

1254 Chestnut Street Newton, MA 02464-1418 Tel: (617) 965-5511 Fax: (617) 965-5818

MATERIAL SAFETY DATA SHEET

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SECTION 1. CHEMICAL IDENTIFICATION ------

CHEMICAL NAME: Organic Solvent Solution

TRADE NAME: 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. 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.



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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, and 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 -----

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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-----

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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 eyewash.

Wear impervious butyl or nitrile gloves. Wash with soap and water after handling.

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

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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.

SECTION 9. PHYSICAL AND CHEMICAL DATA-----

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CHEMICAL NAME: Organic Solvent Solution

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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

SECTION 12. ECOLOGICAL DATA-----

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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: Flammable Liquid NOS(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-----

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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.