

**I – Identification of the Substance and of the Company**

SUPPLIER: RMO, Inc.  
650 W. Colfax Ave.  
Denver, CO 80204  
303-592-8200

Trade Name and Synonyms –  
Description: Etching Gel, Etching Solution  
Liquid

Product Grade / Name:

**ETCHING GEL or LIQUID**

**II – Composition / Information on Ingredients**

<u>Common Name</u>	<u>(% by Wt)</u>	<u>CAS Number</u>
Phosphoric Acid	36.8 – 40.0	7664-38-2

**III – Hazards Identification**Routes of Entry

Inhalation: Severe Irritant  
Skin: Mild to Severe Irritant  
Eye: Mild to Severe Irritant  
Ingestion: Slightly Toxic

Health Hazard (Acute or Chronic)

Acute: Slightly toxic when inhaled or ingested.  
Chronic: Slightly toxic when repeated inhalation or ingestion.

Signs or Symptoms of Exposure

Repeated contact with skin may lead to burns and rashes.

Medical Conditions Generally Aggravated by Exposure

Unknown

Avoid contact with skin, mucous membrane, oral mucous, eyes, inhalation, and ingestion. Skin contact is corrosive; may cause redness, pain, and burns. Eye contact may cause redness, pain, blurred vision, and burns. Inhalation of mist or vapor can cause irritation to the nose, throat, and upper respiratory tract. Ingestion may cause sore throat, abdominal pain, nausea, and burns of the mouth, throat and stomach. Occupational exposure to the material has not been reported to cause significant health effects.

**IV – First Aid Measures**

Inhalation	Remove person to fresh air.
Skin Contact	Wash with soap and water for at least 15 minutes.
Eye Contact	Flush with copious amounts of water for at least 15 minutes. Seek medical attention.
Ingestion	Do not induce vomiting. Wash out mouth with water, keep at rest. Seek medical attention. Drink copious amounts of water.

## **V – Fire Fighting Measures**

Flash Point: Non-flammable

Extinguishing Media: N/A

Special Fire Fighting Procedures: Use full protective clothing and self contained breathing apparatus. Thermal decomposition emits toxic fumes of oxides of phosphorus.

Unusual Fire and Explosion Hazards: None reported.

## **VI – Accidental Release Measures**

Gloves and eye protection suggested. Cover with sodium carbonate and calcium hydroxide. Collect material. Place in an approved metal container.

## **VII – Handling and Storage**

Store away from food and beverages. Store in a cool dry place at or below room temperature. Keep away from heat sources. Keep container dry. Keep in well ventilated area. Routine precautions applicable to acids.

## **VIII – Exposure Controls / Personal Protection**

Respiratory Protections: Respiratory protection is recommended when using large amounts.

Protective Gloves: Recommended

Eye Protection: Safety glasses or splash goggles.

Skin and Body: Lab coat.

## **IX – Physical and Chemical Properties**

Boiling Point: No Data

Vapor Pressure (mmHg): No Data

Vapor Density (Air = 1): No Data

Solubility in Water: Soluble

Appearance and Odor: Viscous Liquid or Gel – Green

Specific Gravity (H<sub>2</sub>O = 1): 1.3

Melting Point: No Data

Evaporation Rate: No Data

Explosion Properties: Material may burn if exposed to flame.

## **X – Stability and Reactivity**

### Stability:

Unstable ( ) Stable (X)

Conditions to Avoid: Avoid dehydration by keeping container closed.

### Incompatibility:

Material to Avoid: Reactive metals, bases.

### Hazardous Decomposition Products:

At flame temperatures, material will emit toxic phosphorus oxide fumes.

### Hazardous Reactions:

None reported.

### **XI – Toxicological Information**

Acute Oral Toxicity:	LD <sub>50</sub> = 1530 mg/kg (for 85% phosphoric acid)
Skin Irritation:	Irritation to skin can occur.
Eye Irritation:	Irritation to the eyes can occur.

### **XII – Ecological Information**

May cause adverse environmental impact if material reaches waterways.

### **XIII – Disposal Considerations**

Dispose of in accordance with Federal, State, and Local Regulations. Un-neutralized phosphoric acid, when discarded, is hazardous waste under Federal Resource Compensation Recovery Act (RCRA) Regulations.

### **XIV – Transportation Information**

Materials are shipped in accordance with Department of Transportation Hazardous Materials (49 CFR) under Exceptions per 49 CFR 173.154 (Limited Quantities). Hazard Class or Division: 8 / I.D. Number: UN1805

### **XV – Regulatory Information**

Concentrate phosphoric acid is a hazardous substance under the Federal Comprehensive Environment Response Compensation and Liability Act (CERCLA). Un-neutralized phosphoric acid, when discarded, is hazardous waste under Federal Resource Compensation Recovery Act (RCRA) Regulations.

Symbols of Danger: Corrosive

R-Phrase:

R34: Causes burns

R22: Harmful if swallowed

S-Phrase:

S36, S39: Wear suitable protective clothing and eye/face protection.

S24, S25: Avoid contact with skin or eyes.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical attention.

S28: After contact with skin, wash immediately with plenty of soap and water.

S46: If swallowed, seek medical advice immediately and show the container or label.

### **XVI – Other Information**

Note: While the information and recommendations set forth on this data sheet are believed to be accurate as received from our suppliers, RMO, Inc. makes no warranty with respect thereto and disclaims all liability from reliance thereon.