

**REVISED MARCH 2006**

**APEX ENGINEERING PRODUCTS CORPORATION**

**1241 Shoreline Drive**

**Aurora, IL 60504**

**Phone Number 800-451-6291 or 630-820-8888 Fax 630-820-8886**

**Emergency Telephone Number +630-820-8888**

**MATERIAL SAFETY DATA SHEET**

**1. PRODUCT IDENTIFICATION AND MANUFACTURER**\_\_\_\_\_

**Trade Name:**

**RYDLYME** (pronounced: *rid-lime*)

**Use of Product:**

Descaler

**Manufacturer Information:**

Apex Engineering Products Corporation, established 1942

1241 Shoreline Drive

Aurora, Illinois 60504

Emergency Phone: +630-820-8888 or +630-258-1048

**Distributor Information:**

Rico Ltd.

Unit 4 Henry Edwards Ind. Est.

Boraston Lane

Tenbury Wells

Worcestershire WR15 8LE, UK

Phone: +44 (0)1584 811716

**2. COMPOSITION/INFORMATION ON INGREDIENTS**\_\_\_\_\_

**Formula:**

Proprietary, confidentiality required

**Chemical Family:**

Water Scale Solvent

### 3. HAZARDOUS INGREDIENTS/IDENTIFICATION

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Material or Component	TLV (p.p.m.)	Approximate %
Hydrogen Chloride, Aqueous	5	Less Than 10

**NOTE:** Material is aqueous inorganic salt solution and as such should **NOT** be considered dangerous according to Directive 1999/45/EC under normal use conditions.

**NOTE:** Laboratory test indicate material to be **BIODEGRADABLE**, NSF certified for use in beverage, pharmaceutical, bottling, poultry and other food processing plants.

### 4. FIRST AID MEASURES

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**Inhalation:**

Material is an aqueous inorganic salt solution and as such has little vapor pressure and no noxious fumes.

**Eye Contact:**

Copious water rinse. Consult physician if irritation persists.

**Skin Contact:**

Copious water rinse. Consult physician if irritation persists.

**Ingestion:**

Do not induce vomiting – drink milk, egg whites, etc. Consult a physician.

### 5. FIRE FIGHTING MEASURES

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<b>Flash Point:</b>	No flash point, extinguishes flame
<b>Auto-ignition Temperature:</b>	Not Applicable
<b>Lower Explosive Limit:</b>	Not Applicable
<b>Upper Explosive Limit:</b>	Not Applicable

**Unusual Fire & Explosion Hazards:**

Non-combustible or explosive. Breathing apparatus recommended.

**Extinguishing Media:**

Does not support combustion.

**Special Fire Fighting Procedures:**

None-Water will control, as will CO2 and dry chemicals.

**Personal Protective Equipment:**

As in any fire, wear self-contained breathing apparatus (pressure-demand, MSHA/NIOSH Approved or equivalent and full protective gear).

## 6. ACCIDENTAL RELEASE MEASURES

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### **Personal Protection:**

Eye protective safety glasses with side shields are recommended, however not mandated. Area isolation is not necessary, as product is of no risk to personnel.

### **Procedures:**

Rinse area with copious amounts of water to dilute. Sodium bicarbonate may also be used to absorb and/or neutralize liquid. Material is fully **biodegradable** and may be disposed of down normal sewer system, with water flush, even in “as received” form.

## 7. HANDLING AND STORAGE

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### **Storage Conditions:**

Preserve integrity of container. The recommended storage temperature is between –12C/10F and 81C/180F.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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### **Exposure Limits:**

#### **Threshold Limit Value:**

None for total, material is an aqueous inorganic 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.

### **Respiratory Protection:**

None required under normal operating conditions, even when materials vapors and/or mists occur.

### **Eye Protection:**

Usage of safety glasses, with side shields are recommended, however not mandated.

### **Hand Protection:**

Recommended however not mandated. Material is non-toxic and can be held in the open hand without risk.

### **Engineering Controls (Ventilation):**

Use normal exhaust, vent to atmosphere.

### **Other Protective Equipment:**

As recommended by plant safety department. Aprons may be worn to prevent clothing from stains.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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<b>Appearance:</b>	Dark Liquid
<b>Color:</b>	Black
<b>State:</b>	Liquid
<b>Odor Characteristics:</b>	Characteristic
<b>pH:</b>	Unreadable, generally < 3
<b>Viscosity:</b>	Comparable to Water
<b>Specific Gravity (Water = 1):</b>	1.045
<b>Vapor Density (Air = 1):</b>	>1
<b>Vapor Pressure:</b>	40 mbar
<b>Boiling Point:</b>	101C/213F
<b>Solubility in Water:</b>	Miscible
<b>Percent Volatility:</b>	99.6
<b>Evaporation Rate (Water = 1):</b>	<1

## 10. STABILITY AND REACTIVITY

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### **Instability:**

This material is considered stable.

### **Hazardous Decomposition:**

None

### **Hazardous Polymerization:**

Product will not undergo polymerization.

### **Incompatibility:**

Avoid contact with the following: strong caustics.

## 11. TOXICOLOGY

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### **Acute Data:**

Some tests indicate that long-term exposure may be corrosive to the eyes of New Zealand albino rabbits. None of the ingredients found in the solution are known carcinogens.

### **Mutagenicity Data:**

Non-mutagenic.

## 12. ECOLOGICAL INFORMATION

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### **Environmental Toxicity:**

Non-toxic, EPA approved as fully biodegradable and environmentally non-hazardous. Using procedures and protocols specified in the latest edition of Standard Methods for the Examination of Water and Waste Water, APHA, AWWA, WPCF, the BOD was performed on the sample with the following results: BOD: 16mg/l.

### 13. DISPOSAL CONSIDERATIONS

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**Product:**

Material may be disposed of down sewer system with water flush. Material is biodegradable as received.

**Uncleaned packaging:**

Packaging can be reused or recycled after cleaning. After a thorough water flush, the container can be recycled or disposed of as non-hazardous waste.

### 14. TRANSPORT INFORMATION

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**Land transport ADR/RID (cross-border):**

**ADR/RID class:**

**Maritime transport IMDG:**

**Marine pollutant: No**

### 15. REGULATORY INFORMATION

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	<b>TSCA (Toxic Substances Control Act)</b>
7732-18-5	Water, distilled, conductivity or of similar purity
7647-01-0	Hydrochloric acid

**Product related hazard information:**

The product has been classified and marked in accordance with directives on hazardous materials.

**Safety phrases:**

Keep container tightly closed.

In case of contact with eyes, rinse immediately with plenty of water. If irritation persists, seek medical advice.

If irritation develops upon contact with skin, rinse with plenty of water.

Rubber gloves and safety glasses are recommended.

### 16. OTHER INFORMATION

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Do not circulate material for more than a six-hour period without consulting the manufacturer. Most cleanings can be accomplished in an average of two hours to four hours. Please use material only as directed. Use at ambient temperatures, to ensure personnel safety. Heating may result in risk to personnel, as in heating water. Vent circulating solution to atmosphere. Some adverse reactions may occur with some alloys of aluminum, magnesium, and/or zinc.

For additional information, please review specifications or contact the manufacturer at +630-820-8888.

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