

Issue Date: 01-Jan-2012

Revision Date: 01-Mar-2024

Version 1

1. IDENTIFICATION

Product Identifier

Product Name MICCRO[®] SH-210 VOC Free

Other means of identification

SDS # TD-018

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) 777-5759
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 Acetone

Classification

Acute toxicity - Oral	Category 4
Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 3
Flammable Liquids	Category 2

Hazards Not Otherwise Classified (HNOC)

Causes mild skin irritation

Signal Word

Danger

Hazard Statements

Harmful if swallowed
Causes serious eye irritation
May cause an allergic skin reaction
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
Do not eat, drink or smoke when using this product
Avoid breathing dust/fume/gas/mist/vapors/spray
Contaminated work clothing should not be allowed out of the workplace
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
Wear protective gloves/protective clothing/eye protection/face protection

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 skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Acetone	67-64-1	70-80
Vinyl chloride	75-01-4	20-30
Vinyl acetate	108-05-4	1-10
Propylene oxide	75-56-9	<5
Maleic acid	110-16-7	<1

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

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	Wash off immediately with plenty of water. Take off contaminated clothing. Wash contaminated clothing before reuse. Get medical attention if irritation occurs.
Inhalation	Remove to fresh air.
Ingestion	Rinse mouth. Do not induce vomiting. Call a poison center or doctor/physician if you feel unwell.

Most important symptoms and effects

Symptoms	Skin contact can lead to drying, defatting, itching, stinging and irritation. Vapors may irritate eye; Liquid and mist may severely irritate or damage the eye. In high concentrations, vapors and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Ingestion may cause irritation, nausea, vomiting.
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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.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Vapors are heavier than air and may spread along floors. Vapors may travel to source of ignition and flash back.

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 Remove all sources of ignition.

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 Contain and collect with an inert absorbent and place into an appropriate container for disposal.

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 thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid breathing vapors or mists. Use only in well-ventilated areas. Contaminated work clothing should not be allowed out of the workplace. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Use spark-proof tools and explosion-proof equipment. Ground/bond container and receiving 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
Acetone 67-64-1	STEL: 750 ppm TWA: 500 ppm	TWA: 1000 ppm TWA: 2400 mg/m ³ (vacated) TWA: 750 ppm (vacated) TWA: 1800 mg/m ³ (vacated) STEL: 2400 mg/m ³ The acetone STEL does not apply to the cellulose acetate fiber industry. It is in effect for all other sectors (vacated) STEL: 1000 ppm	IDLH: 2500 ppm TWA: 250 ppm TWA: 590 mg/m ³
Vinyl chloride 75-01-4	TWA: 1 ppm	TWA: 1 ppm STEL: 5 ppm see 29 CFR 1910.1017	-
Vinyl acetate 108-05-4	STEL: 15 ppm TWA: 10 ppm	(vacated) TWA: 10 ppm (vacated) TWA: 30 mg/m ³ (vacated) STEL: 20 ppm (vacated) STEL: 60 mg/m ³	Ceiling: 4 ppm 15 min Ceiling: 15 mg/m ³ 15 min
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	Chemical splash goggles.
Skin and Body Protection	Long sleeve shirt and long pants. Protective shoes or boots. Solvent resistant gloves.
Respiratory Protection	Wear a NIOSH approved respirator.

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	Liquid	Odor	Acetone
Appearance	Red liquid	Odor Threshold	Not determined
Color	Red		
Property	Values	Remarks • Method	
pH	Not determined		
Melting Point/Freezing Point	Not determined		
Boiling Point/Boiling Range	48 °C / 118 °F		
Flash Point	-4 °C / 24 °F	Tag Closed Cup (butyl acetate = 1)	
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	Not soluble		
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.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization	Hazardous polymerization does not occur.
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Conditions to Avoid

Heat, flames and sparks.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition Products

Carbon oxides.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure****Product Information**

Eye Contact	Causes serious eye irritation.
Skin Contact	Causes mild skin irritation. May cause an allergic skin reaction.
Inhalation	Avoid breathing vapors or mists.
Ingestion	Harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Acetone 67-64-1	= 5800 mg/kg (Rat)	-	-
Vinyl chloride 75-01-4	= 500 mg/kg (Rat)	-	-
Vinyl acetate 108-05-4	= 2920 mg/kg (Rat)	= 2320 mg/kg (Rabbit)	= 11.4 mg/L (Rat) 4 h = 3200 ppm (Rat) 4 h
Propylene oxide 75-56-9	= 520 mg/kg (Rat)	-	-
Maleic acid 110-16-7	= 708 mg/kg (Rat)	= 1560 mg/kg (Rabbit)	> 0.72 mg/L (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

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
Vinyl chloride 75-01-4	A1	Group 1	Known	X
Vinyl acetate 108-05-4	A3	Group 2B		X
Propylene oxide 75-56-9	A3	Group 2B	Reasonably Anticipated	X

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A1 - Known Human Carcinogen

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

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**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Acetone 67-64-1		4.74 - 6.33: 96 h Oncorhynchus mykiss mL/L LC50 6210 - 8120: 96 h Pimephales promelas mg/L LC50 static 8300: 96 h Lepomis macrochirus mg/L LC50	EC50 = 14500 mg/L 15 min	10294 - 17704: 48 h Daphnia magna mg/L EC50 Static 12600 - 12700: 48 h Daphnia magna mg/L EC50
Vinyl chloride 75-01-4	943: 48 h Chilomonas paramecium mg/L EC50	210: 96 h Brachydanio rerio mg/L LC50		
Vinyl acetate 108-05-4		14: 96 h Pimephales promelas mg/L LC50 static 15.04 - 21.54: 96 h Lepomis macrochirus mg/L LC50 static 26.1 - 36.63: 96 h Poecilia reticulata mg/L LC50 static	EC50 = 2080 mg/L 5 min	52: 24 h Daphnia magna mg/L EC50
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
Maleic acid 110-16-7		5: 96 h Pimephales promelas mg/L LC50 static		250 - 400: 48 h Daphnia magna mg/L EC50

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Acetone 67-64-1	-0.24
Vinyl chloride 75-01-4	1.58
Vinyl acetate 108-05-4	0.73
Propylene oxide 75-56-9	0.08
Maleic acid 110-16-7	0.32

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
Acetone 67-64-1		Included in waste stream: F039		U002
Vinyl chloride 75-01-4	U043	Included in waste streams: F024, F025, F039, K019, K020, K028, K029	0.2 mg/L regulatory level	U043

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Vinyl chloride 75-01-4	Category I - Volatiles		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.	

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Acetone 67-64-1	Ignitable
Vinyl acetate 108-05-4	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

TSCA

All ingredients are listed or exempt from listing on Chemical Substance Inventory

Legend:

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*
- ENCS - Japan Existing and New Chemical Substances*
- IECSC - China Inventory of Existing Chemical Substances*
- KECL - Korean Existing and Evaluated Chemical Substances*
- PICCS - Philippines Inventory of Chemicals and Chemical Substances*

US Federal Regulations

CERCLA

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Acetone 67-64-1	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
Vinyl chloride 75-01-4	1 lb		RQ 1 lb final RQ RQ 0.454 kg final RQ
Vinyl acetate 108-05-4	5000 lb	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
Maleic acid 110-16-7	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

SARA 313

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Vinyl chloride - 75-01-4	75-01-4	20-30	0.1
Vinyl acetate - 108-05-4	108-05-4	1-10	0.1
Propylene oxide - 75-56-9	75-56-9	<5	0.1

CWA (Clean Water Act)

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Vinyl chloride 75-01-4 (20-30)		X	X	
Vinyl acetate 108-05-4 (1-10)	5000 lb			X
Propylene oxide 75-56-9 (<5)	100 lb			X
Maleic acid 110-16-7 (<1)	5000 lb			X

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Vinyl chloride - 75-01-4	Carcinogen
Propylene oxide - 75-56-9	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Acetone 67-64-1	X	X	X
Vinyl chloride 75-01-4	X	X	X
Vinyl acetate 108-05-4	X	X	X
Propylene oxide 75-56-9	X	X	X
Maleic acid 110-16-7	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

3

3

0

X

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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