

NETWORK SILVERVAL PLATE ETCH

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufacturer: Photo Systems, Inc.

Product Number: **608400**

Customer Information Phone Number:

CHEMTREC®: 24 Hour Emergency Transport Phone Number: 1-800-424-9300

Product Name: **SILVERVAL PLATE ETCH**

Date Prepared: 09/28/2007

1-800-521-4042

2. COMPOSITION/INFORMATION ON INGREDIENTS

| <u>Chemical Name</u> | <u>CAS</u> | <u>OHSA PEL</u> | <u>ACGIH TLV</u> | <u>Weight %</u> |
|----------------------|------------|-----------------|-----------------------------------|-----------------|
| 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 |
| ETHYL ALCOHOL | MIXTURE | 1000 ppm TWA* | 1000 ppm TWA* | 1-5 |

*Ethanol component of the alcohol

3. HAZARDOUS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

Eye Contact: May cause irritation or permanent damage to tissue.

Inhalation: May cause irritation to nasal mucous membranes and respiratory tract.

Ingestion: May cause irritation or corrosion to digestive tract.

Skin Contact: May cause skin irritation upon contact.

Signs And Symptoms Of Exposure: Eye irritation, respiratory irritation, dermatitis, difficulty breathing, abdominal pain, skin irritation, mucus membrane irritation, coughing, nausea, diarrhea.

4. FIRST AID MEASURES

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

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

Ingestion: If swallowed, DO NOT induce vomiting. Give large quantities of water. Call a physician or poison control center.

Skin Contact: Immediately wash skin with soap and plenty of water.

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

Supplemental Health Information: None of the chemicals in this component is listed by IARC, NTP, or OSHA as carcinogen.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

Flash Point: Not flammable

Flash Point Method: Not applicable

Auto ignition: Not applicable

LEL: Not applicable

UEL: Not applicable

Extinguishing Media: Use alcohol foam, carbon dioxide, or dry chemical when fighting fires involving this material.

Special Fire-Fighting Procedures: Firefighters should wear proper protective equipment and self-contained breathing apparatus with full-face piece in positive pressure mode. Move containers from fire area if it can be done without risk. Use water to keep fire-exposed containers cool and disperse vapors.

Unusual Fire And Explosion Hazards: None

Combustion Products: Carbon dioxide and carbon monoxide

6. ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Spilled Or Released: 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. Discharge to sewer requires approval of permitting authority and may require pre-treatment.

7. HANDLING AND STORAGE

Precautions To Be Taken In Handling And Storage: Store in a cool, dry, well-ventilated area. Keep containers closed. Do not store with incompatible materials. Do not store or consume food, drink, or tobacco where they may become contaminated with this material.

Other Precautions: All labeled precautions must be observed when handling, storing and transporting empty containers due to product residues. Triple rinse before disposal.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: None necessary when this product is used in its intended manner.

Ventilation: Local exhaust ventilation is recommended. Ventilation must be adequate to keep hazardous ingredients below their exposure limits.

Protective Gloves: Nitrile, rubber, or neoprene waterproof gloves are recommended.

Eye Protection: Chemical safety goggles.

Other Protective Clothing or Equipment: Rubber or plastic apron.

Work/Hygienic Practices: Use good personal hygiene when handling this product. Wash hands after use, before smoking, or using the toilet.

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Exposure Guidelines: See Section 2.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance And Odor: Clear, colorless liquid, alcohol odor.

Solubility In Water: Complete

Boiling Point: N.E.

Vapor Pressure: N.E.

Ph: 5.35

Specific Gravity: 1.028 g/ml

Melting Point: Not applicable

Freezing Point: N.E.

Evaporation Rate: N.E.

Vapor Density: N.E.

Percent Volatile: 67.74

Molecular Weight: Not applicable Pounds Per Gallon: 8.56 Other Properties:
V.O.C. is 415.36 g/L or 40.40 % or 3.46 lb. /gal.

10. STABILITY AND REACTIVITY

Stability: Stable

Conditions To Avoid: High temperatures

Incompatibility: Strong oxidizing agents, acids

Hazardous Decomposition Or By Products: May produce carbon dioxide and carbon monoxide.

Decomposition products can include aldehydes, alcohols, and ethers from the ethylene glycol.

Hazardous Polymerization: Will Not Occur

Conditions To Avoid: High temperatures

11. TOXICOLOGICAL INFORMATION

12. ECOLOGICAL INFORMATION

13. DISPOSAL CONSIDERATIONS

The 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

This material is not regulated for domestic ground shipments by the U.S. Department of Transportation (DOT) when transported in non-bulk (a packaging which has a maximum capacity of 119 gallons or less as a receptacle for a liquid). Reference 49 CFR 173.120 (b) (2) and 173.150 (f) (1).

In summary, for non-bulk domestic ground shipments:

DOT Class: Not Regulated

Hazard Class: Not Applicable

UN No.: Not Applicable

Packing Group:

Guide No.:

If this material is offered for domestic ground shipment in bulk (a packaging which has a maximum capacity greater than 119 gallons as a receptacle for a liquid), then the material is regulated. Reference 49 CFR 173.120 (b) (2) and 173.150 (f) (2).

In summary, for bulk domestic ground shipments:

DOT Shipping Name: Combustible Liquid, N.O.S. (Contains n-Propanol)

Hazard Class: Combustible

UN No.: NA 1993

Packing Group: III

Guide No. 128

The domestic provisions provided for in non-bulk and bulk ground shipments are not valid for transportation by aircraft or vessel and they are not valid for international shipments. Please follow the appropriate DOT regulations in 49 CFR and the information referenced where appropriate in the IATA Dangerous Goods Transportation Regulation, the International Maritime Organization (IMO), the International Civil Aviation Organization (ICAO and our NFTA partner hazardous material regulation requirements.

15. REGULATORY INFORMATION

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

SARA TITLE III: Ethylene Glycol is listed under Sara Title III 313 and CERCLA.

CALIF. PROP. 65: This product contains a mixture which includes trace amounts of Ethylene Oxide (Cas # 75-21-8), 1, 4-dioxane (Cas # 13-91-1), Acetaldehyde (Cas # 75-07-0), and Formaldehyde (Cas # 50-00-0). The following information is required by the State of California's Safe Drinking Water and Toxic Enforcement Act of 1986 or Proposition 65. This regulation does not address di minimus levels; therefore, even trace amounts of the chemicals included on Proposition 65's list of chemicals known to the State of California to cause cancer or reproductive toxicity must be noted with the "Safe Harbor" wording. WARNING: This product contains Ethylene Oxide- known to the State of California to cause cancer or other reproductive harm. 1, 4-Dioxane, Acetaldehyde, and Formaldehyde are known to cause cancer.

CARCINOGENICITY: NONE OF THE COMPONENTS IN THIS CHEMICAL IS LISTED BY IARC, NTP OR OSHA AS A CARCINOGEN.

SCAQMD Rule 443.1

Photochemically Reactive: No

Maximum Grams of VOC per Liter: 415.36 g/L

Vapor Pressure: N.E. mm Hg@ 20 Degrees C

16. OTHER INFORMATION (HMIS)

Health: 2

Flammability: 3

Reactivity: 0

Protective: C

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.