DOTWORKS
CLASSIC POLY® PLATE ETCH

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Distributor: Recognition Systems, Inc.
30 Harbor Park Drive, Port Washington, NY 11050
Product Name: CLASSIC POLY® PLATE ETCH
Product Number: 608400, CPPEQ
Product Use: Plate etch
Customer Information Phone Number: 1-516-625-5000
CHEMTREC®: 24 Hour Emergency Transport Phone Number: 1-800-424-9300
Date Reviewed: 5/08/2015
Version: 2.0

2. HAZARDOUS IDENTIFICATION

2.1 Classification of the substance or mixture

Health hazard
Acute toxicity, Oral (Category 4), H302
Specific organ toxicity, Oral (Category 2), Kidney, H373
Serious eye damage (Category 1), H318

2.2 GHS Label elements, including precautionary statements

Pictogram

⚠️ ⚠️

Signal Word: WARNING

Hazard statement(s)
H302 Harmful if swallowed
H318 Serious eye damage
H373 Specific organ toxicity – repeated exposure, Oral (Category 2), Kidney

Precautionary statement(s)

P201 Obtain special instructions before use
P260 Avoid breathing mist
P264 Wash skin thoroughly after handling
P270 Do not eat, drink, or smoke when using this product
P280 Wear protective gloves, eye protection
MATERIAL SAFETY DATA SHEET

P301 + P312 IF SWALLOWED; call a POISON CENTER or doctor/physician if you feel unwell
P302 + P352 IF ON SKIN: Wash with plenty of soap

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P330 Rinse mouth.
P501 Dispose of contents to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS</th>
<th>OHSA PEL</th>
<th>ACGIH TLV</th>
<th>Weight %</th>
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</thead>
<tbody>
<tr>
<td>Ethylene Glycol</td>
<td>107-21-1</td>
<td>N.E.</td>
<td>127 mg/m³ Vapor/ Mist</td>
<td>25-35</td>
</tr>
<tr>
<td>N Propanol</td>
<td>71-23-8</td>
<td>200 ppm TWA</td>
<td>200 ppm SKIN</td>
<td>5-10</td>
</tr>
<tr>
<td>Polyethylene Glycol</td>
<td>25322-68-3</td>
<td>1000 ppm TWA*</td>
<td>1000 ppm TWA*</td>
<td>1-3</td>
</tr>
<tr>
<td>Silica, Amorphous, fume</td>
<td>7631-86-</td>
<td>N.E.</td>
<td>2mg/m³ DUST</td>
<td>1-3</td>
</tr>
<tr>
<td>*Ethanol component of the alcohol</td>
<td></td>
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</tr>
</tbody>
</table>

4. FIRST AID MEASURES

4.1 Description of first aid measures

**Eye Contact:** Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

**Inhalation:** If symptomatic, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

**Ingestion:** Only induce vomiting at the instruction of medical personnel. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

**Skin Contact:** Flush skin with plenty of water and wash with a non-alkaline skin cleaner. Wash contaminated clothes before reuse. Get medical attention if irritation develops.

**Aggravated Medical Conditions:** Individuals who are under the care of a physician or have chronic ailments, should consult a physician before using this product.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media
Nonflammable. Use agent appropriate for surrounding fire.

5.2 Special Hazards arising from substance or mixture
Fire or excessive heat may cause production of hazardous decomposition products.
Combustion Products: Carbon dioxide, carbon monoxide.

5.3 Advise for firefighters
Wear self-contained breathing NIOSH/MSHA approved apparatus and protective clothing to prevent contact with skin and eyes.

Date: 5/11/15 Classic Poly® Plate Etch
6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Review fire and explosion hazards and safety precautions before proceeding with cleanup. Use appropriate personal protective equipment. Avoid contact with skin and eyes. Stop the spillage. Dike the spill. Prevent liquid from entering sewers, waterways or low areas. Absorb spillage in inert material. Soak up with sawdust, sand, or other absorbent material. Remove non-usable solid material and/or contaminated soil for disposal in an approved and permitted landfill.

6.2 Environmental precautions
Prevent liquid from entering sewers, waterways or low areas. Discharge to sewer requires approval of permitting authority and may require pre-treatment. Contaminated surfaces should be cleaned using water.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Store in a cool, dry, well-ventilated area. Keep containers closed. Do not store or consume food, drink, or tobacco where they may become contaminated with this material.

7.2 Conditions for safe storage, including any incompatibles
Do not store with incompatible materials. Do not store with oxidizing materials. All labeled precautions must be observed when handling, storing and transporting empty containers due to product residues. Triple rinse before disposal. Dispose of in a licensed facility.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control parameters
See Section 3.

8.2 Exposure controls
Use good personal hygiene when handling this product. Wash hands after use, before smoking, or using the toilet. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Personal protective equipment

Eye Protection: Safety glasses with side shields (or goggles).

Respiratory Protection: When this product is used in the intended way, no respiratory protection is anticipated to be necessary. However, if use conditions generate decomposition vapors or fumes; use a NIOSH approved respirator with acid gas cartridges.

Skin protection: Latex, rubber, or neoprene waterproof gloves are recommended.

Body protection: Rubber or plastic apron.

Respiratory protection: Local exhaust ventilation is recommended. Ventilation must be adequate to keep hazardous ingredients below their exposure limits.
9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- Appearance And Odor: Clear, colorless liquid, alcohol odor.
- Solubility In Water: Complete
- Boiling Point: > 97º C
- Flash Point: Nonflammable
- Flash Point Method: Not applicable
- Auto ignition: Not applicable
- LEL: Not applicable
- UEL: Not applicable
- Vapor Pressure: 18 mm Hg @ 20º C
- Ph: 5.35
- Specific Gravity: 1.028 g /ml
- Melting Point: Not applicable
- Freezing Point: <-18° C
- Evaporation Rate: N.E.
- Vapor Density: Nor established
- Percent Volatile: 67.74
- Molecular Weight: Not applicable
- Pounds Per Gallon: 8.56
- V.O.C. is 415.36 g/L or 40.4% or 3.46 lb. /gal.

10. STABILITY AND REACTIVITY

10.1 Reactivity
- Stable

10.2 Chemical stability
- Conditions To Avoid: None

10.3 Possibility of hazardous reactions
- None

10.4 Conditions to avoid
- None

10.5 Incompatible Materials
- May be incompatible with strong oxidizers, acids.

10.6 Decomposition Products
- May produce carbon oxides. Decomposition products can include aldehydes, alcohols, and ethers from the ethylene glycol.
11. TOXICOLOGICAL INFORMATION

11.1 Information of toxicological effects

**Component information**

**Ethylene glycol 107-21-1**

**Acute toxicity:**
- Oral: LD50 (rats): 4,700 mg/kg
- Inhalation: no data
- Dermal: LD50 (rabbits) – 10,626 mg/kg

**Skin irritation:** Skin – rabbit, not irritant

**Eye irritation:** Eyes – rabbit, Mild eye irritation - 24h
- Not considered to be a human eye irritant in normal industrial use.

**Respiratory or skin sensitization:** No data available

**Carcinogenicity/mutagenicity:** none

**Specific target organ toxicity – repeated exposure**
- Oral - May cause damage to organs through prolonged exposure. – kidney

**Aspiration hazard:** No data available

**1-Propanol 111-46-6**

**Acute toxicity:**
- Oral: LD50 (rats): 8,038 mg/kg
- Dermal: LD50 (rabbits) – 4,000 mg/kg
- Inhalation: LD50 (rats) – 2000 ppm – 1 h

**Skin irritation:** Skin – rabbit, not irritant

**Eye irritation:** Eyes – rabbit – Severe eye irritation
- Not considered to be a human eye irritant in normal industrial use.

**Respiratory or skin sensitization:** Maximization Test – guinea pig, did not cause sensitization.

**Carcinogenicity/mutagenicity:** none

**Specific target organ toxicity – repeated exposure**
- May cause drowsiness or dizziness

**Polyethylene glycol 25322-68-3**

**Acute toxicity:**
- Oral LD-50 (rat): 27,500 mg/kg
- Dermal LD-50 (rabbit): >20,000 mg/kg
- Inhalation: no data available

**Skin irritation:** no data available

**Serious Eye irritation:** Rabbit
- Result: Mild eye irritation

**Respiratory or Skin Sensitization:** no data available

**Carcinogenicity/mutagenicity:** none
Silica, Colloidal  7631-86-9

Acute toxicity:
Dermal: No data available
Inhalation: No data available

Skin irritation: No data available
Eye irritation: No data available
Respiratory or Skin Sensitization: No data available
Carcinogenicity/mutagenicity: none

12. ECOLOGICAL INFORMATION

Component information

Ethylene glycol  107-21-1

12.1 Toxicity

Toxicity to fish          LC50-Onchorhynchus mykiss (rainbow trout) – 18,500 mg/l – 96 h
                            LC50-Leuciscus idus (Golden orfe) - >10,000 mg/l – 48 h
                            NOEC-Pimephales promelas (fathead minnow) – 32,000 mg/l – 7 d

Toxicity to daphnia and
other aquatic invertebrates   EC50 – Daphnia magna (Water flea) – 74,000 mg/l – 24 h
                            LC50 – Daphnia magna (Water flea) – 41,000 mg/l – 48 h

12.2 Persistence and degradability
No data available
Ratio BOD/ThBOD  0.78%

12.3 Bioaccumulative potential
Does not bioaccumulate
Bioaccumulation    other fish – 61 d
                  -50 mg/l

12.4 Mobility in soil
No data available

12.5 Result of PBT and vPvB assessment
Assessment not available as chemical assessment not required/not conducted

12.5 Other adverse effects
No data available

1-Propanol  111-46-6

12.1 Toxicity

Toxicity to fish        LC50-Pimephales promelas (fathead minnow) – 4,555 mg/l – 96h
Toxicity to daphnia and other aquatic invertebrates
EC50 – Daphnia magna (Water flea) -> 3,642 mg/l – 48 h
Toxicity to algae
EC50- Pseudokirchneriella subcapitata (green algae)
– 9,170 mg/l – 48 h

12.2 Persistence and degradability
Biodegradability
Result: 75% - Readily biodegradable.
Ratio BOD/ThBOD
< 2 %

12.3 Bioaccumulative potential
The product is miscible in water and readily biodegradable in both water and soil. Accumulation is not expected.

12.4 Mobility in soil
No data available

12.5 Result of PBT and vPvB assessment
Assessment not available as chemical assessment not required/not conducted

12.5 Other adverse effects
None

Polyethylene glycol 25322-68-3

12.1 Toxicity
Toxicity to fish
LC50- Leuciscus idus (golden orfe) - <500 mg/l
Remarks: no data available

12.2 Persistence and degradability
Biodegradability
Aerobic – exposure time 28 d
Result: 90% - Readily biodegradable

Biochemical Oxygen Demand (BOD)
< 10 mg/g
1,120 mg/g

Chemical Oxygen Demand (COD)
1,660 mg/g

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Result of PBT and vPvB assessment
Assessment not available as chemical assessment not required/not conducted
12.5 Other adverse effects
   No data available

*Silica, Colloidal  7631-86-9*

12.1 Toxicity
   No data available

12.2 Persistence and degradability
   No data available

12.3 Bioaccumulative potential
   No data available

12.4 Mobility in soil
   No data available

12.5 Result of PBT and vPvB assessment
   Assessment not available as chemical assessment not required/not conducted

12.5 Other adverse effects
   None

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

   Product
   Preferred options for disposal are to send to licensed reclaimers, or to permitted incinerators. Any
   disposal practice must be in compliance with federal, state, and local regulations. Do not dump into
   sewers, ground, or any body of water.

14. TRANSPORT INFORMATION

DOT (US)
Not regulated

15. REGULATORY INFORMATION

SARA 302 Components
The following components are subject to reporting levels established by SARA Title III, Section 302:

SARA 313 Components
The following components are subject to reporting levels established by SARA Title III, Section 313:

<table>
<thead>
<tr>
<th></th>
<th>Cas#</th>
<th>Revision Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol</td>
<td>107-21-1</td>
<td>2007-07-01</td>
</tr>
</tbody>
</table>
SARA 311/312 Hazards
Acute Health Hazard, Chronic Health Hazard

California Prop 65 Components
This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

TSCA
All ingredients in this finished product are listed on the EPA TSCA INVENTORY.

SCAQMD Rule 443.1
Photochemically Reactive: No
Maximum Grams of VOC per Liter: 415.7 g/L
Vapor Pressure: 18 mm Hg@ 20 Degrees C

16. OTHER INFORMATION

Full text of H-statements referred to under sections 2 and 3.

Acute toxicity, Oral (Category 4), H302
Specific organ toxicity Oral (Category 2), Kidney, H373
Serious eye damage (Category 1), H318

HMIS RATING

Health: 3
Flammability: 1
Reactivity: 0

OTHER ADDITIONAL INFORMATION: The information contained herein is based on the data available to us and is believed to be accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. We assume no responsibility for the injuries from the use of the product described herein.