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**RLT 35**

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**1 PRODUCT AND COMPANY IDENTIFICATION**

**Product Identifier:** RLT 35  
**Common Name:** MIXTURE  
**SDS Number:** 0982  
**Product Code:** BT0036  
**Revision Date:** 4/22/2015  
**Version:** 2  
**Internal ID:** 220H  
**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):**

Health, Acute toxicity, 4 Inhalation  
Health, Acute toxicity, 4 Oral  
Health, Skin corrosion/irritation, 1 A  
Physical, Flammable Liquids, 3  
Physical, Corrosive to Metals, 1  
Health, Specific target organ toxicity - Single exposure, 3

**GHS Label elements, including precautionary statements**

**GHS Signal Word:** DANGER

**GHS Hazard Pictograms:****GHS Hazard Statements:**

H332 - Harmful if inhaled  
H302 - Harmful if swallowed  
H314 - Causes severe skin burns and eye damage  
H226 - Flammable liquid and vapor  
H290 - May be corrosive to metals  
H335 - May cause respiratory irritation

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### GHS Precautionary Statements:

- P102 - Keep out of reach of children.
- P281 - Use personal protective equipment as required.
- P302+352 - IF ON SKIN: Wash with soap and water.
- P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- P313 - Get medical advice/attention.
- P301+310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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

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)

## 3 COMPOSITION/INFORMATION ON INGREDIENTS

### Ingredients:

Cas#	%	Chemical Name
108-91-8	10-15%	Cyclohexanamine
110-91-8	10-15%	Morpholine
100-37-8	10-15%	Diethylaminoethanol

## 4 FIRST AID MEASURES

- Inhalation:** Remove from contamination. If person has stopped breathing administer artificial respiration. If symptoms persist, seek medical attention.
- Skin Contact:** Wash off with soap and plenty of water. Remove contaminated garments and wash or destroy. Seek medical attention if irritation develops. Consult a physician if irritation develops.
- Eye Contact:** Flush eyes with plenty of running water for 15 minutes. Seek medical attention.
- Ingestion:** Do not induce vomiting unless directed to do so by medical personnel. Seek medical attention.

**Most important symptoms & effects (acute & delayed):** No data available

**Indication of need for immediate medical attention:** No data available

**Special treatment needs:** No data available

## 5 FIRE FIGHTING MEASURES

- Flash Point:** 142°F
- Flash Point Method:** Pensky Martens Closed Cup
- Burning Rate:** No data available
- Autoignition Temp:** No data available
- LEL:** Not applicable
- UEL:** Not applicable

**Extinguishing Media:**

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**Suitable:** Use extinguishing media suitable for surrounding fire. Water fog, foam, carbon

**Unsuitable:** No information available

**Hazardous combustion products:** Hazardous decomposition products formed under fire conditions- Carbon oxides, and other hazardous compounds

**Unusual Fire or Explosion Hazards:** Explosive air-vapor mixtures may form

**Special protective equipment/precautions:** Wear self-contained breathing apparatus

### 6 ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective equipment, emergency procedures:** Avoid contact with the material. See section 8 of SDS for PPE recommendations

**Environmental Precautions:** Keep runoff from entering drains or waterways

**Spill/Leak procedures:** 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. 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 properly labeled containers 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, H | Splash Goggles, Gloves, Apron, Vapor Respirator

**Respiratory protection:** If needed use MSHA/NIOSH approved respirator for dusts and mists. 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)

**Exposure Limits:**

**USA OSHA (TWA)/PEL):** Morpholine: 20ppm  
Diethylaminoethanol: 10ppm

**ACGIH (TWA/TLV):** Cyclohexylamine: 10ppm

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Morpholine: 20ppm  
Diethylaminoethanol: 10ppm

### 9 PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Colorless to yellow	<b>Odor:</b>	Mild
<b>Physical State:</b>	Liquid	<b>Solubility:</b>	Complete
<b>Odor Threshold:</b>	No data available	<b>Freezing/Melting Pt.:</b>	19°F
<b>Spec Grav./Density:</b>	8.26 Lb/Gal	<b>Flash Point:</b>	Nonflammable
<b>Viscosity:</b>	No data available	<b>Vapor Density:</b>	No data available
<b>Boiling Point:</b>	No data available	<b>Auto-Ignition Temp:</b>	No data available
<b>Vapor Pressure:</b>	No data available	<b>UFL/LFL:</b>	No data available
<b>pH:</b>	13-13.5		
<b>Evap. Rate:</b>	No data available		
<b>Decomp Temp:</b>	No data available		

### 10 STABILITY AND REACTIVITY

<b>Stability:</b>	Product is stable under normal storage and use conditions.
<b>Conditions to Avoid:</b>	Avoid temperature extremes. Protect from freezing
<b>Materials to Avoid:</b>	Strong acids, strong bases, strong oxidizing agents.
<b>Hazardous Decomposition:</b>	Thermal decomposition may produce carbon oxides and other toxic compounds.
<b>Hazardous Polymerization:</b>	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  
**Specific target organ toxicity (single exposure):** No data available  
**Specific target organ toxicity (repeated exposure):** No data available  
**Aspiration hazard:** No data available  
**Carcinogenicity:** No carcinogenic effects are known for the components of this product  
**Germ Cell Mutagenicity:** No mutagenic effects are known for the components of this product  
**Teratogenicity:** No teratogenic effects are known for the components of this product

### 12 ECOLOGICAL INFORMATION

#### Aquatic Toxicity

SPECIES	LC <sub>50</sub> 24 Hr	LC <sub>50</sub> 48 Hr	LC <sub>50</sub> 72 Hr	LC <sub>50</sub> 96 Hr	NOEC	LOEC
<i>Ceriodaphnia dubia</i>	107 mg/L	65 mg/L	---	---	50 mg/L 48 Hr	100 mg/L 48 Hr
Fathead Minnow	892 mg/L	495 mg/L	431 mg/L	304 mg/L	175 mg/L 96 Hr	350 mg/L 96 Hr

**Elimination (persistence & degradability):** No data available  
**Bioaccumulative potential:** No data available

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**Mobility in soil:** No data available

**Other adverse effects:** No data available

**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)

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

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Cyclohexanamine (108-91-8) [10-15%] EHS302, HAP, MASS, NJHS, OSHAWAC, PA, TSCA, TXAIR

Morpholine (110-91-8) [10-15%] MASS, OSHAWAC, PA, TSCA, TXAIR

Diethylaminoethanol (100-37-8) [10-15%] MASS, OSHAWAC, PA, TSCA, TXAIR

**Regulatory CODE Descriptions**

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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, Chronic, Fite

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RCRA: Corrosive, D002

**16****OTHER INFORMATION**HMIS III: Health = 2, Fire = 2, Physical Hazard = 0  
HMIS PPE: H - Splash Goggles, Gloves, Apron, Vapor Respirator

HMIS	
HEALTH	■ 2
FLAMMABILITY	2
PHYSICAL HAZARD	0
PERSONAL PROTECTION	H

Author: U.S. Water Services

Revision Notes: Updated to GHS format

**Disclaimer:**

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