

**MATERIAL SAFETY DATA SHEET**

RLT 1131

Latest Revision Date...07/19/06

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**SECTION 1**

**MANUFACTURER INFORMATION**

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**SECTION 2**

**PRODUCT IDENTIFICATION**

PRODUCT NUMBER..... HZ 1131  
TRADE NAME OR CHEMICAL NAME... RLT 1131  
SYNONYMS..... K12035-1  
CHEMICAL FAMILY..... Internal Boiler Condensate Treatment  
NFPA - HEALTH HAZARD..... 2  
FIRE HAZARD..... 2  
REACTIVITY HAZARD..... 0  
NFPA SCALE..... 4=Extreme 3=High 2=Moderate 1=Slight 0=Insignificant  
KEY..... NA= Not Applicable ND= Not Determined

**SECTION 3**

**HAZARDOUS INGREDIENTS**

CHEMICAL NAME(S)	CAS NUMBER	% WT	TLV-TWA	PEL	SEC.313	CARCINOGEN?
Morpholine	110-91-8	<40	20 ppm	20 ppm	No	No
Diethylaminoethanol	100-37-8	<20	10 ppm	10 ppm	No	No
Cyclohexylamine	108-91-8	<20	10 ppm	10 ppm	No	No

**SECTION 4**

**SHIPPING DATA**

D.O.T. PROPER SHIPPING NAME... Amines, Liquid, Corrosive, N.O.S. (Cyclohexylamine, Morpholine)  
D.O.T. HAZARD CLASS..... Corrosive Material Class 8  
D.O.T. LABELS REQUIRED..... Corrosive  
UN/NA I.D. NUMBER..... UN 2735  
PACKAGING GROUP..... II  
NON-BULK SHIPPING NAME..... Amines, Liquid, Corrosive, N.O.S. (Cyclohexylamine, Morpholine), 8, UN 2735, PG II  
BULK SHIPPING NAME..... Same

**SECTION 5**

**PHYSICAL DATA**

BOILING/FREEZING POINT @760 mmHg... 200°F (93°C) / ND  
pH..... 11.8  
VAPOR PRESSURE mm Hg @20° C..... ND  
VAPOR DENSITY (Air = 1)..... ND  
PERCENT VOLATILE BY WEIGHT (%)..... 100  
SPECIFIC GRAVITY @20°C..... 0.98  
SOLUBILITY IN WATER..... Complete  
EVAPORATION RATE..... (Water=1) ≈1  
APPEARANCE AND ODOR..... Clear to yellowish liquid with strong ammoniacal odor.

**SECTION 6**

**FIRE AND EXPLOSION HAZARD DATA**

FLASH POINT (Test Method)..... 125°F (52°C) T.C.C.

SECTION 6FIRE AND EXPLOSION HAZARD DATA

CONT'D

AUTOIGNITION TEMPERATURE..... ND  
 FLAMMABILITY LIMITS IN AIR (% V)... ND  
 EXTINGUISHING MEDIA..... Water fog or spray, carbon dioxide, alcohol foam  
 SPECIAL FIRE FIGHTING PROCEDURES... Dilution with water will reduce intensity of flames. Cover all spills with foam to minimize vapor release. Wear self-contained breathing apparatus.  
 UNUSUAL FIRE & EXPLOSION HAZARDS... Closed containers may rupture when exposed to extreme heat. Material is a fire hazard in presence of heat, flame, or oxidizers.

SECTION 7REACTIVITY DATA

PRODUCT STABILITY..... Stable  
 Conditions to Avoid..... Temperatures above 125°F (52°C), ignition sources  
 CHEMICAL INCOMPATIBILITY..... Strong acids  
 HAZARDOUS DECOMPOSITION PRODUCTS... Oxides of nitrogen, carbon dioxide, carbon monoxide  
 HAZARDOUS POLYMERIZATION..... Will Not Occur

SECTION 8HEALTH HAZARD DATA

SKIN CONTACT... May cause severe irritation, burns and sensitization.  
 EYE CONTACT.... May cause chemical burns and irreversible damage.  
 INHALATION.... Inhalation of high vapor concentrations may produce irritation of respiratory tract and lungs.  
 INGESTION..... Not Determined.

SECTION 9EMERGENCY AND FIRST AID PROCEDURES

SKIN.....Remove contaminated clothing and flush exposed skin with soap and water. If irritation persists or develops, get medical attention. Launder contaminated clothing before reuse.  
 EYES.....Immediately flush eyes with large amounts of water for 15 minutes and get medical attention.  
 INGESTION...If swallowed, DO NOT INDUCE VOMITING. Get medical attention immediately. Never give anything by mouth to an unconscious person.  
 INHALATION...Move to fresh air. Aid in breathing, if necessary, and get medical attention.

SECTION 10ENVIRONMENTAL DATA

SPILL OR LEAK PROCEDURES... Keep upwind and avoid skin contact. Eliminate ignition sources. Neutralize and absorb with sand or inert material. Place in suitable container for disposal.  
 WASTE DISPOSAL METHOD..... Ignitable and Corrosive. Dispose of in accordance with all federal, state and local regulations.  
 HAZARDOUS WASTE 40CFR261... Yes. Hazardous Waste Numbers: D001 and D002  
 CONTAINER DISPOSAL..... Empty containers may contain residuals. Thoroughly clean, then offer for recycling, reuse, or disposal in accordance with governmental regulations.

SECTION 11SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION.....NIOSH/MSHA approved can or cartridge respirator for gas and vapor as needed to maintain P.E.L.  
 VENTILATION.....Local and/or mechanical exhaust to maintain exposure below P.E.L.  
 PROTECTIVE CLOTHING.....Neoprene gloves, full chemical suit, boots - as necessary to prevent skin contact.  
 EYE PROTECTION.....Chemical goggles and/or full face shield.  
 OTHER PRECAUTIONS.....Safety shower and eyewash fountains should be easily accessible.

SECTION 12SUPPLIER INFORMATION

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of manufacturer. The data on this sheet relates only to the specific material designated herein. Manufacturer assumes no legal responsibility for use or reliance upon this data.