



MATERIAL SAFETY DATA SHEET

SECTION I - Product / Company Identification

Product Trade Name: **ALPHA-ETCH 37 (37% PHOSPHORIC ACID GEL)**

Supplier: RMO INC.
Address: 650 West Colfax Avenue
City, State, Zip: Denver, CO U.S.A.
Emergency Telephone Number: (800) 424-9300 / (703) 527-3887 (Chemtrec)
Information Telephone Number: (800) 525-6375/ (847) 677-5500
Date Revised: 25-Aug-15 Rev. No. 001

SECTION II - Hazardous Ingredients/Identity Information

| Hazardous Components: | Concentration | CAS NO. | HAZARD CODE | RISK CODE |
|-----------------------|---------------|---------------|-------------|---------------|
| Phosphoric acid | | [7664-38-2] | C | R21, R22, R34 |
| Amorphous Silica | | [112945-52-5] | Xi | R36/37 |

* It is important to note that materials in the product are physically bonded into a gel form and no independent compound dust or elements exist.

SECTION III - Hazards Identification

HAZARD CLASSIFICATION **C - Corrosive**

SECTION IV - First Aid Measures

Skin: Immediately wash the affected skin with plenty of water and soap while removing any contaminated clothing and shoes. If irritation occurs seek medical attention. Wash and rinse clothing thoroughly before reuse.

Ingestion: Do not induce vomiting. Drink plenty of water. Seek medical help immediately.

Inhalation: Inhalation is not an expected hazard.

Eyes: Wash open eye with running water for 15 minutes. Seek immediate medical attention by an Ophthalmologist.

SECTION V - Fire-fighting Measures.

The product is not considered to be a fire hazard.

Suitable extinguishing Media: Use suitable means to extinguish surrounding fire, such as carbon dioxide, chemical foam. . Water spray may used to keep containers cool.

Unsuitable extinguishing media: Water with strong full jet (not sprayed) can move and spread the material.

Forbidden Extinguishing Media: None

Special Exposure Hazards: Toxic fumes of Phosphoric Acid

Unusual explosion hazards: Not considered to be an explosion hazard. Contact with some metals may cause formation of flammable and explosive hydrogen gas

Special Protection Equipment: Self Contained Breathing Apparatus if toxic fumes are generated.



SECTION VI - Accidental Release Measures

Personal precautions: See handling precautions of Section VII and personal protection in Section VIII
 Environmental precautions: Keep spilled material out of sewers.
 Reclaiming methods: Absorb with liquid absorbent material such as sand, sawdust, acid binders, diatomite, etc. Neutralize acid before disposal as hazardous waste.

SECTION VII - Handling and Storage

Handling: Avoid unnecessary exposure. Follow normal procedures for handling chemicals.
 Storage: Room temperature.
 Incompatibilities: Strong Caustics, metals, sulfites, sulfides.
 Containers: Store in original containers, keep all containers tightly closed.
 Other precautions: Use by trained professionals only and according to directions.. Avoid contact with eyes, skin and soft tissue.

SECTION VIII - Exposure Controls / Personal Protection

| | | | | |
|------------------|-----------------------|----------------------|-----------------------|-----------------------|
| Exposure limits: | OSHA-PEL | ACGIH-TLV | TWA STEL | TWA STEL |
| Phosphoric acid | 1 mg / m ³ | 3mg / m ³ | 1 mg / m ³ | 3 mg / m ³ |

General ventilation: Local or general exhaust system is recommended to keep personnel exposures below the exposure limits.

General protective measures: Follow the usual precautionary measures for handling chemicals and exercise good personal hygiene practice. Avoid contact with skin and eyes.

Respiratory protection: none required in normal use.

Eye protection: Use safety glasses or goggles.

Hands protection: Use of non-permeable gloves is recommended

Skin protection: Light weight protective clothing

Other equipment: Lab coat over clothing is recommended.

SECTION IX - Physical and Chemical Properties

| | | | |
|-------------------|----------------------|-------------------------|-------------------------|
| Appearance: | Gel | Explosion limits: | Not an explosion hazard |
| Color | Blue or green | Water solubility: | Soluble |
| Odor | Odorless | Evaporation rate: | NE |
| pH 10 % solution: | < 2 | Specific gravity range: | 1.2 |
| Boiling point: | No information found | Melting point: | N.A |
| Flash point | Not applicable | | |

SECTION X - Stability and Reactivity

Stability: Stable if stored as directed.

Conditions to avoid: Temperature above 40 C

Materials to avoid: Strong Caustics, Sulfites, Sulfides,

Metals. Hazardous decomposition products: Toxic fumes if temperature is above 100 °C.

Hazardous polymerization products: Will not occur



SECTION XI - Toxicological Information

Ingestion: Corrosive. May cause sore throat, abdominal pain, nausea, severe burns to mouth, throat, upper respiratory tract, and stomach.

Eye contact: Corrosive. May cause redness, pain, blurred vision, eye burns or permanent eye damage

Skin contact: Corrosive. May cause redness, pain, severe skin burns.

Inhalation: Inhalation is not a hazard unless the product is heated at high temperatures. In these conditions may cause irritation of the respiratory system, asfixia or permanent damage to the lungs.

Prolonged exposure: No information found.

SECTION XII - Ecological Information

There is no specific information on the product. Use according to good working practice.
Avoid releasing the product into environment.

SECTION XIII - Disposal Considerations

Do not allow undiluted product or large quantities to reach ground water, or sewage system.
Dike and cover spilled liquid with dirt, vermiculite or other inert absorbent. Cover spill with sodium bicarbonate and mix to neutralize. Neutralized waste must be disposed of in an approved disposal facility.
Dispose containers and unused contents in accordance with Federal, State and local environmental regulations.

SECTION XIV - Transport Information

Land transport

| | |
|---------------------------|------------------------------|
| DOT Hazard Classification | Corrosive |
| Class | 8 |
| UN No | 1805 |
| Packaging group | III |
| Hazard label | 8 |
| Description of goods | 1805 Phosphoric acid mixture |

Air transport

| | |
|------------------|---------------------------------|
| ICAO/IATA Class: | 8 |
| UN/ID Number: | 1805 |
| Label | 8 |
| Packaging group: | III |
| Shipping name: | Phosphoric Acid, Liquid mixture |

Maritime transport

| | |
|-------------------|---------------------------------|
| Class: | 8 |
| UN Number: | 1805 |
| Packaging group | III |
| EMS Number | F-A,S-B |
| Marine pollutant: | No |
| Shipping name: | Phosphoric Acid, Liquid mixture |



SECTION XV - Regulatory Information

CLASSIFICATION IN ACCORDANCE WITH EEC DIRECTIVES.

Hazard Classification Symbol: C Corrosive
Risk statements R 21 Harmful in contact with skin
R 22 Harmful if swallowed
R 34 Causes burns
Safety Statements S 24 Avoid contact with skin
S 25 Avoid contact with eyes.
S 26 If eye is contacted rinse immediately with water. Seek medical advice.

SECTION XVI - Other Information

| | NFPA Hazard Classification | HMIS Hazard Classification |
|-----------------------|----------------------------|----------------------------|
| Health | 3 | 3 |
| Flammability | 0 | 0 |
| Reactivity | 0 | 0 |
| Specific Hazard / PPE | Corrosive | B |

- NFPA - National Fire Protection Association
- HMIS - Hazardous materials Identification System
- N/A - Not Applicable
- N/E - Not Established

CAUTION: PRODUCT FOR PROFESSIONAL USE ONLY.

The above information is based on presently available data and to our best knowledge for handling the product under normal conditions. Any use of this product in any way not indicated on this document or using it together with any other process/procedure will be exclusively under the user's responsibility.