



Microlithography Chemical Corp.

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MATERIAL SAFETY DATA SHEET

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SECTION 1. CHEMICAL IDENTIFICATION -----

CHEMICAL NAME: Organic Solvent Solution
TRADE NAME: XP SU-8 Developer

PRODUCT #: Y020100

SECTION 2. COMPOSITION-----

HAZARDOUS
INGREDIENTS: 1-Methoxy-2-propyl acetate (CAS: 108-65-6), 98-100%
Synonym: propylene glycol monomethyl ether acetate

SECTION 3. HAZARD DATA-----

INFLAMMABILITY: Combustible liquid.
SKIN CONTACT: May cause skin irritation. No evidence of harmful effects of skin absorption.
EYE CONTACT: Moderate temporary irritation.
INGESTION: Slightly toxic. Headache, weakness and incoordination may occur. Nausea, vomiting, diarrhea, dizziness, and drowsiness may occur.
INHALATION: Vapor causes irritation of the respiratory tract with coughing and chest discomfort. Headache, weakness and incoordination, nausea, vomiting, diarrhea, dizziness, and drowsiness may occur.
MUTAGENICITY: No positive response for several tested salmonella strains.
CARCINOGENICITY: Not listed in NTP, IARC, or OSHA as a carcinogen.
TARGET ORGANS: Nervous System, Respiratory Tract

SECTION 4. FIRST AID MEASURES-----

INHALATION: Remove to fresh air. If patient has stopped breathing, give artificial respiration. Contact physician immediately.
INGESTION: If substantial amounts are swallowed, have patient drink large amounts of water and INDUCE VOMITING. Contact a physician immediately.
SKIN CONTACT: Rinse with water. Remove contaminated clothing and shoes. Wash skin with soap and water.
EYE CONTACT: Rinse immediately with water, flush for 15 min. Contact a physician.

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SECTION 5. FIRE FIGHTING MEASURES-----

EXTINGUISHING

MEDIA: Water, dry chemical, carbon dioxide, foam.

SPECIAL FIRE FIGHTING PRECAUTIONS:

Wear self-contained breathing apparatus (SCBA) and personal protective equipment when exposed to products of combustion.

UNUSUAL FIRE OR
EXPLOSION HAZARDS: None

SECTION 6. ACCIDENTAL RELEASE PROCEDURES -----

Avoid eye or skin contact. Eliminate ignition sources. Cover large quantities with absorbent material and collect in closed container for disposal. All clean-up should be carried out in accordance with federal, state, and local regulations. If required proper authorities should be notified.

SECTION 7. STORAGE AND HANDLING PRECAUTIONS-----

STORAGE: Store in original, well closed container in a cool dry place.
HANDLING: Keep away from heat, sparks, and flames.
Avoid breathing vapors.
Use with adequate ventilation.
Avoid contact with skin, eyes, and clothing. Have available safety shower and eye wash.
Wear impervious butyl or nitrile gloves.
Wash with soap and water after handling.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION-----

RESPIRATORY PROTECTION:

In case of large spills, use of self-contained breathing apparatus (SCBA) is recommended as narcosis may occur.

VENTILATION:

General mechanical ventilation is sufficient under normal conditions.

SKIN PROTECTION:

Impervious butyl or nitrile gloves are recommended.

EYE PROTECTION:

Safety goggles are recommended.

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SECTION 9. PHYSICAL AND CHEMICAL DATA

APPEARANCE: Viscous pale yellow to yellow liquid
ODOR: Fruity, ester-like
BOILING POINT: 150 °C (302 °F)
SPECIFIC GRAVITY: 0.969
VAPOR PRESSURE: 3.7 mm Hg @ 20 °C (68 °F)
H₂O SOLUBILITY: Appreciable
% VOLATILES: 100% by wt
EVAPORATION RATE: 0.39 (BuAc = 1)
FLASH POINT: 46 °C (114 °F) TCC
AUTOIGNITION TEMP: 354 °C (670 °F)
EXPLOSION LIMITS: 1.3% lower
13.1% upper

SECTION 10. REACTIVITY DATA

STABILITY: Stable
INCOMPATIBILITY: Oxidizing Agents, Strong Acids, Strong Alkali
HAZARDOUS POLYMERIZATION: Will not occur
HAZARDOUS COMBUSTION OR
DECOMPOSITION PRODUCTS: Carbon Monoxide, Carbon Dioxide

SECTION 11. TOXICITY HAZARDS

ACUTE EFFECTS:

May be harmful if swallowed, inhaled, or absorbed through the skin.
Readily absorbed through the skin. No significant signs of any health hazard are expected to occur through skin absorption.
Irritating to eyes and respiratory tract. May cause burning, tearing, redness or swelling.
Vapor or mist is irritating to the eyes, mucous membranes and upper respiratory tract.
Prolonged and/or repeated exposure can cause gastric or nervous system effects.
To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

ORAL: LD50 (rat): 8500 mg/kg
DERMAL: LD50 (rbt) >5000 mg/kg
INHALATION: LC50: >4350 mg/m³.
TLV: (TWA) 100 ppm suggested

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SECTION 12. ECOLOGICAL DATA

This product has the following properties: a moderate biochemical oxygen demand and may cause oxygen depletion in aqueous systems, a low potential to affect aquatic organisms, a low potential to persist in the environment. When diluted with a large amount of water, this material released directly or indirectly into the environment is not expected to have a significant impact.

Oxygen Demand Data:

ThOD:	1.82g oxygen/g
BOD-5:	3.63g oxygen/g
BOD-20	1.05g oxygen/g

Acute Aquatic Effects Data:

96-h LC-50 (fathead minnow):	161 mg/L
48-h LC-50 (daphnid):	408 mg/L

SECTION 13. DISPOSAL CONSIDERATIONS

Burn in a chemical incinerator in an approved waste disposal facility under Federal, State, and local regulations.

SECTION 14. TRANSPORTATION INFORMATION

HAZARD CLASSIFICATION:	Flammable Liquid
SHIPPING NAME:	Propylene glycol monomethyl ether acetate
UN NUMBER:	UN 1993
PACKING GROUP	III

SECTION 15. REGULATORY INFORMATION

HAZARDOUS LISTINGS:	All ingredients appear on the TSCA Inventory of Chemical Substances, EINECS, and the Japan Hazardous Chemical Listing.
SARA Title III.	This product IS NOT subject to SARA Title III, Section 313 Reporting Requirements.
Calif. SCAQMD Rule 443.1 VOC's:	969 g/l; vapor pressure 3.8 mm Hg @ 20° C.

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SECTION 16. ADDITIONAL PRECAUTIONS AND COMMENTS

To the best of our knowledge, the above information is believed to be accurate but does not claim to be all inclusive and is intended to be used only as a guide. The supplier makes no warranty of any kind, expressed or implied, concerning the use of this product and shall not be held liable for any damage resulting from handling or from contact with the above product. User assumes all risks incident to its use.