

RLT 351

1 PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: RLT 351
Common Name: Mixture
SDS Number: 0191
Revision Date: 3/18/2015
Version: 2
Internal ID: 221J
Product Use: Water treatment
Supplier Details: U. S. Water Services
12270 43rd St. NE
St. Michael, MN 55376

Contact: Non-emergency #: 866-663-7632
Email: SDS@uswaterservices.com
Web: www.uswaterservices.com

EMERGENCY RESPONSE: (ChemTel)
US & Canada: 800-255-3924
International: +01-813-248-0585

2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):

Physical, Flammable Liquids, 3
Health, Specific target organ toxicity - Repeated exposure, 2
Health, Acute toxicity, 5 Oral
Health, Skin corrosion/irritation, 2
Health, Serious Eye Damage/Eye Irritation, 2 B

GHS Label elements, including precautionary statements

GHS Signal Word: **WARNING**

GHS Hazard Pictograms:



GHS Hazard Statements:

H226 - Flammable liquid and vapour
H373 - May cause damage to organs through prolonged or repeated exposure
H303 - May be harmful if swallowed
H315 - Causes skin irritation
H320 - Causes eye irritation

GHS Precautionary Statements:

P102 - Keep out of reach of children.
P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if

RLT 351

present and easy to do. Continue rinsing.

P313 - Get medical advice/attention.

P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P301+310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P302+352 - IF ON SKIN: Wash with soap and water.

Hazards not otherwise classified (HNOC) or not covered by GHS

3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

Cas#	%	Chemical Name
108-91-8	10-30%	Cyclohexylamine
110-91-8	<10%	Morpholine
100-37-8	1-15%	2-Diethylaminoethanol

4 FIRST AID MEASURES

Inhalation: Remove from contamination. If person has stopped breathing give artificial respiration. Seek medical attention.

Skin Contact: Wash thoroughly with soap and water. Remove contaminated garments and wash or destroy.

Eye Contact: Flush eyes with plenty of running water for at least 15 minutes. Seek medical attention at once. NOTE TO PHYSICIAN: If cornea is burned, instill antibiotic steroid preparation frequently.

Ingestion: If conscious, give plenty of water. Get medical attention.

Most important symptoms & effects (acute & delayed): Excessive exposures may cause injury to lungs, liver and kidneys.

Indication of need for immediate medical attention: No data available

Special treatment needs: No data available

5 FIRE FIGHTING MEASURES

Flammability:	Non flammable
Flash Point:	170°F
Flash Point Method:	Pensky Martens Closed Cup
Burning Rate:	Not applicable
Autoignition Temp:	Not applicable
LEL:	Not applicable
UEL:	Not applicable

Extinguishing Media

Suitable: Use extinguishing media suitable for surrounding fire. Dry chemical, carbon dioxide, or foam is recommended.

Unsuitable: Water may be ineffective unless used under favorable conditions by experienced firefighters

Hazardous combustion products: Hazardous decomposition products formed under fire conditions- Carbon

RLT 351

oxides, oxides of nitrogen and sulfur, and other hazardous compounds.

Unusual Fire or Explosion Hazards: FLAMMABLE! This material can be ignited by heat, sparks, flames, or other sources of ignition. This product will float and can be reignited on surface water. Vapors are heavier than air and can accumulate in low areas.

Special protective equipment/precautions: Wear self-contained breathing apparatus. Use water to cool equipment and containers exposed to fire if it can be done safely.

6

ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective equipment, emergency procedures: Avoid contact with the material. See section 8 of SDS for PPE recommendations. SCBA must be used when handling a spill or leak.

Environmental Precautions: Keep runoff from entering drains or waterways

Spill/Leak procedures: Extinguish all ignition sources. Stay up wind from spill or leak. Contain spill or leak. Dike area if necessary to prevent spill from spreading or entering sewers and waterways. Recover as much as possible then absorb remainder with inert material. Place into closed container for disposal.

Regulatory Requirements: Dispose of recovered material in accordance with all applicable state and federal regulations.

7

HANDLING AND STORAGE

Handling Precautions: Avoid contact with eyes, skin, or clothing. Do not taste or swallow. Do not inhale vapor or mist. Do not use near any ignition sources. Use with adequate ventilation. For industrial use only!

Storage Requirements: Keep away from children. Store in closed containers away from temperature extremes and incompatible materials. Store in cool, well ventilated location. Do not handle or store near open flame, heat, or other ignition source. Use proper bonding and/or grounding procedures. Store in a dry, well ventilated area. Keep containers tightly closed, and properly labeled. Store in accordance with all local, state and federal guidelines.

8

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Provide local exhaust ventilation as needed to control misting.
Personal Protective Equipment: HMIS PP, J | Splash Goggles, Gloves, Apron, Dust and Vapor Resp

Respiratory protection: If ventilation does not maintain levels below allowable exposure limits, use MSH/NIOSH approved respirator for organic vapors. Seek professional advice prior to respirator selection and use. Follow all requirements of OSHA respirator regulations (29 CFR 1910.134)

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

General Hygiene: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, using the toilet, or applying cosmetics.

PPE recommendation is advisory only and based on typical use conditions. An industrial hygienist or safety officer familiar with the specific situation of anticipated use must determine actual PPE required when using this product (29 CFR 1910.132)

RLT 351

Exposure Limits:	Cyclohexylamine	Morpholine	Diethylaminoethanol
OSHA (PEL):	NE	20ppm (TWA)	10ppm (TWA) skin
NIOSH (REL):	10ppm (TWA)	20ppm (TWA) skin	10ppm (TWA) skin

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear, colorless to yellow	Odor:	Amine odor
Physical State:	Liquid	Solubility:	Complete in water
Odor Threshold:	Not determined	Freezing/Melting Pt.:	Not determined
Spec Grav./Density:	8.18 lb/gal	Flash Point:	170°F
Viscosity:	Not determined	Vapor Density:	Same to water (Air=1)
Boiling Point:	Not determined	Auto-Ignition Temp:	Not determined
Partition Coefficient:	Not determined	UFL/LFL:	Not determined
Vapor Pressure:	Same as water		
pH:	11.8		
Evap. Rate:	Not determined		
Decomp Temp:	Not determined		

10 STABILITY AND REACTIVITY

Stability:	Product is stable under normal storage and use conditions.
Conditions to Avoid:	Keep closed when not in use. Empty containers may contain flammable vapors.
Materials to Avoid:	Strong oxidizing agents, strong acids, strong alkalis
Hazardous Decomposition:	Possible aminated diethylene glycol, acetaldehyde, formaldehyde. Thermal decomposition and burning may produce carbon monoxide, carbon dioxide or other toxic by products
Hazardous Polymerization:	Will not occur

11 TOXICOLOGICAL INFORMATION

Acute Toxicity:	No data available
Skin Corrosion/Irritation:	No data available
Serious eye damage/irritation:	No data available
Respiratory or skin sensitization:	No data available
Germ cell mutagenicity:	No data available
Carcinogenicity:	No data available
Reproductive Toxicity:	No data available
Specific target organ toxicity (single exposure):	No data available
Specific target organ toxicity (repeated exposure):	No data available
Aspiration hazard:	No data available

12 ECOLOGICAL INFORMATION

Aquatic Toxicity	No data available
Elimination (persistence & degradability):	No data available
Bioaccumulative potential:	No data available
Mobility in soil:	No data available
Other adverse effects:	No data available

RLT 351

13 DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations.

This material should be fully characterized for toxicity and possible reactivity prior to disposal (40 CFR 261). Use which results in chemical or physical change or contamination may subject it to regulation as a hazardous waste. Along with properly characterizing all waste materials, consult state and local regulations regarding the proper disposal of this material.

Container contents should be completely used and containers should be emptied prior to discard. Container rinsate could be considered a RCRA hazardous waste and must be disposed of with care and in full compliance with federal, state and local regulations. Larger empty containers, such as drums, should be returned to the distributor or to a drum reconditioner. To assure proper disposal of smaller empty containers, consult with state and local regulations and disposal authorities.

14 TRANSPORT INFORMATION

UN1760, Corrosive liquids, n.o.s., 8, PGII, (Morpholine, Cyclohexylamine)

DOT Transportation data (49 CFR 172.101)

See section 15 for information on Reportable Quantity chemicals (RQ)

15 REGULATORY INFORMATION**Component (CAS#) [%] - CODES**

Cyclohexylamine (108-91-8) [10-30%] EHS302, HAP, MASS, NJHS, OSHAWAC, PA, TSCA, TXAIR

Morpholine (110-91-8) [<10%] MASS, OSHAWAC, PA, TSCA, TXAIR

2-Diethylaminoethanol (100-37-8) [1-15%] MASS, OSHAWAC, PA, TSCA, TXAIR

Regulatory CODE Descriptions

EHS302 = Extremely Hazardous Substance
HAP = Hazardous Air Pollutants
MASS = MA Massachusetts Hazardous Substances List
NJHS = NJ Right-to-Know Hazardous Substances
OSHA = OSHA workplace Air Contaminants
PA = PA Right-To-Know List of Hazardous Substances
TSCA = Toxic Substances Control Act
TXAIR = TX Air Contaminants with Health Effects Screening Level

TSCA: All components of this product are listed (or are not required to be listed) in the TSCA inventory

EPA / CERCLA / SARA TITLE III:

CERCLA List: This product does not contain any CERCLA listed hazardous substances.

Toxic Chemical List (SARA 313): This product does not contain any chemicals subject to routine annual toxic chemical release reporting.

SARA 312: Acute, Fire

RCRA: No data available

RLT 351

16**OTHER INFORMATION**

HMIS III: Health = 2, Fire = 2, Physical Hazard = 1

HMIS PPE: J - Splash Goggles, Gloves, Apron, Dust and Vapor Respirator

HMIS	
HEALTH	2
FLAMMABILITY	2
PHYSICAL HAZARD	1
PERSONAL PROTECTION	J

Author: U.S. Water Services**Revision Notes:** Updated to GHS format**Disclaimer:**

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