

MATERIAL SAFETY DATA SHEET

Section 1. Chemical Product and Company Identification

Product Name: ChemTreat BL1553
Product Use: Steam Line Treatment
Supplier's Name: ChemTreat, Inc.
Emergency Telephone Number: (800) 424-9300 (Toll Free)
(703) 527-3887
Address (Corporate Headquarters): 5640 COX ROAD
Glen Allen, VA 23060
Telephone Number for Information: (800) 648-4579
Date of MSDS: August 16, 2013

Section 2. Hazard(s) Identification



Signal Word: DANGER!

Hazard Statement(s): Causes severe skin burns and eye damage.
Causes serious eye damage.
Harmful in contact with skin.
Harmful if inhaled.
Harmful if swallowed.

Precautionary Statement(s): Wear protective gloves/clothing and eye/face protection. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Use only outdoors or in a well-ventilated area.

Section 3. Composition/Hazardous Ingredients

Component	CAS Registry #	Wt. %
Cyclohexylamine	108-91-8	10 - 30
Morpholine	110-91-8	7 - 13
2-diethylaminoethanol	100-37-8	7 - 13

Section 4. First Aid Measures

Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.
Eyes:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.
Skin:	Immediately remove/take off all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before re-use. Immediately call a poison center or doctor/physician.
Ingestion:	DO NOT INDUCE VOMITING. Rinse mouth. Call a POISON CENTER or doctor/physician.
Notes to Physician:	N/A
Additional First Aid Remarks:	N/A

Section 5. Fire Fighting Measures

Flammability of the Product:	Negative results obtained in sustained combustion test.
Suitable Extinguishing Media:	Use extinguishing media suitable to surrounding fire.
Specific Hazards Arising from the Chemical:	Product may emit toxic gases or fumes under fire conditions.
Protective Equipment:	If product is involved in a fire, wear full protective clothing including a positive-pressure, NIOSH approved, self-contained breathing apparatus.

Section 6. Accidental Release Measures

Personal Precautions:	Use appropriate Personal Protective Equipment (PPE).
Environmental Precautions:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers.
Methods for Cleaning up:	Contain and recover liquid when possible. Flush spill area with water spray.
Other Statements:	If RQ (Reportable Quantity) is exceeded, report to National Spill Response Office at 1-800-424-8802.

Section 7. Handling and Storage

Handling: Wear appropriate Personal Protective Equipment (PPE) when handling this product. Do not get in eyes, or on skin and clothing. Wash thoroughly after handling. Do not ingest. Avoid breathing vapors, mist or dust.

Storage: Store away from incompatible materials (see Section 10). Store at ambient temperatures. Keep container securely closed when not in use. Label precautions also apply to empty container. Recondition or dispose of empty containers in accordance with government regulations. For Industrial use only. Protect from heat and sources of ignition.

Section 8. Exposure Controls/Personal Protection

Exposure Limits

Component	Source	Exposure Limits
Cyclohexylamine	ACGIH TLV	41 mg/m ³ TWA
Morpholine	ACGIH TLV	71 mg/m ³ TWA Skin
	OSHA PEL	70 mg/m ³ TWA Skin
2-diethylaminoethanol	ACGIH TLV	9.6 mg/m ³ TWA Skin
	OSHA PEL	50 mg/m ³ TWA Skin

Carcinogenicity Category

Component	Source	Code	Brief Description
Cyclohexylamine	ACGIH	TLV-A4	Not classifiable as a human carcinogen.
Morpholine	ACGIH	TLV-A4	Not classifiable as a human carcinogen.
	IARC	IARC-3	Unclassifiable as to carcinogenicity in humans
2-diethylaminoethanol			N/E

Engineering Controls: Use only with adequate ventilation. The use of local ventilation is recommended to control emission near the source.

Personal Protection

Eyes: Wear chemical splash goggles or safety glasses with full-face shield. Maintain eyewash fountain in work area.

Skin: Maintain quick-drench facilities in work area. Wear butyl rubber or neoprene gloves. Wash them after each use and replace as necessary. If conditions warrant, wear protective clothing such as boots, aprons, and coveralls to prevent skin contact.

Respiratory: If misting occurs, use NIOSH approved organic vapor/acid gas dual

cartridge respirator with a dust/mist prefilter in accordance with 29 CFR 1910.134.

Section 9. Physical and Chemical Properties

Physical State and Appearance:	Liquid, Colorless, Clear
Specific Gravity:	0.984 @ 20°C
pH:	12.3 @ 20°C, 100.0%
Freezing Point:	32°F
Flash Point:	125°F
Odor:	Strong
Melting Point:	N/A
Boiling Point:	212°F
Solubility in Water:	Complete
Evaporation Rate:	N/D
Vapor Density:	N/D
Molecular Weight:	N/D
Viscosity:	N/A
Flammable Limits:	N/A
Autoignition Temperature:	N/A
Density:	8.21 lb/ga
Vapor Pressure:	N/D
% VOC:	50

Section 10. Stability and Reactivity

Chemical Stability:	Stable at normal temperatures and pressures.
Incompatibility with Various Substances:	Strong oxidizers, Acids
Hazardous Decomposition Products:	Oxides of carbon, Oxides of nitrogen
Possibility of Hazardous Reactions:	None known.

Section 11. Toxicological Information

Chemical Name	Exposure	Type of Effect	Concentration	Species
Cyclohexylamine	Oral	LD50	156 mg/kg	Rat
	Dermal	LD50	277 mg/kg	Rabbit
Morpholine	Oral	LD50	1050 mg/kg	Rat
	Dermal	LD50	500 mg/kg	Rabbit
2-diethylaminoethanol	Oral	LD50	1300 mg/kg	Rat
	Dermal	LD50	1260 mg/kg	Rabbit

Comments: None.

Section 12. Ecological Information

Species	Duration	Type of Effect	Test Results
Fathead Minnow	96h	LC50	517.632 mg/l
Ceriodaphnia dubia	48h	LC50	171 mg/l
	7d	NOEC	100 mg/l
	7d	LOEC	200 mg/l
	7d	IC25	37 mg/l

Comments: NOEC effect = Survival

Section 13. Disposal Considerations

Dispose of in accordance with local, state and federal regulations.
EPA ignitibility characteristic hazardous waste D001 when disposed of in the original product form.

Section 14. Transport Information

DOT

Proper Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S.
Technical Name: (CYCLOHEXYLAMINE AND MORPHOLINE)
Hazard Class: Corrosive
UN/NA#: UN2735
Packing Group: PGIII

TDG

Proper Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S.
Technical Name: (CYCLOHEXYLAMINE AND MORPHOLINE)
Hazard Class: Corrosive
UN/NA#: UN2735
Packing Group: PGIII

ICAO

Proper Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S.
Technical Name: (CYCLOHEXYLAMINE AND MORPHOLINE)
Hazard Class: Corrosive
UN/NA#: UN2735
Packing Group: PGIII

Section 15. Regulatory Information

Inventory Status

United States (TSCA): All ingredients listed.
Canada (DSL/NDSL): All ingredients listed.

Federal Regulations**SARA Title III Rules****Sections 311/312 Hazard Classes**

Fire Hazard: Yes
Reactive Hazard: No
Release of Pressure: No
Acute Health Hazard: Yes
Chronic Health Hazard: No

Other Sections

Component	Section 313 Toxic Chemical	Section 302 EHS TPQ	CERCLA RQ
Cyclohexylamine	N/A	10000	10000
Morpholine	N/A	N/A	N/A
2-diethylaminoethanol	N/A	N/A	N/A

Comments: None.

State Regulations

California Proposition 65: None known.

Special Regulations

Component	States
Cyclohexylamine	MA, MN, NJ, NY, PA, WA
Morpholine	MA, MN, PA, WA
2-diethylaminoethanol	MA, MN, PA, WA

International Regulations

Canada

WHMIS Classification: D2B (Toxic Material)
E (Corrosive Material)

Controlled Product Regulations (CPR): This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Section 16. Other Information

HMIS Hazard Rating

Health: 2
Flammability: 2
Physical Hazard: 0
PPE: X

Notes: The PPE rating depends on circumstances of use. See Section 8 for recommended PPE.
The Hazardous Material Information System (HMIS) is a voluntary, subjective alpha-numeric symbolic system for recommending hazard risk and personal protection equipment information. It is a subjective rating system based on the evaluator's understanding of the chemical associated risks. The end-user must determine if the code is appropriate for their use.

NSF: This product conforms to the requirements of the NSF Nonfood Compounds Registration Program, Registration #148348; Category G6, G7.

FDA/USDA/GRAS: All ingredients in this product are authorized in 21 CFR 173.310 for use as "Boiler Water Additives" where the steam may contact food.



KOSHER: This product is certified by the Orthodox Union as kosher pareve. Only when prepared by the following ChemTreat facilities: Ashland, VA; Eldridge, IA; Nederland, TX; Vernon, CA.

FIFRA: N/A

Other: None

Abbreviations

Abbreviation	Definition
<	Less Than
>	Greater Than
ACGIH	American Conference of Governmental Industrial Hygienists
EHS	Environmental Health and Safety Dept
N/A	Not Applicable
N/D	Not Determined
N/E	Not Established
OSHA	Occupational Health and Safety Dept
PEL	Personal Exposure Limit
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
TWA	Time Weight Average
UNK	Unknown

Prepared by: Regulatory Affairs Department

Disclaimer

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