

# MATERIAL SAFETY DATA SHEET

## RLT 1131B

Latest Revision Date: 10/18/02

### SECTION 1 MANUFACTURER INFORMATION

HYDRO-ZONE, INC.  
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Romulus, MI 48174  
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(800) 255-3924

### SECTION 2 PRODUCT IDENTIFICATION

PRODUCT NUMBER.....1131B  
TRADE NAME OR CHEMICAL NAME.....RLT 1131B  
SYNONYMS.....NA  
CHEMICAL FAMILY.....Volatile Amine Boiler 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 NF= Not Determined

### SECTION 3 HAZARDOUS IDENTIFICATION

<u>CHEMICAL NAME(S)</u>	<u>CAS NUMBER</u>	<u>% WT.</u>	<u>TLV-TWA</u>	<u>PEL</u>	<u>SEC.313</u>	<u>CARCINOGEN?</u>
Morpholine	110-91-8	<40	20 ppm	30 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, Flammable, N.O.S. (Cyclohexylamine, Morpholine, Diethylaminoethanol)  
D.O.T. HAZARD CLASS.....Primary—Corrosive Material Class 8, Secondary—Flammable Liquid Class 3  
D.O.T. LABELS REQUIRED.....Corrosive and Flammable  
UN/NA I.D. NUMBER.....UN 2734  
PACKAGING GROUP.....II  
NON-BULK SHIPPING NAME.....Amines, Liquid, Corrosive, Flammable, N.O.S. (Cyclohexylamine, Morpholine, Diethylaminoethanol), 8, UN 2734, 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 mmHg @ 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.....Colorless to yellowish liquid with strong ammonia-like odor

## RLT 1131B

### SECTION 6 FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (PENSKEY-MARTEN C.C.).....125°F (52°C) T.C.C.  
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 7 REACTIVITY 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 8 HEALTH 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 9 EMERGENCY 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 seek medical attention.  
INGESTION.....If swallowed, DO NOT INDUCE VOMITING. Seek medical attention immediately.  
INHALATION.....Move to fresh air. Aid in breathing, if necessary, seek medical attention.

### SECTION 10 ENVIRONMENTAL DATA

SPILL OR LEAK PROCEDURES.....Keep upwind and avoid skin contact. Eliminate ignition sources. Neutralize and absorb with sand or inert material and 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 11 SPECIAL 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, apron, boots---as necessary, to prevent skin contact.  
EYE PROTECTION.....Chemical goggles or face shield.  
OTHER PRECAUTIONS.....Safety shower and eyewash fountains should be easily accessible.

### SECTION 12 SUPPLIER 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.