



SAFETY DATA SHEET

Section 1. Chemical Product and Company Identification

Product Name: Product Use: Supplier's Name: Emergency Telephone Number: Address (Corporate Headquarters):

Telephone Number for Information: Date of SDS: Revision Date: Revision Number: ChemTreat BL1541 Steam Line Treatment ChemTreat, Inc. (800)424–9300 (Toll Free) 5640 Cox Road Glen Allen, VA 23060 (800)648–4579 March 20, 2017 March 20, 2017 17032001AN

Section 2. Hazard(s) Identification

Signal Word:	DANGER
GHS Classification(s):	Skin corrosion/irritation – Category 1b Eye damage/irritation – Category 1 Acute Toxicity Dermal – Category 4 Acute Toxicity Inhalation – Category 4 Acute Toxicity Oral – Category 4 Flammable Liquids – Category 4
Hazard Statement(s):	H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H312 Harmful in contact with skin. H332 Harmful if inhaled. H302 Harmful if swallowed. H227 Combustible Liquid.
Precautionary Statement(s):	
Prevention:	 P260 Do not breathe dust/fume/gas/mist/vapors/spray. P264 Wash thoroughly after handling. P270 Do not eat, drink, or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/protective clothing/eye protection/face protection. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.





Response:	 P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell P301 + 330 + 331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower P304 + P340 IF INHALED: Remove person to fresh air and keep 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/doctor. P363 Wash contaminated clothing before reuse. P370 + P378 In case of fire: Use extinguishing media suitable to surrounding fire to extinguish.
Storage:	P405 Store locked up. P403 Store in a well-ventilated place.
Disposal:	P501 Dispose of contents and container in accordance with applicable local, regional, national, and/or international regulations.
System of Classification Used:	Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).
Hazards Not Otherwise Classified:	None.

Section 3. Composition/Hazardous Ingredients

Component	CAS Registry #	Wt.%
2-diethylaminoethanol	100–37–8	7 – 13
Cyclohexylamine	108–91–8	7 – 13

Comments

If chemical identity and/or exact percentage of composition has been withheld, this information is considered to be a trade secret.





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.
Most Important Symptoms:	N/D
Indication of Immediate Medical Attention and Special Treatment Needed, If Necessary:	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. Store above Freeze Point.

Section 8. Exposure Controls/Personal Protection

Exposure Limits

Component	Source	Exposure Limits
2-diethylaminoethanol	ACGIH TLV	9.6 mg/m³ TWA Skin
	OSHA PEL	50 mg/m³ TWA Skin
Cyclohexylamine	ACGIH TLV	41 mg/m³ TWA

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:	0.988 @ 20°C
pH:	12.2 @ 20°C, 100.0%
Freezing Point:	32°F
Flash Point:	143.6°F
Odor:	Strong
Melting Point:	N/A
Initial Boiling Point and Boiling Range:	212°F
Solubility in Water:	Complete
Evaporation Rate:	N/D
Vapor Density:	As Water
Molecular Weight:	N/D
Viscosity:	N/A
Flammability (solid, gas):	N/A
Flammable Limits:	N/A
Autoignition Temperature:	N/A
Density:	8.24 LB/GA
Vapor Pressure:	As Water
% VOC:	20
Odor Threshold	N/D
n-octanol Partition Coefficient	N/D
Decomposition Temperature	N/D





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.
Reactivity:	N/D
Conditions To Avoid:	N/D
Products: Possibility of Hazardous Reactions: Reactivity:	None known. N/D

Section 11. Toxicological Information

Acute Toxicity

Chemical Name	Exposure	Type of Effect	Concentration	Species
2-diethylaminoethanol	Oral	LD50	1300 MG/KG	Rat
	Dermal	LD50	1260 MG/KG	Rabbit
Cyclohexylamine	Oral	LD50	156 MG/KG	Rat
	Dermal	LD50	277 MG/KG	Rabbit

Carcinogenicity Category

Component	Source	Code	Brief Description
2-diethylaminoethanol	N/E	N/E	N/E
Cyclohexylamine	ACGIH	TLV–A4	Not classifiable as a human carcinogen.

Likely Routes of Exposure: N/D Symptoms Inhalation: N/D Eye Contact: N/D Skin Contact: N/D Ingestion: N/D



Skin Corrosion/Irritation:	N/D	
Serious Eye Damage/Eye Irritation:	N/D	
Sensitization:	N/D	
Germ Cell Mutagenicity:	N/D	
Reproductive/Developmental Toxicity:	N/D	
Specific Target Organ Toxicity		
Single Exposure:		N/D
Repeated Exposure:		N/D
Aspiration Hazard:	N/D	
Comments:	None.	

Section 12. Ecological Information

Ecotoxicity

Species		Duration	Type of Effect	Test Results
Fathead Minnow		96h	LC50	>1000 mg/l
Ceriodaphnia dubia		48h	LC50	654.5 mg/l
Sheepshead Minnow		96h	LC50	>1000 mg/l
Mysid Shrimp		48h	LC50	>1000 mg/l
Persistence and Biodegradability:	N/D			
Bioaccumulative Potential:	N/D			
Mobility In Soil:	N/D			
Other Adverse Effects:	N/D			
Comments:	None.			







Section 13. Disposal Considerations

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

Section 14. Transport Information

Controlling					Packing
Regulation	UN/NA#:	Proper Shipping Name:	Technical Name:	Hazard Class:	Group:
DOT	UN2735	AMINES, LIQUID, CORROSIVE,	(CYCLOHEXYLAMINE AND	8	PGIII
		N.O.S.	N,N-DIETHYLETHANOLAMINE)		
TDG	UN2735	AMINES, LIQUID, CORROSIVE,	(CYCLOHEXYLAMINE AND	8	PGIII
		N.O.S.	N,N-DIETHYLETHANOLAMINE)		
ICAO	UN2735	AMINES, LIQUID, CORROSIVE,	(CYCLOHEXYLAMINE AND	8	PGIII
		N.O.S.	N,N-DIETHYLETHANOLAMINE)		

Note:

N/A

Section 15. Regulatory Information

Inventory Status

United States (TSCA): Canada (DSL/NDSL):

Federal Regulations

SARA Title III Rules

Sections 311/312 Hazard Classes

Fire Hazard:YesReactive Hazard:NoRelease of Pressure:NoAcute Health Hazard:YesChronic Health Hazard:No

All ingredients listed.

All ingredients listed.





Other Sections

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

Comments: None.

State Regulations

California Proposition 65: None known.

Special Regulations

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

International Regulations

Canada	
WHMIS Classification:	D2B (Toxic Material) E (Corrosive Material)
Controlled Product Regula (CPR):	ations 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.
Compliance Information	
NSF:	N/A
Food Regulations:	FDA: All ingredients in this product are authorized in 21 CFR 173.310 (d) for use as "Boiler Water Additives" where the steam may contact food, not to exceed the listed limitations, and excluding use of such steam in contact with milk and milk products.
KOSHER:	This product is certified by the Orthodox Union as Kosher for Passover and year–round use. Only when prepared by the following ChemTreat facilities: Ashland, VA; Eldridge, IA; Nederland, TX.
FIFRA:	N/A
Other:	None





Comments:

None.

Section 16. Other Information

HMIS Hazard Rating

Health:	2
Flammability:	1
Physical Hazard:	0
PPÉ:	Х

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.

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

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Disclaimer

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