



Safety Data Sheet

Issue Date: 19-Sep-2012

Revision Date: 18-Feb-2014

Version 1

1. IDENTIFICATION

Product Identifier

Product Name MICCROSTOP

Other means of identification

SDS # TD-002-OSHA

UN/ID No UN1263

Recommended use of the chemical and restrictions on use

Recommended Use Plating.

Details of the supplier of the safety data sheet

Supplier Address

Tolber Chemical Division
220 West 5th Street
Hope, AR 71801

Emergency Telephone Number

Company Phone Number 870-777-3251
Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Red liquid

Physical State Liquid

Odor Ketone

Classification

Serious eye damage/eye irritation	Category 2
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1B
Specific target organ toxicity (single exposure)	Category 3
Flammable Liquids	Category 2

Hazards Not Otherwise Classified (HNOC)

May be harmful if swallowed
Causes mild skin irritation

Signal Word

Danger

Hazard Statements

Causes serious eye irritation
May cause genetic defects
May cause cancer
May cause respiratory irritation. May cause drowsiness or dizziness
Highly flammable liquid and vapor

**Precautionary Statements - Prevention**

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Wash face, hands and any exposed skin thoroughly after handling
 Wear eye/face protection
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking
 Keep container tightly closed
 Ground/bond container and receiving equipment
 Use explosion-proof equipment
 Use only non-sparking tools
 Take precautionary measures against static discharge
 Keep cool

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 If eye irritation persists: Get medical advice/attention
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 IN CASE OF FIRE: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up
 Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Methyl ethyl ketone	78-93-3	70-80
Propylene oxide	75-56-9	0.5-1.5

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures

General Advice	If exposed or concerned: Get medical advice/attention.
Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin Contact	Flush with water. If skin irritation persists, call a physician.

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a physician if you feel unwell.
Ingestion	Do not induce vomiting. Call a physician or poison control center immediately.

Most important symptoms and effects

Symptoms	Skin contact can lead to drying, defatting, itching, stinging and irritation. Prolonged contact may cause painful stinging or burning of eyes and lids, watering of eye, and irritation. Prolonged breathing of vapors may cause nausea, headache, weakness and/or dizziness. May cause nausea, vomiting, stomach ache, and diarrhea.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Carbon dioxide (CO₂). Dry chemical. Foam.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Not determined.

Hazardous Combustion Products Carbon monoxide. Carbon dioxide (CO₂).

Sensitivity to Mechanical Impact Not determined.

Sensitivity to Static Discharge Take precautionary measures against static discharge.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Personal Precautions Use personal protective equipment as required. Remove all sources of ignition.

Environmental Precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Absorb spillage with non-combustible, absorbent material.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protection recommended in Section 8. Wash face, hands, and any exposed skin thoroughly after handling. Avoid breathing vapors or mists. Use only in well-ventilated areas. Ground/bond container and receiving equipment. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Use spark-proof tools and explosion-proof equipment. Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up.

Incompatible Materials

Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methyl ethyl ketone 78-93-3	STEL: 300 ppm TWA: 200 ppm	TWA: 200 ppm TWA: 590 mg/m ³ (vacated) TWA: 200 ppm (vacated) TWA: 590 mg/m ³ (vacated) STEL: 300 ppm (vacated) STEL: 885 mg/m ³	IDLH: 3000 ppm TWA: 200 ppm TWA: 590 mg/m ³ STEL: 300 ppm STEL: 885 mg/m ³
Propylene oxide 75-56-9	TWA: 2 ppm	TWA: 100 ppm TWA: 240 mg/m ³ (vacated) TWA: 20 ppm (vacated) TWA: 50 mg/m ³	IDLH: 400 ppm

Appropriate engineering controls

Engineering Controls

Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection

Wear approved safety goggles.

Skin and Body Protection

Chemical resistant, impermeable gloves. Long sleeve shirt and long pants. Protective shoes or boots.

Respiratory Protection

In case of insufficient ventilation, wear suitable respiratory equipment.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State
Appearance
Color

Liquid
Red liquid
Red

Odor
Odor Threshold

Ketone
Not determined

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not determined	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	47.8 °C / 118 °F	
Flash Point	-1.1 °C / 30 °F	Tag Closed Cup
Evaporation Rate	5.0	
Flammability (Solid, Gas)	n/a-liquid	
Upper Flammability Limits	10%	
Lower Flammability Limit	2%	
Vapor Pressure	Not determined	
Vapor Density	2.8	(Air=1)
Specific Gravity	0.95	
Water Solubility	Insoluble in water	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions. Not reactive under normal conditions

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to Avoid

Heat, flames and sparks.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition Products

Thermal decomposition may produce oxides of carbon.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact	Causes serious eye irritation.
Skin Contact	Causes mild skin irritation.
Inhalation	Avoid breathing vapors or mists.
Ingestion	May be harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Methyl ethyl ketone 78-93-3	= 2737 mg/kg (Rat)	= 6480 mg/kg (Rabbit)	-
Propylene oxide 75-56-9	= 520 mg/kg (Rat)	-	-

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Germ cell mutagenicity May cause genetic defects.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen. However, the product as a whole has not been tested.

Chemical Name	ACGIH	IARC	NTP	OSHA
Propylene oxide 75-56-9	A3	Group 2B	Reasonably Anticipated	X

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

NTP (National Toxicology Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

STOT - single exposure May cause respiratory irritation. May cause drowsiness or dizziness.

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Methyl ethyl ketone 78-93-3		3130 - 3320: 96 h Pimephales promelas mg/L LC50 flow-through	EC50 = 3403 mg/L 30 min EC50 = 3426 mg/L 5 min	520: 48 h Daphnia magna mg/L EC50 5091: 48 h Daphnia magna mg/L EC50 4025 - 6440: 48 h Daphnia magna mg/L EC50 Static
Propylene oxide 75-56-9	240: 96 h Pseudokirchneriella subcapitata mg/L EC50	215: 96 h Lepomis macrochirus mg/L LC50 static	EC50 = 3300 mg/L 160 min	350: 48 h Daphnia magna mg/L EC50

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Methyl ethyl ketone 78-93-3	0.29
Propylene oxide 75-56-9	0.08

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS**Waste Treatment Methods**

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

US EPA Waste Number

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Methyl ethyl ketone 78-93-3	U159	Included in waste streams: F005, F039	200.0 mg/L regulatory level	U159

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Methyl ethyl ketone 78-93-3	Toxic Ignitable
Propylene oxide 75-56-9	Toxic Ignitable

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN/ID No UN1263
Proper Shipping Name Paint
Hazard Class 3
Packing Group II

IATA

UN/ID No UN1263
Proper Shipping Name Paint
Hazard Class 3
Packing Group II

IMDG

UN/ID No UN1263
Proper Shipping Name Paint
Hazard Class 3
Packing Group II

15. REGULATORY INFORMATION

International Inventories

Not determined

US Federal Regulations**CERCLA**

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Methyl ethyl ketone 78-93-3	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
Propylene oxide 75-56-9	100 lb	100 lb	RQ 100 lb final RQ RQ 45.4 kg final RQ

SARA 313

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Propylene oxide - 75-56-9	75-56-9	0.5-1.5	0.1

CWA (Clean Water Act)

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Propylene oxide 75-56-9 (0.5-1.5)	100 lb			X

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Propylene oxide - 75-56-9	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Methyl ethyl ketone 78-93-3	X	X	X
Propylene oxide 75-56-9	X	X	X

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards	Flammability	Instability	Special Hazards
	3	3	0	Not determined
<u>HMIS</u>	Health Hazards	Flammability	Physical Hazards	Personal Protection
	3	3	0	X

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 Revision Date: 18-Feb-2014
 Revision Note: New format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet