



Safety Data Sheet

Return Line Treatment BAN-8689

Section 1 Identification

Trade Name: Return Line Treatment BAN-8689 **Date Prepared:** 02/22/2016
Product Identification: GLA-BAN8689
Synonyms: None **CAS No:** Mixture

Product Use Description:
Industrial Water Treatment/Corrosion Inhibitor

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
Acute Toxicity Oral Category 4
Acute Toxicity Dermal Category 3
Skin Corrosion/Irritation Category 1
Serious Eye Damage/Irritation Category 1
Reproductive Toxicity Category 2
Aquatic Toxicity Category 3

GHS label elements:



Irritant Health Hazard Corrosive Toxic Flammable

Signal Word: Danger

Hazard Statements:

- H226** Flammable liquid and vapour
- H302** Harmful if swallowed
- H311** Toxic in contact with skin
- H314** Causes severe skin burns and eye damage
- H318** Causes serious eye damage
- H361** Suspected of damaging fertility or the unborn child
- H402** Harmful to aquatic life

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, open flames and hot surfaces. No smoking.
- P233** Keep container tightly closed.
- P240** Ground container and receiving equipment.



Safety Data Sheet

Return Line Treatment BAN-8689

- P241** Use explosion-proof 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.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P280 Wear protective gloves, protective clothing, eye protection or face protection.

Response

- P301 + P312** IF SWALLOWED: call a POISON CENTER or physician IF you feel unwell.
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.
P363 Wash contaminated clothing 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	40 - 45
morpholine		110-91-8	40 - 45

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. 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.



Safety Data Sheet

Return Line Treatment BAN-8689

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:

No information available.

Specific hazards developing from the chemical:

Combustion may produce oxides of nitrogen, carbon monoxide, carbon dioxide and other unidentified organic compounds.

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.



Safety Data Sheet

Return Line Treatment BAN-8689

Individual protection measures:

Eye/face protection:

Safety glasses or chemical goggles 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.

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	Light Yellow Liquid
Odor	Strong Amine
Odor threshold	Not available.
pH	11.8
Melting/freezing point	Not available.
Initial boiling point	Not available.
Flash point	110°F (43°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	0.96

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 excessive heating, freezing and chemical contamination.
Decomposition products:	No decomposition products are expected under normal storage and handling conditions. Sulfur dioxide, sulfur oxides and toxic vapors can result from heating or chemical contamination.
Incompatible materials:	Avoid contact with oxidizers and strong acids.

Section 11 Toxicological Information

Information on the likely routes of exposure:

Trade Name: Return Line Treatment BAN-8689
SDS ID: SDS00921

SDS #: GLA-BAN8689
Revision # 1

Page 4 of 8
Revision Date 02/22/2016



Safety Data Sheet

Return Line Treatment BAN-8689

Inhalation:

This material may cause respiratory irritation, dizziness, nausea and vomiting.

Skin Contact:

This material may cause severe skin irritation . May be harmful if absorbed through the skin.

Eye Contact:

This material may cause eye irritation and injury.

Ingestion:

This material may cause irritation of the gastrointestinal system and may be harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics:

No information available.

Delayed and chronic effects:

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	LD50	Rat	1910 mg/kg	
Dermal	LD50	Rabbit	500 mg/kg	
Inhalation	LC50	Rat	8 mg/l	

Toxicological effects:**Acute Toxicity:**

Mixture:

No information available.

Skin Corrosion/Irritation:

Mixture:

No information available.

Serious Eye Damage/Irritation:

Mixture:

No information available.

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:



Safety Data Sheet

Return Line Treatment BAN-8689

None.

Section 12 Ecological Information

Ecotoxicity:

No information available.

Numerical measures of ecotoxicity:

Components	Type	Species	Dose	Notes
cyclohexylamine:				
Fish	LC50	Freshwater	19 mg/l	14 days
Invertebrate	EC50	Daphnia magna	36.3 mg/l	48 hr
Algae	EC50	Selenastrum capricornutum	29.3 mg/l	72 h
morpholine:				
Fish	LC50	Salmo gairdneri	180 mg/l	96 hr
Invertebrate	EC50	Daphnia magna	45 mg/l	48 hr
Algae	EC50	Pseudokircheneriella subcapitata	28 mg/l	96 h

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:

UN number: UN2734

UN proper shipping name: UN2734, Amines, Liquid, Corrosive, Flammable, N.O.S. (Morpholine, Cyclohexylamine), 8 (3), (8,3), PGII

Class: 8

Subsidiary risk: 3

Label(s): 8, 3

Packing group: II

Packaging exceptions: none

Section 15 Regulatory Information

Federal regulations:

SARA 311/312 Hazard categories:

Immediate (Acute) Health Hazard

Immediate (Acute) Health Hazard



Safety Data Sheet

Return Line Treatment BAN-8689

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 SOCMI:
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 Ingridient Disclosure List substances:
None listed.

WHMIS classification:
cyclohexylamine
Class B-2
Class E

Section 16 Other Information

HMIS hazard ID:

HEALTH	3
FLAMMABILITY	2
REACTIVITY	0
PERSONAL PROTECTION	H

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



Safety Data Sheet

Return Line Treatment BAN-8689

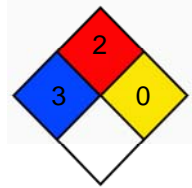
NFPA hazard ID:

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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