

JANUARY 2008

**APEX ENGINEERING PRODUCTS CORPORATION**

1241 Shoreline Drive  
Aurora, Illinois 60504  
Phone: 800-451-6291 FAX: 630-820-8886

For Chemical Emergency, Spill, Leak, Fire Exposure or Accident  
Call CHEMTREC Day or Night  
DOMESTIC NORTH AMERICA 800-424-9300  
INTERNATIONAL, CALL 703-527-3887 (collect calls accepted)

**MATERIAL SAFETY DATA SHEET**

**I. PRODUCT INFORMATION**

TRADE NAMES OR SYNONYMS: *RYDLYME Marine*, RID-LIME Marine  
FORMULA: PROPRIETARY, CONFIDENTIALITY REQUIRED  
CHEMICAL FAMILY: MARINE WATER SCALE CLEANER

**II. HAZARDOUS INGREDIENTS**

MATERIAL OR COMPONENT	TLV (p.p.m.)	PEL (p.p.m.)	APPROXIMATE %
HYDROGEN CHLORIDE, AQUEOUS	5	5	LESS THAN 10

NOTE: Laboratory tests indicate material to be **BIODEGRADABLE**. USFDA has no jurisdiction over the product, since it does not come in direct contact with food.

**III. PHYSICAL DATA**

BOILING POINT: 105° C.  
SOLUBILITY IN WATER: MISCIBLE  
SPECIFIC GRAVITY, (WATER=1): 1.03 @ 25 DEGREE C  
VAPOR PRESSURE: 20.1mmHg @ 25 DEGREE C  
VAPOR DENSITY, (AIR=1): .62 @ 25 DEGREE C  
PERCENT VOLATILE BY VOLUME: ~99.0%  
APPEARANCE: DARK LIQUID  
ODOR: CHERRY LIKE SMELL  
pH: LESS THAN 3  
EVAPORATION RATE, (WATER=1): SLOW  
PHYSICAL STATE: LIQUID

**IV. FIRE AND EXPLOSION HAZARD DATA**

FLASH POINT: NO FLASH POINT, EXTINGUISHES FLAME  
EXTINGUISHING MEDIA: DOES NOT SUPPORT COMBUSTION  
SPECIAL FIRE FIGHTING PROCEDURES: NONE-WATER WILL CONTROL, OR CO2/DRY CHEMICALS  
UNUSUAL FIRE & EXPLSION HAZARDS: NON-COMBUSTIBLE OR EXPLOSIVE. BREATHING APPARAUS RECOMMENDED

**V. HMIS**

HEALTH: 0  
FLAMMABILITY: 0  
REACTIVITY: 0  
PERSONAL PROTECTION: B

(continued)

## VI. HEALTH HAZARD DATA

**THRESHOLD LIMIT VALUE:** NONE FOR TOTAL-MATERIAL IS AN AQUEOUS ORGANIC SALT SOLUTION AND AS SUCH HAS LITTLE VAPOR PRESSURE AND NO NOXIOUS FUMES.

**EFFECTS OF OVEREXPOSURE:** SHOULD NOT BE CONSIDERED HAZARDOUS WHEN USED AS DIRECTED.

**EMERGENCY & FIRST AID:** IF EYE/SKIN CONTACT, COPIOUS WATER RINSE. CONSULT PHYSICIAN. NOT TO BE TAKEN INTERNALLY. IF INGESTED-DO NOT INDUCE VOMITING-DRINK MILK, EGG WHITES, ETC. AS DIRECTED BY PHYSICIAN.

**NOTE:** ADVERSE EFFECTS ON HUMAN HEALTH ARE NOT EXPECTED FROM THE *RYDLYME MARINE* SOLUTION.

## VII. REACTIVITY DATA

**STABILITY:** STABLE

**INCOMPATIBILITIES:** STRONG CAUSTICS

**HAZARDOUS DECOMPOSITION PRODUCTS:** NONE

**HAZARDOUS POLYMERIZATION:** WILL NOT OCCUR

**CONDITIONS TO AVOID:** EXCESSIVE HEATING

## VIII. SPILL AND DISPOSAL PROCEDURES

**ACTION TO TAKE FOR SPILLS:** RINSE WITH COPIOUS AMOUNTS OF WATER TO DILUTE: SODIUM BICARBONATE MAY ALSO BE USED TO SOAK UP AND NEUTRALIZE LIQUID.

**DISPOSAL METHOD:** EXPENDED OR USED MATERIAL MAY BE DISPOSED OF DOWN SEWER WITH WATER FLUSH. MATERIAL IS **BIODEGRADABLE**-EVEN AS RECEIVED.

## IX. SPECIAL HANDLING INFORMATION

**VENTILATION:** 1. LOCAL EXHAUST: NORMAL  
2. MECHANICAL: SUFFICIENT  
3. RESPIRATORY: NONE

**PROTECTIVE GLOVES:** RECOMMENDED, SUCH AS NEOPRENE GLOVES.

**EYE PROTECTION:** RECOMMENDED, SUCH AS CHEMICAL GOGGLES.

**OTHER PROTECTIVE EQUIPMENT:** AS RECOMMENDED BY PLANT SAFETY DEPARTMENT. TO PREVENT STAINING OF CLOTHES, WEAR AN APRON.

## X. SPECIAL PRECAUTIONS

**HANDLING AND STORING:** PRESERVE INTEGRITY OF CONTAINER.

**CAN MATERIAL BE STORED OUTSIDE?** YES, MAINTAIN TEMPERATURE BETWEEN 10°-180° F.

**IS MATERIAL FREEZABLE?** YES. <20 F WITH AN EXPOSURE TIME OF 72 HOURS.

**OTHER PRECAUTIONS:** Do not circulate material for more than a four hour period without consulting the manufacturer. Most *RYDLYME Marine* cleanings can be accomplished within an average of two hours. Please use material only as directed. Do not heat. Use *RYDLYME Marine* at an ambient temperature. Vent circulating solution to atmosphere. Some adverse reactions may occur with some alloys of aluminum, magnesium, and/or zinc. Please consult the manufacturer.

**CAUTION:** *RYDLYME Marine* is non-corrosive, but the application of *RYDLYME Marine* may expose pre-existing under deposit corrosion (pitting, holes or similar damage) that can result in leaks in pipes, equipment or systems.

**FOR ADDITIONAL INFORMATION, PLEASE REVIEW THE RYDLYME MARINE SPECIFICATIONS OR CONTACT OUR MANUFACTURING FACILITY AT 800-451-6291.**

This data is furnished independent of any sales of the product only for your investigation and independent verification. While information is believed to be correct, APEX ENGINEERING PRODUCTS CORPORATION shall in no event be responsible for any damage whatsoever, directly or indirectly, resulting from the publication or use of or reliance upon data contained herein. No warranty, either expressed or implied, of merchantability, of fitness, or of any nature with respect to the product, or to the data, is made herein.