MATERIAL SAFETY DATA SHEET REVISED AUGUST 2013

APEX ENGINEERING PRODUCTS CORPORATION

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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)

PRODUCT INFORMATION

TRADE NAMES OR SYNONYMS: RYDLYME, RID-LIME

FORMULA: PROPRIETARY, CONFIDENTIALITY REQUIRED

CHEMICAL FAMILY: WATER SCALE CLEANER

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**. Certified to NSF/ANSI 60. NSF Registered for use in beverage, pharmaceutical, bottling, poultry, and other food processing plants. USFDA has no jurisdiction over the product, since it does not come in direct contact with food. Non-reportable under SARA Title 3: Section 311/312/313 Categorization. Not reportable under CERCLA.

PHYSICAL DATA____

BOILING POINT: 213° F / 101° C.
FREEZING POINT: 0° F / -18° C

SOLUBILITY IN WATER: MISCIBLE

SPECIFIC GRAVITY, (WATER=1): 1.045

VAPOR PRESSURE: 30 TORR.

VAPOR DENSITY, (AIR=1): GREATER THAN 1

PERCENT VOLATILE BY VOLUME: 99.6

APPEARANCE: DARK LIQUID
ODOR: ROASTED ALMONDS

pH: UNREADABLE, GENERALLY < 3

EVAPORATION RATE, (WATER=1): SLOW PHYSICAL STATE: LIQUID

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 & EXPLOSION HAZARDS: NON-COMBUSTIBLE OR EXPLOSIVE. BREATHING

APPARATUS RECOMMENDED

HMIS____

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

HEALTH HAZARD DATA__

EFFECTS OF OVER EXPOSURE:

EMERGENCY & FIRST AID:

SHOULD NOT BE CONSIDERED HAZARDOUS WHEN USED AS DIRECTED. 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 SOLUTION, BASED UPON 70+ YEARS OF USE WITHOUT REPORTED ADVERSE HEALTH INCIDENCE IN DIVERSE POPULATION

GROUPS, INCLUDING EXTENSIVE USE IN THE U.S. ARMED FORCES.

REACTIVITY DATA

STABILITY: STABLE

INCOMPATIBILITIES: STRONG CAUSTICS

HAZARDOUS DECOMPOSITION PRODUCTS: NONE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR EXCESSIVE HEATING CONDITIONS TO AVOID:

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,

IF NECESSARY.

EXPENDED OR USED MATERIAL MAY BE DISPOSED OF DOWN SEWER WITH DISPOSAL METHOD:

WATER FLUSH IN ACCORDANCE WITH THE LOCAL, STATE, PROVINCIAL, AND FEDERAL REGULATIONS FOR YOUR LOCATION. MATERIAL IS

BIODEGRADABLE-EVEN IN AS RECEIVED FORM.

SPECIAL HANDLING INFORMATION_

VENTILATION: NORMAL (MECHANICAL)

RESPIRATORY: NONE

PROTECTIVE GLOVES: RECOMMENDED, SUCH AS NEOPRENE GLOVES. RECOMMENDED, SUCH AS CHEMICAL GOGGLES. **EYE PROTECTION:**

OTHER PROTECTIVE EQUIPMENT: AS RECOMMENDED BY PLANT SAFETY DEPARTMENT. TO PREVENT

STAINING OF CLOTHES, WEAR AN APRON.

SPECIAL PRECAUTIONS

HANDLING AND STORING: PRESERVE INTEGRITY OF CONTAINER.

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

OTHER PRECAUTIONS: Please use material only as directed. If procedures are not published for your particular application, please call for assistance. Furthermore, RYDLYME is designed to be used by itself or diluted with water and water only. Do not heat. Use RYDLYME 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 is non-corrosive, but the application of RYDLYME 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 SPECIFICATIONS OR CONTACT OUR MANUFACTURING FACILITY AT 800-451-6291.

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