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APEX ENGINEERING PRODUCTS CORPORATION

1241 Shoreline Drive

Aurora, Illinois 60504

Phone: 800-451-6291 FAX: 630-820-8886

Emergency Telephone Number: 630-820-8888

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° C
VAPOR PRESSURE:	20.1mmHg @ 25° C
VAPOR DENSITY, (AIR=1):	.62 @ 25° 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.

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

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