

SUPERMEG PLATE ETCH

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufacturer: Photo Systems, Inc.

7200 Huron River Drive, Dexter, MI 48130

Product Name: **SUPERMEG PLATE ETCH**

Product Number: **608400**

Product Use: Plate etch

Customer Information Phone Number:

1-734-424-9625

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

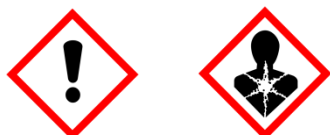
Acute toxicity, Oral (Category 4), H302

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

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

Chemical Name	CAS	OHSA PEL	ACGIH TLV	Weight %
Ethylene Glycol	107-21-1	N.E.	127 mg/m ³ Vapor/ Mist	25-35
N Propanol	71-23-8	200 ppm TWA	200 ppm SKIN	5-10
Polyethylene Glycol	25322-68-3	1000 ppm TWA*	1000 ppm TWA*	1-3
Silica, Amorphous, fume	7631-86-	N.E.	2mg/m ³ DUST	1-3

*Ethanol component of the alcohol

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.

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: > 97° C

Flash Point: Nonflammable

Flash Point Method: Not applicable

Auto ignition: Not applicable

LEL: Not applicable

UEL: Not applicable

Vapor Pressure: 18 mm Hg @ 20° C

Ph: 5.35

Specific Gravity: 1.028 g /ml

Melting Point: Not applicable

Freezing Point: <-18° C

Evaporation Rate: N.E.

Vapor Density: Not 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 73-23-8

Acute toxicity:

Oral: LD50 (rats): 8,038 mg/kg
Dermal: LD50 (rabbits) – 4, 000 mg/kg
Inhalation: LD50 (rats) – 20000 ppm – 1 h

Skin irritation: Skin – rabbit, not irritant

Eye irritation: Eyes – rabbit – Severe eye irritation

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-Oncorhynchus 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
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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
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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
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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 73-23-8**12.1 Toxicity**

Toxicity to fish	LC50-Pimephales promelas (fathead minnow) – 4,555 mg/l – 96h
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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:

	Cas#	Revision Date
Ethylene Glycol	107-21-1	2007-07-01

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.