MICRO CHEM

Safety Data Sheet
acc. to OSHA HCS

Printing date 12/15/2014 Reviewed on 12/15/2014

1 Identification of the substance/mixture and of the company

· **Product identifier**

· **Trade name: SU-8 Developer**
· **CAS Number:**
108-65-6
· **EC number:**
203-603-9
· **Index number:**
607-195-00-7
· **Application of the substance / the mixture** Solvents

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
MicroChem Corp.
200 Flanders Road
Westborough, MA 01581 USA

· **Information department:**
Product Safety
Email: productsafety@microchem.com
· **Emergency telephone number:**
MicroChem Corp : 617-965-5511
Chemtrec USA Emergency : 800-424-9300
Chemtrec International Emergency : 703-527-3887

2 Hazard(s) identification

· **Classification of the substance or mixture**

GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapor.

GHS08 Health hazard

Repr. 1B H360 May damage fertility or the unborn child.

· **Label elements**
· **GHS label elements**
The substance is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**

GHS02 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
2-Methoxy-1-propyl acetate
· **Hazard statements**
H226 Flammable liquid and vapor.
H360 May damage fertility or the unborn child.

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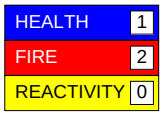
· **Precautionary statements**
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P201 Obtain special instructions before use.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P370+P378 In case of fire: Use for extinction: Alcohol resistant foam.
P370+P378 In case of fire: Use for extinction: Fire-extinguishing powder.
P370+P378 In case of fire: Use for extinction: Carbon dioxide.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
· **Classification system:**
· **NFPA ratings (scale 0 - 4)**

Health = 1
Fire = 2
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 1
Fire = 2
Reactivity = 0

· **Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization: Substances**
· **CAS No. Description**
108-65-6 1-Methoxy-2-propanol acetate
· **Identification number(s)**
· **EC number:** 203-603-9
· **Index number:** 607-195-00-7

· **Dangerous components:**		
70657-70-4	2-Methoxy-1-propyl acetate Flam. Liq. 3, H226; Repr. 1B, H360; STOT SE 3, H335	<0.5%
108-65-6	1-Methoxy-2-propanol acetate Flam. Liq. 3, H226	> 99.5%

4 First-aid measures

· **Description of first aid measures**
· **After inhalation:**
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
· **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

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· **After swallowing:**
Do not induce vomiting unless instructed to do so by a physician. Wash out mouth with water and keep person at rest. Seek immediate medical attention.
· **Information for doctor:**
· **Most important symptoms and effects, both acute and delayed** No further relevant information available.
· **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

· **Extinguishing media**
· **Suitable extinguishing agents:**
Fire-extinguishing powder
Alcohol resistant foam
Carbon dioxide
· **For safety reasons unsuitable extinguishing agents:**
Water with full jet
Water
· **Special hazards arising from the substance or mixture**
Containers may explode due to pressure increase when container is exposed to extreme heat. Vapors may travel a considerable distance to a source of ignition and flash back along vapor trail.
· **Advice for firefighters**
· **Protective equipment:** Wear SCBA.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Keep away from ignition sources
· **Environmental precautions:**
Do not allow product to reach sewage system or any drains.
Inform respective authorities in case of seepage into water course or sewage system.
· **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
Dispose contaminated material as waste according to Section 13.
· **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

· **Handling:**
· **Precautions for safe handling**
Ensure good ventilation/exhaust at the workplace.
Store in cool, dry place in tightly closed containers.
Prevent formation of aerosols.

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· **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Use explosion-proof apparatus / fittings and spark-proof tools.

· **Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and containers:**
Store in a cool location.
Store in inert atmosphere or keep well sealed to prevent the formation of peroxides and other oxidation products.
· **Information about storage in one common storage facility:** Store away from oxidizing agents.
· **Further information about storage conditions:**
Keep container well-sealed in cool, dry location.
Store under lock and key and with access restricted to technical experts or their assistants only.
· **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**	
108-65-6 1-Methoxy-2-propanol acetate	
WEEL	50 ppm

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from food and beverages.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Pregnant women should strictly avoid inhalation or skin contact.
· **Respiratory equipment:**
In case of low exposure, use cartridge respirator. In case of intensive or longer exposure, use SCBA.
· **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Protective gloves

· **Material of gloves** Neoprene gloves
· **Penetration time of glove material** Contact glove manufacture for break-through time.
· **Eye protection:**

Tightly sealed goggles

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9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Liquid
Color:	Colorless
· **Odor:**	Fruit-like
· **Odour threshold:**	Not determined.
· **pH-value at 20 °C (68 °F):**	4
· **Change in condition**	
Melting point/Melting range:	< -67 °C (< -89 °F)
Boiling point/Boiling range:	146 °C (295 °F)
· **Flash point:**	46 °C (115 °F)
· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	315 °C (599 °F)
· **Decomposition temperature:**	Not determined.
· **Auto igniting:**	Not determined.
· **Danger of explosion:**	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· **Explosion limits:**	
Lower:	1.5 Vol %
Upper:	10.8 Vol %
· **Vapor pressure at 20 °C (68 °F):**	3.7 hPa (3 mm Hg)
· **Density at 20 °C (68 °F):**	0.96682 g/cm³ (8.068 lbs/gal)
· **Relative density**	Not determined.
· **Vapour density**	Not determined.
· **Evaporation rate**	1.6-2.3 (BuAc=1)
· **Solubility in / Miscibility with**	
Water at 20 °C (68 °F):	220 g/l
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
Organic solvents:	100 %
VOC content:	100 %
· **Other information**	No further relevant information available.

10 Stability and reactivity

· **Reactivity**
· **Chemical stability** Stable under normal use conditions
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **Possibility of hazardous reactions** Possible formation of peroxide.
· **Conditions to avoid** Heat, flames and sparks. Extremes of temperature and direct sunlight.
· **Incompatible materials:** Strong oxidizing agents

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· **Hazardous decomposition products:**
Carbon monoxide and carbon dioxide
Poisonous gases/vapors

11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**		
108-65-6 1-Methoxy-2-propanol acetate		
Oral	LD50	8532 mg/kg (Rat)
Dermal	LD50	>5000 mg/kg (Rat)
Inhalative	LC50/6 h	4345 ppm (Rat)

· **Primary irritant effect:**
· **on the skin:** Irritant to skin and mucous membranes.
· **on the eye:** Irritating effect.
· **Sensitization:** No sensitizing effects known.
· **Experience with humans:** No further relevant information available.
· **Additional toxicological information:**

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**
Substance is not listed.

· **NTP (National Toxicology Program)**
Substance is not listed.

12 Ecological information

· **Toxicity**

· **Aquatic toxicity:**	
108-65-6 1-Methoxy-2-propanol acetate	
LC50	408-500 mg/l (daphnia magna) 100-180 mg/l (rainbow trout (Oncorhynchus mykiss))

· **Persistence and degradability** No further relevant information available.
· **Behavior in environmental systems:**
· **Bioaccumulative potential** No further relevant information available.
· **Mobility in soil** No further relevant information available.
· **Additional ecological information:**
· **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Other adverse effects** No further relevant information available.

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13 Disposal considerations

· **Waste treatment methods**
· **Recommendation:**
Must not be disposed of as regular garbage/trash. Do not allow product to reach sewage system.
Disposal must be made in accordance with Federal, State, and Local regulations.

· **Uncleaned packagings:**
· **Recommendation:** Disposal must be made in accordance with Federal, State, and Local regulations.

14 Transport information

· **UN-Number**	
· **DOT, ADR, IMDG, IATA**	UN3272
· **UN proper shipping name**	
· **DOT, IMDG, IATA**	ESTERS, N.O.S. (1-Methoxy-2-propanol acetate)
· **ADR**	3272 ESTERS, N.O.S. (1-Methoxy-2-propanol acetate)
· **Transport hazard class(es)**	
· **DOT**	
· **Class**	3 Flammable liquids.
· **Label**	3
· **ADR, IMDG, IATA**	
· **Class**	3 Flammable liquids
· **Label**	3
· **Packing group**	
· **DOT, ADR, IMDG, IATA**	III
· **Environmental hazards:**	
· **Marine pollutant:**	No
· **Special precautions for user**	Warning: Flammable liquids
· **Danger code (Kemler):**	30
· **EMS Number:**	F-E,S-E
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **UN "Model Regulation":**	UN3272, ESTERS, N.O.S. (1-Methoxy-2-propanol acetate), 3, III

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15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
· **Sara**

· **Section 355 (extremely hazardous substances):**
Substance is not listed.

· **Section 313 (Specific toxic chemical listings):**
Substance is not listed.

· **TSCA (Toxic Substances Control Act):** All ingredients are listed or comply with TSCA regulations.
· **Proposition 65**

· **Chemicals known to cause cancer:**
Substance is not listed.

· **Chemicals known to cause reproductive toxicity for females:**
Substance is not listed.

· **Chemicals known to cause reproductive toxicity for males:**
Substance is not listed.

· **Chemicals known to cause developmental toxicity:**
Substance is not listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**
Substance is not listed.

· **TLV (Threshold Limit Value established by ACGIH)**
Substance is not listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**
Substance is not listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**
Substance is not listed.

· **California SCAQMD Rule 443.1 VOC's:** 960 g/l; vapor pressure 3.8 mm Hg @ 25C
· **GHS label elements**
The substance is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**

GHS02 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
2-Methoxy-1-propyl acetate
· **Hazard statements**
H226 Flammable liquid and vapor.
H360 May damage fertility or the unborn child.
· **Precautionary statements**
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P201 Obtain special instructions before use.

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P308+P313 IF exposed or concerned: Get medical advice/attention.
P370+P378 In case of fire: Use for extinction: Alcohol resistant foam.
P370+P378 In case of fire: Use for extinction: Fire-extinguishing powder.
P370+P378 In case of fire: Use for extinction: Carbon dioxide.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing MSDS:** Product safety department
· **Contact:** Mr. Cole

· **Revision History:**
The business address of the manufacturer in Section 1 was updated. The hazard classification and precautionary statements for the mixture in Section 2 were revised. The toxicology data in Sections 11 and 12 were revised.
· **Date of preparation / last revision** 12/15/2014 / -
· **Abbreviations and acronyms:**
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent