

Issue Date: 02/JAN/2019

Revision Date: 01-Jan-2024

Version 1

## 1. IDENTIFICATION

**Product Identifier**

**Product Name** MICCRO SUPER XP-2000<sup>®</sup> REDUCER

**Other means of identification**

**SDS #** TD-009-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** liquid

**Physical State** Liquid

**Classification**

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Vapors)	Category 4
Skin corrosion/irritation	Category 2
Reproductive toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration toxicity	Category 1
Flammable Liquids	Category 2

**Signal Word**

**Danger**

**Hazard Statements**

Harmful if swallowed

Harmful if inhaled

Causes skin irritation

Suspected of damaging fertility or the unborn child

May cause respiratory irritation. May cause drowsiness or dizziness

May cause damage to organs through prolonged or repeated exposure

May be fatal if swallowed and enters airways

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

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

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 ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

If skin irritation occurs: Get medical advice/attention

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do not induce vomiting

Rinse mouth

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

**Other Hazards**

Toxic to aquatic life with long lasting effects

**Unknown Acute Toxicity**

5% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Toluene	108-88-3	90-99

\*\*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

<b>General Advice</b>	If exposed or concerned: Get medical advice/attention.
<b>Eye Contact</b>	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.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation occurs: Get medical advice/ attention.
<b>Inhalation</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.
<b>Ingestion</b>	IF SWALLOWED: call a poison control center or physician immediately. Rinse mouth. Do not induce vomiting.

#### Most important symptoms and effects

<b>Symptoms</b>	May be harmful or fatal if swallowed and enters airways. Ingestion may cause irritation, nausea, vomiting. Causes skin irritation. Harmful if inhaled. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure. Suspected of damaging fertility or the unborn child. Direct contact with eyes will cause irritation.
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#### Indication of any immediate medical attention and special treatment needed

<b>Notes to Physician</b>	Treat symptomatically.
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### 5. FIRE-FIGHTING MEASURES

#### Suitable Extinguishing Media

Dry chemical. Carbon dioxide (CO<sub>2</sub>). Foam.

**Unsuitable Extinguishing Media** Not determined.

#### Specific Hazards Arising from the Chemical

Highly flammable liquid and vapor.

**Hazardous Combustion Products** Carbon oxides.

**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 protection recommended in Section 8. Remove all sources of ignition.
- Environmental Precautions**            See Section 12 for additional Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

**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. Dispose of all contaminated trash in accordance with local regulations.

**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. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash contaminated clothing before reuse. Ground/bond container and receiving equipment. Use non-sparking hand tools and explosion-proof electrical equipment. Take precautionary measures against static discharges. Wash face, hands, and any exposed skin thoroughly after handling.

**Conditions for safe storage, including any incompatibilities**

- Storage Conditions**                      Store in a cool, well-ventilated area, away from ignition sources and incompatible materials. Keep container tightly closed. Store locked up.
- Incompatible Materials**                Strong oxidizing agents.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Toluene 108-88-3	TWA: 20 ppm	TWA: 200 ppm (vacated) TWA: 100 ppm (vacated) TWA: 375 mg/m <sup>3</sup> (vacated) STEL: 150 ppm (vacated) STEL: 560 mg/m <sup>3</sup> Ceiling: 300 ppm	IDLH: 500 ppm TWA: 100 ppm TWA: 375 mg/m <sup>3</sup> STEL: 150 ppm STEL: 560 mg/m <sup>3</sup>

**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**                      Splash proof chemical safety goggles.
- Skin and Body Protection**                Chemical resistant, impermeable gloves. Suitable protective clothing. Long sleeve shirt and long pants. Protective shoes or boots.

**Respiratory Protection** In case of inadequate ventilation wear respiratory protection.

**General Hygiene Considerations** Do not eat, drink or smoke when using this product. Wash face, hands and any exposed skin thoroughly after handling. Wash contaminated clothing before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical State</b>	Liquid	<b>Odor</b>	Not determined
<b>Appearance</b>	liquid	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Not determined		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	Not applicable	
<b>Melting Point/Freezing Point</b>	Not determined	
<b>Boiling Point/Boiling Range</b>	111 °C / 232 °F	
<b>Flash Point</b>	7 °C / 45 °F	
<b>Evaporation Rate</b>	Not determined	
<b>Flammability (Solid, Gas)</b>	Liquid-Not applicable	
<b>Upper Flammability Limits</b>	Not determined	
<b>Lower Flammability Limit</b>	Not determined	
<b>Vapor Pressure</b>	Not determined	
<b>Vapor Density</b>	Not determined	
<b>Specific Gravity</b>	Not determined	
<b>Water Solubility</b>	Not determined	
<b>Solubility in other solvents</b>	Not determined	
<b>Partition Coefficient</b>	Not determined	
<b>Auto-ignition Temperature</b>	Not determined	
<b>Decomposition Temperature</b>	Not determined	
<b>Kinematic Viscosity</b>	Not determined	
<b>Dynamic Viscosity</b>	Not determined	
<b>Explosive Properties</b>	Not determined Not	
<b>Oxidizing Properties</b>	determined	
<b>VOC</b>	7.2 lbs/gal	

## 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions.

### Chemical Stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

### Conditions to Avoid

Avoid contact. Keep away from heat, sparks and open flame.

### 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

<b>Eye Contact</b>	Avoid contact with eyes.
<b>Skin Contact</b>	Causes skin irritation.
<b>Inhalation</b>	Harmful if inhaled.
<b>Ingestion</b>	Harmful if swallowed.

### Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Toluene 108-88-3	= 636 mg/kg ( Rat )	= 8390 mg/kg ( Rabbit ) = 12124 mg/kg ( Rat )	= 12.5 mg/L ( Rat ) 4 h > 26700 ppm ( Rat ) 1 h

### 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

**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. Group 3 IARC components are "not classifiable as human carcinogens".

Chemical Name	ACGIH	IARC	NTP	OSHA
Toluene 108-88-3		Group 3		

*IARC (International Agency for Research on Cancer)*

*Group 3 IARC components are "not classifiable as human carcinogens"*

**Reproductive toxicity** Suspected of damaging fertility or the unborn child.

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

**STOT - repeated exposure** May cause damage to organs through prolonged or repeated exposure.

**Aspiration hazard** May be fatal if swallowed and enters airways.

### Numerical measures of toxicity

Not determined

**Unknown Acute Toxicity** 5% of the mixture consists of ingredient(s) of unknown toxicity.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Toxic to aquatic life with long lasting effects.

### Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea

<p>Toluene 108-88-3</p>	<p>433: 96 h Pseudokirchneriella subcapitata mg/L EC50 12.5: 72 h Pseudokirchneriella subcapitata mg/L EC50 static</p>	<p>15.22 - 19.05: 96 h Pimephales promelas mg/L LC50 flow-through 12.6: 96 h Pimephales promelas mg/L LC50 static 5.89 - 7.81: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 14.1 - 17.16: 96 h Oncorhynchus mykiss mg/L LC50 static 5.8: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 11.0 - 15.0: 96 h Lepomis macrochirus mg/L LC50 static 54: 96 h Oryzias latipes mg/L LC50 static 28.2: 96 h Poecilia reticulata mg/L LC50 semi-static 50.87 - 70.34: 96 h Poecilia reticulata mg/L LC50 static</p>	<p>EC50 = 19.7 mg/L 30 min</p>	<p>5.46 - 9.83: 48 h Daphnia magna mg/L EC50 Static 11.5: 48 h Daphnia magna mg/L EC50</p>
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**Persistence/Degradability**

Not determined.

**Bioaccumulation**

Not determined.

**Mobility**

Chemical Name	Partition Coefficient
<p>Toluene 108-88-3</p>	<p>2.65</p>

**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
<p>Toluene 108-88-3</p>	<p>U220</p>	<p>Included in waste streams: F005, F024, F025, F039, K015, K036, K037, K149, K151</p>		<p>U220</p>

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes

<p>Toluene 108-88-3</p>			<p>Toxic waste waste number F025 Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.</p>	
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**California Hazardous Waste Status**

Chemical Name	California Hazardous Waste Status
<p>Toluene 108-88-3</p>	<p>Toxic Ignitable</p>

**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 related material  
 Hazard Class 3  
 Packing Group II

**IATA**

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

**IMDG**

UN/ID No UN1263  
 Proper Shipping Name Paint related material  
 Hazard Class 3  
 Packing Group II  
 Marine Pollutant This material may meet the definition of a marine pollutant

**15. REGULATORY INFORMATION**

**International Inventories**

Not determined

**US Federal Regulations**

**CERCLA**

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
<p>Toluene 108-88-3</p>	<p>1000 lb 1 lb</p>		<p>RQ 1000 lb final RQ                      RQ 454 kg final RQ RQ 1 lb final RQ                      RQ 0.454 kg final RQ</p>



**SARA 313**

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Toluene - 108-88-3	108-88-3	90-99	1.0

**CWA (Clean Water Act)**

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Toluene 108-88-3 ( 90-99 )	1000 lb	X	X	X

**US State Regulations**

**California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Toluene - 108-88-3	Developmental Female Reproductive

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Toluene 108-88-3	X	X	X

**16. OTHER INFORMATION**

**NFPA**

**Health Hazards**

**Flammability**

**Instability**

**Special Hazards**

Not determined

Not determined

Not determined

Not determined

**HMIS**

**Health Hazards**

**Flammability**

**Physical Hazards**

**Personal Protection**

Not determined

Not determined

Not determined

Not determined

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 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**