



Safety Data Sheet

Return Line Treatment BAN8672

Section 1 Identification

Trade Name: Return Line Treatment BAN8672 **Date Prepared:** 02/10/2016
Product Identification: GLA-BAN8672
Synonyms: None **CAS No:** Mixture

Product Use Description:
Industrial Boiler Treatment

Details of the supplier of the safety data sheet

G.L.A Water Inc.
17802 Rapids Road
HIRAM, OH 44234 US

Phone: (440) 834-8435

website: www.glawater.com

Emergency telephone number

Infotrac (800) 535-5053 (US & Canada)
(352) 323-3500

Section 2 Hazards Identification

GHS Classification: Flammable Liquid Category 3
Skin Corrosion/Irritation Category 1
Serious Eye Damage/Irritation Category 1
Reproductive Toxicity Category 2

GHS label elements:



Health Hazard Corrosive Flammable

Signal Word: Danger

Hazard Statements:

- H226** Flammable liquid and vapour
- H314** Causes severe skin burns and eye damage
- H318** Causes serious eye damage
- H361** Suspected of damaging fertility or the unborn child

Precautionary Statements:

Prevention

- P201** Obtain special instructions before use.
- P202** Do not handle until all safety precautions have been read and understood.
- P210** Keep away from heat, sparks and open flames. No smoking.
- P233** Keep container tightly closed.
- P240** Ground/bond container and receiving equipment.
- P241** Use explosion-proof electrical equipment.
- P242** Use only non-sparking tools.
- P243** Take precautionary measures against static discharge.
- P260** Do not breathe mist or vapours.
- P264** Wash skin thoroughly after handling.
- P280** Wear protective gloves, protective clothing and eye protection and/or face protection.



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Response

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Remove Immediately all contaminated clothing. Rinse SKIN with water.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or physician.

P362 + P364 Take off contaminated clothing and wash before reuse

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

Disposal

P501 Dispose of contents/container to an approved waste disposal plant.

Hazards Not Otherwise Classified (HNOC):

None.

Additional Information:

None.

Section 3 Composition

Chemical Name	Common name and synonyms	CAS #	%
cyclohexylamine		108-91-8	10 - 15
morpholine		110-91-8	10 - 15

Section 4 First Aid

General:

Move out of dangerous area. Perform first aid measures as indicated. Seek medical attention and show this safety data sheet to attending physician.

Inhalation:

Move to fresh air and keep at rest in a position comfortable for breathing. If breathing difficulty occurs or persists seek medical attention. If not breathing give artificial respiration and seek immediate medical attention.

Skin contact:

Immediately flush exposed skin with water for at least 15 minutes while removing contaminated clothing and/or shoes. Thoroughly wash with soap and water. Seek medical attention if irritation develops or persists.

Eye contact:

Immediately flush eyes with water for at least 15 minutes, lifting the upper and lower eyelids intermittently. Check for and remove any contact lenses if easy to do. Seek immediate medical attention.

Ingestion:

Rinse mouth with water. Do not induce vomiting. Seek immediate medical attention.

Most important symptoms and effects both acute and delayed:

No information available.

Indication of any immediate medical attention and special treatment needed:

No information available.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media:

Use alcohol foam, carbon dioxide, dry chemical or water spray. Use water spray to cool fire exposed containers.

Unsuitable Extinguishing Media:



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No information available.

Specific hazards developing from the chemical:

In fire conditions after water loss, combustion may produce carbon monoxide, carbon dioxide and other unidentified combustion products.

Precautions for firefighters:

No information available.

Firefighting Instructions:

No information available.

Protection During Firefighting:

Wear full protective gear and full face pressure demand self-contained breathing apparatus.

Other information:

No additional information available.

Section 6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Avoid direct contact with skin, eyes and clothing. Avoid inhalation of mist, vapor or dust. Wear appropriate personal protective equipment as outlined in Section 8 of this SDS.

Environmental precautions:

Prevent further leakage or spillage if safe to do so. Contain spilled material and prevent run-off onto ground or into water sources or sewers. Remove or eliminate all sources of ignition.

Methods and material for containment and cleaning up:

Absorb on inert material and place in containers for disposal. Dispose of spilled/collected material in accordance with all federal, state and local regulations.

Section 7 Handling and Storage

Precautions for safe handling:

Avoid contact with skin and eyes. Avoid inhalation of mist, vapor and dust. Ensure adequate ventilation. Do not eat, drink or smoke while handling. Wear appropriate personal protective equipment as outlined in Section 8 of this SDS.

Conditions for safe storage, including any incompatibilities:

Store in original container. Keep container tightly closed. Store at room temperature (50-90 F) in a dry well-ventilated area.

Section 8 Exposure Controls/Personal Protection

Exposure limits:

Ingredient	Data Source	Exposure Form	Exposure Value	Exposure Notes
cyclohexylamine	NIOSH		10 ppm	
morpholine	ACGIH TLV	TWA	20 ppm	
	NIOSH REL	TWA	20 ppm	
	OSHA PO	TWA	20 ppm	
	OSHA Z-1	TWA	20 ppm	

Appropriate Engineering Controls:

Use explosion proof electrical equipment, non-sparking tools and ground all containers while handling this product.

Individual protection measures:

Eye/face protection:

Chemical goggles or face shield should be worn when handling this material.

Skin protection:

Hand Protection:

Wear chemical resistant gloves when handling.

Other:

Wear chemical resistant apron when handling.

Respiratory Protection:

Wear respiratory protection while using this material.



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General hygiene considerations:

Follow good hygiene and safety practice. Wash hands and exposed skin before breaks and at the end of the work day. Do not eat, drink or smoke while handling this material. Do not wear contaminated or dirty clothing home from the work-site. Launder contaminated or dirty clothing before reuse.

Additional information:

No additional information available.

Section 9 Physical and Chemical Properties

Appearance	Colorless Liquid
Odor	Amine
Odor threshold	Not available.
pH	11
Melting/freezing point	Not available.
Initial boiling point	Not available.
Flash point	130°F (54°C) TCC
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Lower flammability limit	Not available.
Upper flammability limit	Not available.
Lower explosive limit	Not available.
Upper explosive limit	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility in water	Complete
PC: n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Density	Not available.
Specific gravity	0.99

Section 10 Stability and Reactivity

Reactivity :	Not reactive under normal use conditions.
Chemical stability :	Material is stable under normal handling and storage conditions.
Hazardous reactions :	Hazardous polymerization will not occur under normal handling and storage.
Conditions to avoid :	Avoid temperatures above 100°F (38°C). Avoid sources of ignition.
Decomposition products:	No decomposition products are expected under normal storage and handling conditions.
Incompatible materials:	Avoid contact with oxidizers and strong bases.

Section 11 Toxicological Information

Information on the likely routes of exposure:

Inhalation:

This material may cause respiratory irritation.

Skin Contact:

This material is corrosive and can cause severe irritation and burns.

Eye Contact:

This material is irritating and corrosive to the eyes and can cause serious injury and perminate eye damage.

Ingestion:

May cause burns of the gastrointestinal tract.

Symptoms related to the physical, chemical and toxicological characteristics:

No information available.

Delayed and chronic effects:



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No information available.

Numerical measures of toxicity:

Components	Exposure	Species	Dose	Notes
cyclohexylamine:				
Oral	LD50	Rat	432 mg/kg	
Dermal	LD50	Rabbit	275 mg/kg	
Inhalation	LC50	Rat	700 mg/l	4 hr
morpholine:				
Oral			500 mg/kg	By Calculation
Dermal			1091 mg/kg	By Calculation
Inhalation			11,313 mg/l	By Calculation

Toxicological effects:

Acute Toxicity:

Mixture:

No information available.

Skin Corrosion/Irritation:

Mixture:

Corrosive to skin.

Serious Eye Damage/Irritation:

Mixture:

Corrosive to the eyes.

Respiratory sensitization:

Mixture:

No information available.

Skin sensitization:

Mixture:

No information available.

Germ cell mutagenicity:

Mixture:

No information available.

Carcinogenicity:

Mixture:

This product is considered to be a potential carcinogen by:

NTP: No

OSHA: No

IARC: No

Reproductive toxicity:

Mixture:

This product is known to cause reproductive and developmental effects.

STOT-single exposure:

Mixture:

No information available.

STOT-repeated exposure:

Mixture:

No information available.

Aspiration hazard:

Mixture:

This product is not an aspiration hazard.

Additional information:

None.

Section 12 Ecological Information

Ecotoxicity:

No information available.

Numerical measures of ecotoxicity:

Components	Type	Species	Dose	Notes
cyclohexylamine:				
Fish	LC50	Fresh Water	19 mg/l	14 days



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Invertebrate	EC50	Daphnia magna	36.3 mg/l	48 hr
Algae	EC50	Selenastrum capricornutum	29.3 mg/l	72 hr
morpholine:				
Fish	LC50	Rainbow Trout	180 mg/l	96 hr
Invertebrate	EC50	Daphnia magna	100 mg/l	48 hr
Algae	EC50	Green Algae	>310 mg/l	72 hr

Persistence and degradability:

Mixture:
No information available.

Bioaccumulative potential:

Mixture:
No information available.

Mobility in soil:

Mixture:
No information available.

Other adverse effects:

Mixture:
No information available.

Additional information:

No information available.

Section 13 Disposal Considerations

Disposal instructions:

Dispose of material in accordance with all federal, state and local regulations.

Contaminated packaging:

Triple rinse container and offer for recycling. Dispose of container following all federal, state and local regulations.

Additional Information:

No additional information available.

Section 14 Transport Information

DOT:

Not classified.

Section 15 Regulatory Information

Federal regulations:

SARA 311/312 Hazard categories:

Immediate (Acute) Health Hazard
Immediate (Acute) Health Hazard
Fire Hazard
Fire Hazard

SARA 302 Extremely hazardous substance:

Not listed.

SARA 304 Emergency release notification:

Not regulated.

SARA 311/312 Hazardous chemical:

No

SARA 313 Toxic Release Inventory (TRI) report:

Not regulated.

CERCLA Hazardous substance list:

Not Listed.

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA):

This chemical is not a pesticide product.

Clean Air Act regulated substances:

Volatile Organic Compounds (VOCs) in SOCM1:



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morpholine

Clean Water Act regulated substances:

None.

U.S. state regulations:

California RTK Substances

cyclohexylamine Listed.

Massachusetts RTK Substances

cyclohexylamine Listed.
morpholine Reportable Quantity: >90%

New Jersey RTK Substances

morpholine Reportable Quantity: >90%

New Jersey RTK Substances

cyclohexylamine Listed.

Pennsylvania RTK Substance

cyclohexylamine Listed.
morpholine Reportable Quantity: >90%

Canadian regulations:

Canadian Ingredient Disclosure List substances:

None listed.

WHMIS classification:

cyclohexylamine

Class B-2

Class E

Section 16 Other Information

HMIS hazard ID:



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; *-Chronic health effect

NFPA hazard ID:

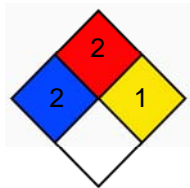
Flamability:



Health:

Reactivity:

Special hazard:



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

Disclaimer:

This Manufacturer believes that the information contained in the Safety Data Sheet is accurate. The suggested procedures are based on experience as of the date of the publication. They are not necessarily all inclusive nor fully adequate in every circumstance. Also, the suggestions should not be confused with, nor followed in violation of applicable laws, regulations, rules or insurance requirements.

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