



## MATERIAL SAFETY DATA SHEET

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PREPARED BY:

EH&S DEPARTMENT

### 1. CHEMICAL PRODUCT

PRODUCT NAME: **RLT-241, Steam Conensate Corrosion Inhibitor**

PRODUCT CODE: 117682

NFPA/HMIS HAZARD CODES(minimal=0; slight=1; moderate=2; serious=3; severe=4)

Health: 2/2

Fire: 2/2

Reactivity: 0/0

Special/Protective Equipment: ALK/B

NAME OF THE MANUFACTURER: Rochester Midland Corporation  
155 Paragon Drive  
Rochester, New York 14624  
USA

Emergency Phone:  
INFOTRAC: 1-800-535-5053  
OUTSIDE US: 1-352-323-3500

### 2. HAZARDS IDENTIFICATION

#### EFFECTS FROM ACUTE EXPOSURE:

**INGESTION:** May be harmful if swallowed. May be fatal if swallowed. May cause severe irritation. Causes vomiting, nausea, and diarrhea. Abdominal pain. May cause burns to mucous membranes of mouth, throat, and digestive tract.

**SKIN CONTACT:** Burning sensation may result May cause dryness and irritation.

**INHALATION:** Harmful if inhaled.

**EYE CONTACT:** May cause permanent eye damage. May cause corneal injury. May cause blindness. Causes blurred vision. Causes redness and tearing.

**CHRONIC EFFECTS:** Dermatitis. Respiratory irritation.

**EFFECTS/CARCINOGENICITY:** None listed under OSHA, IARC, or NTP. If mixed with nitrites or other nitrosating agents, may form nitrosamines, which may cause cancer. (None expected in normal use of this product).

**ROUTES OF ENTRY:** Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

PRODUCT COMPOSITION CAS#	%	ACGIH TLV	OSHA PELs
CYCLOHEXYLAMINE 108-91-8	10 - 15	10 ppm	Not applicable
MORPHOLINE 110-91-8	1 - 10	20 ppm	20 ppm 70 mg/m <sup>3</sup>
Diethylaminoethanol (DEAE) 100-37-8	20	2 ppm	10 ppm 50 mg/m <sup>3</sup>

### 4. FIRST AID MEASURES

**INGESTION:** Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

**SKIN:** Wash with soap and water. Remove contaminated clothing and launder before reuse. Get medical attention if irritation persists.

**INHALATION:** If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.

#### **4. FIRST AID MEASURES**

**EYES:** In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

**NOTES TO PHYSICIAN:** None.

#### **5. FIRE AND EXPLOSION HAZARD DATA**

**FLASH POINT:** (F): 143° F (C): 61.7° C

**METHOD:** TCC

**FLAMMABLE LIMITS IN AIR**

LOWER (%):	1.5%
UPPER (%):	11.7%

**SENSITIVITY TO MECHANICAL IMPACT(Y/N):** NO

**SENSITIVITY TO STATIC DISCHARGE:** Sensitivity to static discharge is not expected.

**SUITABLE EXTINGUISHING MEDIA:** Water fog, carbon dioxide, foam, dry chemical.

**FIRE FIGHTING PROCEDURES:** Fire-fighters should wear self-contained breathing apparatus and full protective clothing when fighting chemical fires. Cool exposed containers with water spray.

#### **6. ACCIDENTAL RELEASE MEASURES**

**SPILL PROCEDURES:**

<b>SMALL SPILLS:</b>	Flush with water.
<b>LARGE SPILLS:</b>	Dike to contain. Pick up with absorbant material. Put in suitable container for disposal.

**PERSONAL PRECAUTIONS:** Not applicable

**ENVIRONMENTAL PRECAUTIONS:** Not applicable

**METHODS FOR CLEANING UP:** Not applicable

#### **7. HANDLING AND STORAGE**

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Store in a cool, dry area.  
Store in a well ventilated area. Do not store near heat, sparks or flame.  
Keep container closed when not in use. Do not inhale vapors.  
Avoid contact with eyes, skin and clothing. DO NOT pressurize, weld, or heat containers.  
Observe proper grounding procedures to prevent fire hazard from static accumulation and discharge. Vapors are heavier than air and may tend to collect in low or poorly ventilated areas resulting in possible fire and/or inhalation hazard.

**OTHER PRECAUTIONS:** Empty containers may retain product residue, follow MSDS/label precautions even after container is emptied. Do not reuse container.

**SPECIFIC USE(S):** Not applicable.

#### **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**PROTECTIVE EQUIPMENT:**



**EXPOSURE CONTROLS:** Use in a well ventilated area.

**RESPIRATORY PROTECTION:** NIOSH approved respirator if spray mist in air causes irritation.

**PROTECTIVE GLOVES:** Chemical resistant gloves are recommended to minimize skin contact.

**EYE PROTECTION:** Safety glasses are recommended to minimize eye contact.

**OTHER PERSONAL PROTECTION EQUIPMENT:** Eyewash fountains and safety showers must be easily accessible. It is the responsibility of the end user of this product to determine level of PPE required that is consistent with safe use of this product.

**VENTILATION:** General mechanical and/or local exhaust as needed to meet exposure limits if mist in air.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>APPEARANCE AND ODOR:</b>	Light amber liquid. Slight amine odor.	
<b>BOILING POINT (F):</b>	Not determined	(C) Not determined
<b>VAPOR PRESSURE:</b>	Approx. 10 mm Hg @ 70° F	
<b>VAPOR DENSITY (AIR=1):</b>	> 1	
<b>SOLUBILITY IN WATER:</b>	Not determined	
<b>SPECIFIC GRAVITY:</b>	0.985	
<b>VOC Content (%):</b>	Not determined	
<b>EVAPORATION RATE:</b>	< (BuAc = 1) : 1.26	
<b>PH:</b>	12.2	

## 10. STABILITY AND REACTIVITY

<b>STABILITY DATA:</b>	STABLE
<b>POLYMERIZATION:</b>	Will Not Occur.
<b>HAZARDOUS DECOMPOSITION:</b>	Ammonia. Oxides of Carbon. Oxides of Nitrogen. Oxides of mercury Toxic carbon-nitrogen compounds.
<b>INCOMPATIBILITY (MATERIALS TO AVOID):</b>	Do not mix with: Acids. Strong alkalis. Hypochlorites (bleach.) Strong oxidents, such as nitric acid, or hypochlorites. Avoid contact with aluminum, zinc, other soft metals or galvanized metals.
<b>CONDITIONS/HAZARDS TO AVOID:</b>	Keep away from heat, sparks and flame.

## 11. TOXICOLOGICAL INFORMATION

<b>ACUTE TOXICITY:</b>	Not Established
<b>EFFECTS OF CHRONIC EXPOSURE:</b>	Not established.
<b>OTHER TOXIC EFFECTS:</b>	Not established.

## 12. ECOLOGICAL INFORMATION

<b>ECOTOXICOLOGICAL INFORMATION:</b>	No data at this time
<b>CHEMICAL FATE INFORMATION:</b>	No data at this time.
<b>MOBILITY:</b>	Not applicable.
<b>PERSISTENCE/DEGRADABILITY:</b>	Not applicable
<b>BIOACCUMULATIVE POTENTIAL:</b>	Not applicable
<b>OTHER ADVERSE EFFECTS:</b>	Not applicable

## 13. DISPOSAL CONSIDERATIONS

<b>WASTE DISPOSAL METHODS:</b>	Dispose in accordance with Federal, State and Local regulations.
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## 14. TRANSPORT INFORMATION

Please refer to the Bill of Lading/Receiving documents for up to date shipping information.

## 15. REGULATORY INFORMATION

PRODUCT COMPOSITION CAS#	%	TSCA:	EINECS:	Canada DSL:	CA PROP 65:
CYCLOHEXYLAMINE 108-91-8	10 - 15	Listed	Listed	Listed	Not Listed
MORPHOLINE 110-91-8	1 - 10	Listed	Listed	Listed	Not Listed
Diethylaminoethanol (DEAE) 100-37-8	20	Listed	Listed	Listed	Not Listed

## RLT-241, Steam Condensate Corrosion Inhibitor

PRODUCT COMPOSITION CAS#	%	CERCLA:	SARA 302:	SARA 313:
CYCLOHEXYLAMINE 108-91-8	10 - 15	Not Listed	10000 lb RQ = 10000 lb TPQ	Not Listed
MORPHOLINE 110-91-8	1 - 10	Not Listed	Not Listed	Not Listed
Diethylaminoethanol (DEAE) 100-37-8	20	Not Listed	Not Listed	Not Listed

PRODUCT COMPOSITION CAS#	%	Canada WHMIS:
MORPHOLINE 110-91-8	1 - 10	Listed
Diethylaminoethanol (DEAE) 100-37-8	20	Listed

The following components of this material are included in the Massachusetts Substance List and are present at or above reportable levels.

PRODUCT COMPOSITION CAS#	%	MARTK:
CYCLOHEXYLAMINE 108-91-8	10 - 15	Listed
MORPHOLINE 110-91-8	1 - 10	Listed
Diethylaminoethanol (DEAE) 100-37-8	20	Listed

The following components of this material are included in the New Jersey Substance List and are present at or above reportable levels.

PRODUCT COMPOSITION CAS#	%	NJRTK:
CYCLOHEXYLAMINE 108-91-8	10 - 15	Listed
MORPHOLINE 110-91-8	1 - 10	Listed
Diethylaminoethanol (DEAE) 100-37-8	20	Listed

The following components of this material are included in the Pennsylvania Substance List and are present at or above reportable levels.

PRODUCT COMPOSITION CAS#	%	PARTK:
CYCLOHEXYLAMINE 108-91-8	10 - 15	Listed
MORPHOLINE 110-91-8	1 - 10	Listed
Diethylaminoethanol (DEAE) 100-37-8	20	Listed

### 16. OTHER INFORMATION

This information was compiled from current, reliable sources and is believed to be correct. As data, and/or regulations change, and conditions of use and handling are beyond our control, no warranty, express or implied, is made as to completeness or continuing accuracy of this information.

\*\*\* END OF MSDS \*\*\*