

Safety Data Sheet

FORMULA 1232

1. IDENTIFICATION

Product Name: FORMULA 1232 **Revised:** 10/30/14
Chemical Name: Not Applicable
Description: Clear colorless liquid with characteristic odor.
Recommended Use: Boiler Water Treatment
Restrictions on Use: For industrial use only. Not for use in treating drinking water

COMPANY IDENTIFICATION

B & L CONTROL SERVICE, INC.
1448 SARATOGA ROAD
BALLSTON SPA, NY 12020

PHONE NUMBER: (518) 273-0500

EMERGENCY PHONE NUMBERS

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

2. HAZARD(S) IDENTIFICATION

GHS Classification:

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 4
Hazardous to the aquatic environment, acute hazard - Category 1

Signal Word: Warning

Symbol(s):



Hazard Statements:

Causes serious eye irritation
Causes skin irritation
May cause damage to digestive system if swallowed
May cause damage to respiratory system if inhaled
Harmful if swallowed
Very toxic to aquatic life

Precautionary Statements:

Prevention

Keep container tightly closed. Keep only in original container. 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 eye protection and protective industrial rubber gloves. When conditions warrant use, add face shield, apron, and/or rubber boots.

Response

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CONTROL CENTER or doctor for treatment advice.

IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice or attention. Specific treatment (see First Aid on SDS or on this label).

Take off contaminated clothing and wash it before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CONTROL CENTER or doctor for treatment advice.

If eye irritation persists: Get medical advice/attention.

IF exposed or concerned: Call a POISON CONTROL CENTER or doctor for treatment advice.
 Call a POISON CONTROL CENTER or doctor for treatment advice if you feel unwell.
 Collect spillage.

Storage
 Store in a secure manner.

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

Hazards Not Otherwise Classified: None Known.

Percentages of Components with Unknown Acute Toxicity:

Dermal: 6%
 Inhalation: 6%

3. COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL INGREDIENTS	CAS NO.*	PERCENT (%)**
A. Hazardous Ingredients		
SODIUM NITRITE	7632-00-0	1% - 11%
POTASSIUM HYDROXIDE	1310-58-3	< 5%
B. Other Ingredients		
2-PROPENOIC ACID, POLYMER WITH SODIUM PHOSPHINATE		71050-62-9 L
ETHYLENEDIAMINETETRAACETATE ESTER	64-02-8	L
ACRYLIC TERPOLYMER		L
HYDROXYETHYLIDENE DIPHOSPHONIC ACID	2809-21-4	L

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 with clean, cool water for 15 minutes and if irritation persists, get medical attention.

Skin Contact: Immediately wash skin with soap and plenty of water while removing contaminated clothing, for at least 15 minutes. If irritation persists, get medical attention. Launder contaminated clothing before reuse.

Inhalation: No adverse effects anticipated by this route of exposure. If effects occur, remove patient to fresh air and give artificial respiration via a suitable mechanical device such as a bag and mask if required and get medical attention. 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 severe irritation. Prolonged contact may cause irreversible damage and/or blindness. Vapor may cause eye irritation experienced as mild discomfort and redness.

Skin Contact: Prolonged contact may cause irritation.

Inhalation: Inhalation of mist may be irritating; a stinging sensation may be experienced. May cause damage to the upper respiratory tract and lungs under severe conditions.

Ingestion: May be toxic. May cause severe irritation to internal tissues. Large amounts can result in acute toxic effects which may be fatal.

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: 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. If evaporated to dryness, some product residuals may burn. 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. Small spills may be flushed with copious quantities of water, preferably to a sanitary sewer or waste treatment facility. Larger spills should be diked to prevent runoff and then absorbed in sand or other inert absorbent for disposal. The area may then be flushed with copious quantities of water. Floor may be slippery; use care to avoid falling. 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 expected to be satisfactory

PERSONAL PROTECTION EQUIPMENT

Respiratory: Not normally required.

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
POTASSIUM HYDROXIDE	2mg/m ³ /15M

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor:	Clear colorless liquid with characteristic odor.		
Odor Threshold:	N.D.	Vapor Pressure:	N.A.
pH (undiluted):	11.4 - 11.9	Vapor Density:	<1
Freeze Point:	<-4°C (24°F)	Specific Gravity(@22°C):	1.035 - 1.045
Boiling Point:	>100°C (212°F)	Solubility in Water:	Complete
Flash Point:	None	Partition Coefficient:	N.D. (n-octanol/water)
		Auto-Ignition Temperature:	N.D.
Evaporation Rate:	1.0	Decomposition Temperature:	N.D.
Flammability (solid, gas):	No	Viscosity:	N.D.
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 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.

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: 1512 mg/kg*

Skin Testing: None established for this product.

Inhalation Testing: None established for this product.

*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 severe irritation. Prolonged contact may cause irreversible damage and/or blindness. Vapor may cause eye irritation experienced as mild discomfort and redness.

Skin Contact: Prolonged contact may cause irritation.

Inhalation: Inhalation of mist may be irritating; a stinging sensation may be experienced. May cause damage to the upper respiratory tract and lungs under severe conditions.

Ingestion: May be toxic. May cause severe irritation to internal tissues. Large amounts can result in acute toxic effects which may be fatal.

Medical Conditions Aggravated by Exposure: None known.

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

12. ECOLOGICAL INFORMATION

Aquatic Toxicity Data:

Invertebrate: Daphnia magna, EC50/48hr: 0.05 mg/l*

Fish: Rainbow trout, LC50/96hr: 3.32 ppm*

*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

NOT REGULATED

VESSEL TRANSPORT (IMO/IMDG)

NOT REGULATED

15. REGULATORY INFORMATION

US FEDERAL REGULATIONS

TSCA: All ingredients listed or exempt from listing.

CERCLA and/or SARA RQ: No ingredients listed in this section.

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: No

Sudden Release of Pressure Hazard: No

Reactive Hazard: No

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
Health: 1
Flammability: 0
Reactivity: 1
Special:

CODE TRANSLATION
0 = Minimal Hazard
1 = Slight Hazard
2 = Moderate Hazard
3 = Severe Hazard
4 = Extreme Hazard

Other Precautions: This product has been designed for use in specific types of hot water heating and low pressure steam heating boiler systems. It 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. The product is not approved for use in boilers where steam can contact food or other edible products.

MSDS REVISION SUMMARY

Revised Date	Revision Notes
10/30/14	GHS Version 1.0: Supersedes: 10/30/2013

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.