

SAFETY DATA SHEET

MICRO PLUS COPPER

1. Product and Company Identification

Product Code: Z-MPC
Product Name: MICRO PLUS COPPER
Company Name: Stoller
9090 Katy Freeway
Suite 400
Houston, TX 77024
Phone Number:
1 (713)461-1493
Web site address: www.stollerusa.com
Email address: compliance@stollerusa.com
Emergency Contact: CHEMTREC, In the US and Canada call 1 (800)424-9300
CHEMTREC, From other countries call +1 (703)527-3887
Information: 1 (800)539-5283
Intended Use: For agricultural use only
Synonyms: Chelated micronutrient solution

2. Hazards Identification

Acute Toxicity: Oral, Category 4
Serious Eye Damage/Eye Irritation, Category 2B
Corrosive To Metals, Category 1
Aquatic Toxicity (Chronic), Category 4
Aquatic Toxicity (Acute), Category 3



GHS Signal Word: **Warning**
GHS Hazard Phrases: H290 - May be corrosive to metals.
H302 - Harmful if swallowed.
H320 - Causes eye irritation.
H402 - Harmful to aquatic life.
H413 - May cause long lasting harmful effects to aquatic life.
GHS Precautionary Phrases: P234 - Keep only in original container.
P264 - Wash hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P273 - Avoid release to the environment.
GHS Response Phrases: P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P330 - Rinse mouth.
P337+313 - If eye irritation persists, get medical advice/attention.
P390 - Absorb spillage to prevent material damage.
GHS Storage and Disposal Phrases: P501 - Dispose of contents/container to permitted waste facility or advised by your local regulatory authority.

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Potential Health Effects (Acute and Chronic):	Hazards not otherwise classified (HNOC) or not covered by GHS: None.
Inhalation:	May be irritating to respiratory tract.
Skin Contact:	May cause skin irritation.
Eye Contact:	May cause severe eye damage.
Ingestion:	May irritate gastrointestinal tract and cause nausea and vomiting.

3. Composition/Information on Ingredients

CAS #	Components (Chemical Name)	Concentration	RTECS #
10125-13-0	Copper(II) chloride hydrate	<10.0 %	GL7030000
527-07-1	Sodium Gluconate	<10.0 %	LZ5235000

4. First Aid Measures

Emergency and First Aid Procedures:	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
In Case of Inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In Case of Skin Contact:	Wash off with soap and plenty of water. Take victim immediately to hospital.
In Case of Eye Contact:	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
In Case of Ingestion:	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Signs and Symptoms Of Exposure:	The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
Indication of any immediate medical attention and special treatment needed:	No data available.
Note to Physician:	Treat symptomatically and supportively.

5. Fire Fighting Measures

Flash Pt:	NA
Explosive Limits:	LEL: N.A. UEL: N.A.
Autoignition Pt:	No data.
Suitable Extinguishing Media:	Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam.
Fire Fighting Instructions:	Wear self contained breathing apparatus for fire fighting if necessary. Further information: No data available.
Flammable Properties and Hazards:	No data available.
Hazardous Combustion Products:	No data available.

6. Accidental Release Measures

Protective Precautions, Protective Equipment and Emergency Procedures: Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

Environmental Precautions: If spilling or leakage occurs, contain and clean if safe to do so. Prevent from reaching drains, sewer, or waterways. Do not let product enter drains. Discharge into the environment must be avoided.

Steps To Be Taken In Case Material Is Released Or Spilled: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. Handling and Storage

Precautions To Be Taken in Handling: Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.

Precautions To Be Taken in Storing: We recommend storing pails a maximum of three pails high. Do not stack pallets. Store container tightly closed in a cool/well-ventilated dry place protected from sunlight above 40 F. Do not allow container to freeze. Store locked up. Keep container tightly closed in a dry and well-ventilated place. Air sensitive. Handle and store under inert gas. Storage class 510) Non-Combustible.

Other Precautions: Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
10125-13-0	Copper(II) chloride hydrate	No data.	TLV: 1 mg/m ³ as Cu	No data.
527-07-1	Sodium Gluconate	No data.	No data.	No data.

Respiratory Equipment (Specify Type): Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Eye Protection: Face shield and safety glasses.

Protective Gloves: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Full contact.
Material: Nitrile rubber Minimum layer thickness: 0.11 mm.
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Other Protective Clothing: Complete suit protecting against chemicals.

Engineering Controls (Ventilation etc.): Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Environmental Exposure Controls: If spilling or leakage occurs, contain and clean if safe to do so. Prevent from reaching drains, sewer, or waterways. Do not let product enter drains. Discharge into the

environment must be avoided.

9. Physical and Chemical Properties

Physical States:	[] Gas [X] Liquid [] Solid
Appearance and Odor:	Blue liquid.
pH:	1.5 - 3.5
Melting Point:	No data.
Boiling Point:	No data.
Flash Pt:	NA
Evaporation Rate:	N.E.
Flammability (solid, gas):	No data available.
Explosive Limits:	LEL: N.A. UEL: N.A.
Vapor Pressure (vs. Air or mm Hg):	N.E.
Vapor Density (vs. Air = 1):	N.E.
Specific Gravity (Water = 1):	1.13 - 1.17
Density:	~ 9.6 LB/GA
Solubility in Water:	Soluble
Saturated Vapor Concentration:	N.E.
Octanol/Water Partition Coefficient:	N.E.
Percent Volatile:	N.A.
Autoignition Pt:	No data.
Decomposition Temperature:	N.E.
Viscosity:	N.E.

10. Stability and Reactivity

Reactivity:	No data available.
Stability:	Unstable [] Stable [X]
Conditions To Avoid - Instability:	Exposure to moisture.
Incompatibility - Materials To Avoid:	Powdered metals, Anhydrous copper (II) sulfate, Reacts violently with 1, hydroxylamine, magnesium.
Hazardous Decomposition or Byproducts:	No data available. In the event of fire: see section 5.
Possibility of Hazardous Reactions:	Will occur [] Will not occur [X]
Conditions To Avoid - Hazardous Reactions:	No data available.

11. Toxicological Information

Toxicological Information:	Teratogenicity: This product has not been investigated for teratogenic effects. Reproductive Toxicity: This product has not been investigated for toxic reproductive effects. Mutagenicity: This product has not been investigated for mutagenic effects. Embryotoxicity: The components of this product are not reported to produce embryotoxic effects in humans.
Irritation or Corrosion:	Skin corrosion/irritation.
Sensitization:	Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.
Chronic Toxicological Effects:	Specific target organ toxicity -single exposure (Globally Harmonized System) No data available. Specific target organ toxicity -repeated exposure: no data available.
Carcinogenicity/Other Information:	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Carcinogenicity:	NTP? No IARC Monographs? No OSHA Regulated? No

12. Ecological Information

General Ecological Information:	Due to its nutrient value, may contribute to eutrophication in bodies of water.
Results of PBT and vPvB assessment:	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.
Persistence and Degradability:	The methods for determining the biological degradability are not applicable to inorganic substances.
Bioaccumulative Potential:	No data available.
Mobility in Soil:	No data available.
Other adverse effects:	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

13. Disposal Considerations

Waste Disposal Method:	PRODUCT: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Contaminated packaging: Empty containers may contain residual liquid or vapors and therefore should be handled the same as full containers.
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14. Transport Information

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Revision: 06/04/2020
Supersedes Revision: 05/27/2020**LAND TRANSPORT (US DOT):**

DOT Proper Shipping Name: Corrosive liquid, N.O.S. (Contains Copper Chloride)
DOT Hazard Class: 8 CORROSIVE
UN/NA Number: UN1760 **Packing Group:** III

**LAND TRANSPORT (Canadian TDG):**

TDG Shipping Name:
UN Number: 1760 **Packing Group:** III
Hazard Class: 8 - CORROSIVE **TDG Classification:**

MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: CORROSIVE LIQUID, N.O.S. (Contains Copper Chloride) 8, III, RQ.
UN Number: 1760 **Packing Group:** III
Hazard Class: 8 - CORROSIVE

15. Regulatory Information

Regulatory Information: TSCA Inventory: In compliance with inventory requirements for commercial purposes.

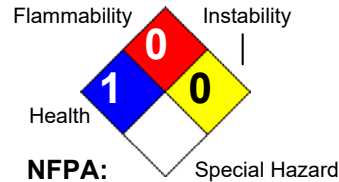
16. Other Information

Revision Date: 06/04/2020

Hazard Rating System:

HEALTH		1
FLAMMABILITY		0
PHYSICAL		0
PPE		

HMIS:



Additional Information About This Product: No data available.

This Product:

Company Policy or Disclaimer:

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