Material Safety Data Sheet  ETCHANT GEL 37% PHOSPHORIC ACID  Page 1 of 5

Section 1 – Identification

Product Name: Seity Etchant Gels 37% Phosphoric Acid (Blue or Green)

Manufacturer: Keystone Industries
480 S Democrat Rd, Gibbstown, NJ 08027

Active Ingredient: Phosphoric Acid

Information Contacts: (856) 663-4700
Toll Free: (800) 333-3131
Emergency Phone Numbers: (800) 535-5053

Family: Etching Gels

Product Use: Professional Dental Etching Gel

Product #: Various

Section 2 – Hazards Identification

EMERGENCY OVERVIEW
This information is based on findings from related or similar materials.

- Corrosive! – H314
- Causes tissue destruction, permanent damage to the cornea, blindness.
- Mists may cause lung irritation, shortness of breath.
- Ingestion may cause nausea, vomiting, diarrhea, burns to the mouth, chest pain, seizures, shortness of breath, even death.
- Please read entire MSDS for additional information.

Potential Health Effects, Signs and Symptoms of Exposure:

Primary Route of Entry  Inhalation, skin, and ingestion.

Eye  Corrosive. May cause redness, pain, blurred vision, eye burns, and permanent eye damage.

Skin  Corrosive. May cause redness, pain, and severe skin burns.

Ingestion  Corrosive. May cause sore throat, abdominal pain, nausea, and severe burns of the mouth, throat, and stomach.

Inhalation  Inhalation is not an expected hazard unless mist is heated to high temperatures. Mist or vapor inhalation can cause irritation to the nose, throat, and upper respiratory tract. Severe exposures can lead to a chemical pneumonitis.

NOTE: Refer to Section 11, Toxicological Information for Details

Section 3 – Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>CAS Numbers</th>
<th>EINECS#</th>
<th>INCI Name</th>
<th>Exposure Limits</th>
<th>Carcinogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphoric Acid</td>
<td>7664-38-2</td>
<td>231-633-2</td>
<td>Phosphoric Acid</td>
<td>TWA = 1 mg/ m³</td>
<td>Not listed</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>STEL = 3 mg/ m³</td>
<td>32-44</td>
</tr>
</tbody>
</table>

N/E – None Established  N/D – No Data Available
N/R – Not Reviewed  N/A – Not Applicable

May contain the following: FD&C Blue, D&C Violet #2,

(items in parenthesis relate to 1999/45/EC)

Phosphoric Acid: Danger Symbol – GHS05 (C) (S26), P309+314 (S45)
Hazard Statement – H314 (R34)
Precautionary Statement – P102 (S1/2), P305+334

See Section 16 for Hazard and Precautionary Statement Key.

Section 4 – First Aid Measures

First Aid for Eye  Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek immediate medical attention. If it is necessary to transport the patient to a physician and the eye needs to be bandaged, use a dry sterile cloth pad and cover both eyes.

First Aid for Skin  Immediately wipe excess material from skin with a dry cloth; then wash skin with plenty of soap and water for at least 15 minutes. Seek medical attention. Remove contaminated clothing and shoes while washing.

First Aid for Ingestion  If victim is conscious and alert, give 2-3 glasses of water to drink and do not induce vomiting. Seek immediate medical attention. To prevent aspiration of swallowed product, lay victim on side with
head lower than waist. Vomiting may occur spontaneously.

First Aid for Inhalation
Remove victim from immediate source of exposure and assure that the victim is still breathing. If breathing is difficult, administer oxygen if available. If victim is not breathing, administer CPR. Seek medical help.

Section 5 – Fire Fighting Measures

<table>
<thead>
<tr>
<th>Flash Point (°F/°C)</th>
<th>Flammable Limit (vol%)</th>
<th>Auto-ignition Temperature (vol%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Method:
Extinguishing Media: Not combustible. Use extinguishing method suitable for surrounding fire.
Fire Fighting: Firefighters should wear NIOSH/MSHA approved self contained breathing apparatus and full protective clothing. Keep unnecessary people away, isolate hazard area and deny entry. Evacuate residents who are downwind of fire. Dike area to prevent runoff and contamination of water sources.

Unusual Hazards: Evacuate all personnel.

Section 6 – Accidental Release Measures

Spill or Release Procedures
Minor spills – Clean up immediately, avoid contact with skin and eyes. Mop / wipe area and clean with soapy water Dike or retain dilution water for disposal.
Major spills – Clear area of personnel. Restrict access to area. Avoid contact with skin and eyes, and dilute area with soapy water. Collect contaminated water and dispose of properly. Dike or retain dilution water for disposal. Large spills should be handled according to a predetermined plan.
See section 8 & section 12.

Section 7 – Handling and Storage

Handling
Limit all unnecessary personal contact. Avoid breathing vapors. Wear appropriate PPE. Do not get into eyes or on skin. Avoid breathing vapors and mists. This product reacts with bases liberating heat and causing spattering.

Storage
Store in a cool, well ventilated area away from heat, sparks and flame. Keep containers closed when not in use. Keep in original container provided by manufacturer.

Explosion Hazard
None.

Section 8 – Exposure Controls / Personal Protection

Engineering Controls
General exhaust is adequate under normal operating conditions; however local exhaust ventilation at the point of generation is preferred. Personal hygiene is an important work exposure control measure.

Personal Protective Equipment
General
To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.132), or European Standard EN166 be conducted before using this product.

Eye/ Face Protection
Safety glasses / goggles or splash shields are required when handling. Ensure eye bath is on hand.

Skin Protection
Use impermeable clothing to prevent ANY contact with this product, such as gloves, apron, boots, or whole body suit.

Respiratory Protection
In case of insufficient ventilation, wear suitable respiratory equipment.

Section 9 – Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Odor &amp; Odor Threshold</th>
<th>pH</th>
<th>Specific Gravity</th>
<th>Viscosity</th>
<th>% Volatile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gel</td>
<td>Odor of Stated Flavor</td>
<td>N/A</td>
<td>(H2O = 1): N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Boiling Point/ Freezing Point</th>
<th>Decomposition Temperature</th>
<th>Octanol/Water Partitioning Coefficient</th>
<th>Vapor Pressure:</th>
<th>Vapor Density</th>
<th>Evaporation Rate</th>
<th>Ignition</th>
<th>Solubility In Water (20°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/DA</td>
<td>N/DA</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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</table>

Date of Issue: 05/01/03
Section 10 – Stability and Reactivity

Stability:
Stable under normal conditions

Incompatibility (Materials to Avoid):
Bases, metals, strong oxidizing or reducing agents

Hazardous Decomposition Products:
Oxides of Phosphorus

Hazardous Polymerization:
Will not occur

Conditions to Avoid: Heat and incompatible materials

Section 11 – Toxicological Information

<table>
<thead>
<tr>
<th>Acute Oral Toxicity</th>
<th>Acute Dermal Toxicity</th>
<th>Acute Inhalation Toxicity</th>
<th>Irritation – skin</th>
<th>Irritation – Eye</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/DA</td>
<td>N/DA</td>
<td>N/DA</td>
<td>N/DA</td>
<td>N/DA</td>
</tr>
</tbody>
</table>

Sensitization: N/DA
Mutagenicity: N/DA
Sub-chronic Toxicity: N/DA

Section 12 – Ecological Information

Ecotoxicological Information

Acute Toxicity to Fish: N/DA
Acute Toxicity to Invertebrates: N/DA
Acute Toxicity to Algae: N/DA
Bioconcentration: N/DA
Toxicity to Sewage Bacteria: N/DA

Chemical Fate Information

Biodegradability: N/DA. This material is not expected to significantly bio-accumulate.
Chemical Oxygen Demand: N/DA

Section 13 – Disposal Considerations

Dispose of in compliance with governmental regulation (state and federal).
Dispose of container and unused contents in accordance with federal, state and local requirements. For EU Member States, please refer to any relevant Community provisions relating to waste. In their absence, it is useful to remind the user that national or regional provisions may be in force.

Section 14 – Transport Information

DOT (49 CFR 172):
Proper Shipping Name: UN1805, Phosphoric Acid Solution, 8, III
Identification Number: UN1805
Marine Pollutant: No
Special Provisions: A7, IB3, N34, T4, TP1
Emergency Response Guidebook (ERG) #: 154

IATA (DGR):
Proper Shipping Name: UN1805, Phosphoric Acid Solution, 8, III
Class or Division: 8
UN or ID Number: UN1805
Packaging Instructions: III

Emergency Response Guidance (ICAO) #:

IMO (IMDG):
Proper Shipping Name: UN1805, Phosphoric Acid Solution, 8, III
Class or Division: 8
UN or ID Number: UN1805
Special Provisions & Stowage/Segregation: N/A
Emergency Schedule (EmS)#: N/A
Other Information: This product can qualify as a consumer commodity (limited quantity exception)

Date of Issue: 05/01/03
**Section 15 – Regulatory Information**

**US Federal Regulations**

| Clean Air Act: HAP/ODS | This product contains the following HAP’s or ODS:  
| --- | ---  
| • NONE |  
| Clean Water Act: Priority Pollutant | This product contains the following chemicals listed under the U. S. Clean Water Act Priority Pollutant and Hazardous Substance List:  
| • None |  
| FDA: Food Packaging Status | This product has not been cleared by the FDA for use in food packaging and / or other applications as an indirect food-packaging additive.  
|  
| Occupational Safety and Health Act | This product is considered to be hazardous under the OSHA Hazard Communication Standard. It’s hazards are:  
| • Phosphoric Acid CAS # 7664-38-2 (Corrosive) |  
| RCRA | This product contains the following chemicals considered to be hazardous waste under RCRA ( 40 CFR 261).  
| • None |  
| SARA Title III: Section 302 (RQ) | This product contains no chemicals regulated under Section 302 as extremely hazardous substances.  
|  
| SARA Title III: Section 302 (TPQ) | This product contains chemicals regulated under Section 304 as extremely hazardous chemicals for emergency release notification (“CERCLA” List):  
| • Phosphoric Acid CAS #7664-38-2 (Corrosive) – RQ 5000# |  
| SARA Title III: Section 311-312: | This product is considered to be hazardous under the OSHA Hazard Communication Standard and is regulated under Section 311-312 (40 CFR 370). It’s hazards are:  
| • Phosphoric Acid CAS #7664-38-2 (Corrosive) |  
| SARA Title III: Section 313: | This product contains the following chemicals which are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:  
| • None |  
| TSCA Section 8(b): Inventory: TSCA Significant New Use Rule: | This product does contain chemicals listed on the TSCA inventory or otherwise complies with TSCA pre-manufacture notification requirements.  
| • Phosphoric Acid CAS #7664-38-2 | None of the chemicals in this material have a SNUR under TSCA.  

**State Regulations**

| CA Right-to-Know Law: California No Significant Risk Rule: | None  
| --- | ---  
| None |  
| MA Right-to-Know Law: | Phosphoric Acid CAS # 7664-38-2  
|  
| NJ Right-to-Know Law: | Phosphoric Acid CAS # 7664-38-2  
|  
| PA Right-to-Know Law: | Phosphoric Acid CAS # 7664-38-2  
|  
| FL Right-to-Know Law: | None  
|  
| MN Right-to-Know Law: | Phosphoric Acid CAS # 7664-38-2  
|  

**International Regulations**

| CDSL: Canadian Inventory (on Canadian Transitional List) | Phosphoric Acid CAS # 7664-38-2  
| --- | ---  

**Labeling according to EC directives – 1272/2008 (CLP) AND 1999/45/EC (items in parenthesis relate to 1999/45/EC)**

**European Community:**

For Seity Etchant Gel (finished product):  
- **DANGER SYMBOLS:** GHS05 (C) – Corrosive  
- **HAZARD STATEMENT:** H314 (R34), Causes severe skin burns and eye damage.  
- **PRECAUTIONARY STATEMENT:** P102 (S2), Keep out of reach of children. P210 (S15), Keep away from heat/sparks/open flames/hot surfaces. P260 (S23), Do not breathe dust/fume/gas/mist/vapors/spray. P280 (S36/37/39), Wear protective gloves/clothing/eye protection/face protection. P309+314 (S45), If exposed or you feel unwell, get medical advice/attention. P405 (S1), Store locked up. P501 (S56), Dispose of contents/container in appropriate way.
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Section 16 – Other Information
EU Classes and Risk / Safety Phrases for Referenced Ingredients (See Section 2):

(items in parenthesis relate to 1999/45/EC)

Danger Symbols:
GHS05 (C) - Corrosive

Hazard Statement: H314 (R34), Causes severe skin burns and eye damage.

Precautionary Statement: P102 (S1 or S2). Keep out of reach of children. P210 (S15), Keep away from heat/sparks/open flames/hot surfaces. P260 (S23). Do not breathe dust/fume/gas/mist/vapors/spray. P261 (S24). Avoid breathing dust/fume/gas mist/vapor sprays. P280 (S36/37/39). Wear protective gloves/clothing/eye protection/face protection. P305+314 (S45), In case of contact with eyes, rinse immediately with water. P309+314 (S45), If exposed or you feel unwell, get medical advice/attention. P404 (S7), Store in a closed container. P405 (S1), Keep cool. P405 (S1), Store locked up. P501 (S56), Dispose of contents/container in appropriate way.

Hazard Rating System (Pictograms)

<table>
<thead>
<tr>
<th>NFPA:</th>
<th>HMIS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>Health</td>
</tr>
<tr>
<td>Flammability</td>
<td>Flammability</td>
</tr>
<tr>
<td>Reactivity</td>
<td>Reactivity</td>
</tr>
</tbody>
</table>

MSDS Prepared by: WME
Revision History: 03/29/11 Initial

05/01/13 Changed manufacturer from Deepak to Keystone, changed address and telephone number SWR

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