorbed by lung tissue.

Eye: Eye contact causes moderate to severe irritation. May cause corneal injury

Skin: Material may cause irritation to the skin on prolonged contact.

Ingestion: Ingestion of large amounts may cause nausea, vomiting, cyanosis, convulsions and coma.

Carcinogenicity: IARC, NTP, and OSHA do not list this product or its components as a carcinogen.

Medical Conditions Aggravated by Long-term Exposure: None known.

Chronic Effects: Repeated inhalation (depending on severity of exposure) contact to caustics may result in lung impairment. Continual exposure to nitrites may cause headaches, visual problems, and decreased blood pressure.

Section 4 - First Aid Measures

Inhalation: Remove from contamination. If person has stopped breathing give artificial respiration. Seek medical attention.

Eye Contact: Flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention.

Skin Contact: Wash thoroughly with soap and water. Remove contaminated garments and wash or destroy.

Ingestion: If conscious, give plenty of water. Get medical attention.

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Section 5 - Fire-Fighting Measures

Flash Point: Nonflammable

Flash Point Method: Pensky-Martens closed cup.

Burning Rate: Not applicable

Auto-ignition Temperature: Does not burn.

LEL: Not established

UEL: Not established

Extinguishing Media: Material is not combustible. Use extinguishing media appropriate to surrounding materials.

Unusual Fire or Explosion Hazards: Product may supply oxygen to stimulate or accelerate the combustion of organic or other combustible material.

Hazardous Combustion Products: See Section 10.

Fire-Fighting Instructions: Cool containers/exposed structures with water spray.

Fire-Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full-face piece operated in pressure-demand or positive-pressure mode.

Section 6 - Accidental Release Measures

Spill/Leak Procedures: Wear appropriate protective gear. Contain spill or leak. Collect for disposal.

Small Spills: Dike area to prevent spill from spreading. Absorb with an inert material and place used absorbent into closed container for disposal. Keep out of sewers and waterways.

Large Spills: Follow all Federal, State and local regulations

Containment: Dike area to prevent spill from spreading. Absorb with an inert material and place used absorbent into closed container for disposal. Keep out of sewers and waterways.

Cleanup: Dispose of according to federal, state and local regulations. Sodium nitrite is EPA ignitable waste D001. Containers with less than 1" of residue may be land filled at a licensed facility.

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120)

Section 7 - Handling and Storage

Handling Precautions: Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Do not inhale mists. Use with adequate ventilation. For Industrial use only!

Storage Requirements: KEEP OUT OF REACH OF CHILDREN. Store in closed container away from incompatible materials, heat and sources of ignition.

Regulatory Requirements: Store materials according to all local, state and federal guidelines that are established for corrosive materials.

Section 8 - Exposure Controls/Personal Protection

Engineering Controls: No recommendations

Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

Administrative Controls: No recommendations

Respiratory Protection: Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or non-routine operations (cleaning spills, reactor vessel, or storage tanks), wear an SCBA. *Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.* If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Protective Clothing/Equipment: Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye-and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

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

Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

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

Section – 9 Physical and Chemical Properties

Physical State: Liquid

Appearance and Odor: Light to yellow liquid, no appreciable odor.

Vapor Pressure: Same as water

Vapor Density (Air=1): Same as water

Specific Gravity (H₂O=1, at 4°C): 9.41 lb/gal

PH: 12 to 13

Water Solubility: Complete

Other Solubilities: Not tested for the blend

Boiling Point: Not determined

Freezing/Melting Point: Not determined

% Volatile: Not determined

Evaporation Rate: Not determined

Section 10 - Stability and Reactivity

Stability: Product stable under normal use conditions and temperatures.

Polymerization: Hazardous polymerization will not occur.

Chemical Incompatibilities: Strong oxidizing agents, strong alkalis, strong acids. Secondary and tertiary amines. Cyanide.

Conditions to Avoid: Keep container closed when not in use.

Hazardous Decomposition Products: Decomposes above 320 degrees C and releases toxic nitrogen oxide gases and oxygen. Burning may produce carbon monoxide, carbon dioxide, or other toxic by products.

Section 11 - Toxicological Information

Acute Toxicity

See Section 3

Chronic Effects: See Section 3

Carcinogenicity: No carcinogenic effects are known to be applicable for the formulation components of this product.

Mutagenicity: No mutagenic effects are known to be applicable for the formulation components of this product.

Teratogenicity: No teratogenic effects are known to be applicable for the formulation components of this product.

**See NIOSH, RTECS, for additional toxicity data.

Section 12 - Ecological Information

Eco-toxicity: No specific data is available on this product. However, for the chemical components which make up this product, there may be specific data available and in the public domain. Consult the data available for each individual raw material component.

Environmental Fate: Ground and/or water

Environmental Degradation: No information available

Soil Absorption/Mobility: No studies have been conducted for this blend

Section 13 - Disposal Considerations

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Disposal: Review federal, state and local government requirements prior to disposal.

Disposal Regulatory Requirements: Follow all Federal, State and local regulations.

Container Cleaning and Disposal: Review federal, state and local government requirements prior to disposal.

Section 14 - Transport Information

DOT Transportation Data (49 CFR 172.101):

Shipping Name: Corrosive Liquid N.O.S. (Contains: Potassium Hydroxide, Sodium Nitrite)

Hazard Class: 8

ID No.: UN1760 PG III

Label Code: Corrosive

HMIS Label Code: 211C

Shipping Notations: None

Section 15 - Regulatory Information

EPA Regulations:

RCRA Hazardous Waste Classification (40 CFR 261.): Corrosivity

RCRA Hazardous Waste Number (40 CFR 261.33): D002

CERCLA Reportable Quantity (RQ): 800 lbs

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

Sodium Nitrite CAS# 7632-00-0 Percent: 12.00

Potassium Hydroxide CAS# 1310-58-3 Percent: 1.8

SARA TITLE III-TOXIC CHEMICAL LIST: This product contains the following toxic chemicals subject to routine annual toxic chemical release reporting.

Sodium Nitrite CAS# 7632-00-0 Percent: 12.00

SARA TITLE III-EXTREMELY HAZARDOUS SUBSTANCE: This product does not contain any of the extremely hazardous listed substances subject to the emergency planning requirements.

Section 16 - Other Information

Prepared By: D Erickson, Director R&D

Revision Notes:

Additional Hazard Rating Systems:

Disclaimer:

USER'S RESPONSIBILITY

The information and recommendations contained herein cannot cover all possible situations which the user may experience during processing. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees or customers. It is your responsibility to use this information to develop appropriate work practice guidelines and employee instructional programs for your operation.

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