

Hoof 3 Zinc-Copper SOL

Safety Data Sheet

Prepared According to Federal Register / vol.77, No. 58 / Rules and Regulations

Section 1: Identification

Product Name: Hoof 3 Zin-Cop

Product Form: Mixture

Use of Substance/Mixture: Foot Bath Additive for Livestock

Chemical Name/Synonyms: Acid Blue 9, Sulfuric acid, copper (2+) salt (1:1) Pentahydrate, Zinc Sulfate liquid

Company: Sea 7 Technologies, Inc. 10214 Chestnut Plaza #177 Fort Wayne, In. 46814

Emergency Number: Chem-Trek 1-800-424-9300

Section 2: Hazard(s) Identification

2.1 Hazard Classification:

Eye Damage. 1 H318

Aquatic Acute 1 H400

Aquatic Chronic 2 H411

Full text of hazard classes and H-statements: see section 16

2.2 Hazard Statements:

- H318 - Causes severe eye damage
- H315 - Skin Irritant
- H400 - Toxic to aquatic life
- H411 - Toxic to aquatic life with long lasting effects

2.3 Label Elements

GHS-US labeling

Pictograms: Hazardous Pictograms:



Signal Word (GHS US): Danger

2.4 Precautionary Statements:

P273 - Avoid accidental release to environment.

P280- Wear eye protection. Wear gloves and protective clothing to prevent skin irritation

P305+P351+P338 – If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. P310 – Immediately call doctor or poison control. P391- Collect spillage. P501- Dispose of contents/container in accordance with local, regional, national and international regulations

2.5 Description of other hazards: Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.6 Unknown Acute Toxicity (GHS-US)

No data available

Section 3: Composition/ Information on Ingredients**3.1 Substance :**

Not applicable

3.2 Mixture:

Chemical Name	Synonym	CAS#	Conc.
Sulfuric acid, copper (2+) salt (1:1) Pentahydrate	Copper Sulfate Pentahydrate	CAS-No. 7758-99-8	5%
Zinc Sulfate	Zinc Sulfate	CAS-No. 7733-02-0	13%
Acid Blue 9	Blue dye -Food grade	CAS-N0. 7758-99-8	<5%

Section 4: First-Aid Measures

4.1 First Aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show product label to medical adviser whenever possible).

After skin contact: Remove contaminated clothing to avoid prolonged contact with skin if allergic to sulfur or are experiencing skin irritation. Thoroughly rinse skin area(s) with water for several minutes if irritation occurs. If irritation persists, seek medical attention.

After eye contact: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek immediate medical attention for thorough flushing and eye-damage evaluation and/or care.

After inhalation: If symptoms occur, go into an open-air area and ventilate suspected area. If breathing difficulty persists, seek medical attention.

Symptoms/After swallowing: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2 Most Important Symptoms and Acute Delay:

Symptoms/injuries: Causes severe eye damage.

Symptoms/injuries After Inhalation: Prolonged exposure may cause irritation.

Symptoms/injuries After Skin Contact: Prolonged exposure/contact may cause irritation. May cause allergic reaction in sensitive individuals.

Symptoms/injuries After Ingestion: Ingestion may cause adverse effects. May cause gastrointestinal irritation.

Symptoms/injuries: May cause permanent eye damage to the cornea, iris, or conjunctiva.

Chronic Symptoms: None known.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed and concerned, get medical advice and attention. If medical advice is needed bring label/product container.

Section 5: Fire-Fighting Measures

5.1 Special Hazards for firefighting: Not considered flammable.

Explosion Hazards: Considered non explosive but may release hydrogen gas on contact with some metals.

Reactivity: Hazardous reactions will not occur under normal conditions. Copper sulfate can undergo hazardous reactions with acetylene, potassium chlorate, strong bases, hydroxylamine, and magnesium.

5.2 Suitable extinguishing agents: Water spray, dry chemical, foam, carbon dioxide. Alcohol-resistant foam.

Unsuitable extinguishing agents: Do not use a heavy water stream as it may cause fire to spread.

5.3 Special protective equipment for firefighters: Do not enter fire area without proper protective equipment including respirator. Use water or fog for cooling exposed containers and remove container if that can be done safely.

5.4 Advice for Firefighters:

Precautionary measures Fire – Exercise caution when fighting a chemical fire.

Instructions: Use water or fog for cooling exposed containers. Remove containers from fire area if this can be done without risk. Do not breathe fumes from fires or vapors from decomposition.

Protection During Fighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Thermal decomposition generates: sulfur oxides, oxides of copper. Metal oxides. Irritating fumes.

Other Information: Do not allow run-off to enter drains or water courses.

Section 6: Accidental Release Measures

6.1 Personal precautions: General measures - Do not breathe vapor, mist or spray. Do not get in eyes. Avoid prolonged contact with skin or clothing.

Non-Emergency Personnel:

Use appropriate personal protective equipment (PPE)

Emergency Procedure: Evacuate unnecessary personnel.

For Emergency Personnel:

Provide cleanup crew with proper protection.

Emergency Procedures: Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call

for the assistance of trained personnel as soon as conditions permit.

6.2 Environmental Precautions:

Prevent entry to sewers and public waters. Avoid release to environment. Collect spillage.

6.3 Measures for environmental protection: Prevent entry to

Measures for cleaning/collecting: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Ventilate area. Cautiously neutralize spilled liquid. Absorb and/or contain spill with inert material. Transfer spilled material to a suitable container for disposal. Contact competent authorities for disposal. (see section 8 for exposure controls and personal protection and section 13 for disposal considerations.)

Section 7: Handling and Storage

7.1 Precautions for Handling: Always use protective eye-wear or goggles, and gloves. May be corrosive to metals upon prolonged contact. Wash hands and other exposed areas with mild soap and water after use before eating, drinking, or smoking. Avoid breathing vapors, mist, or spray. Do not get in eyes. Avoid prolong contact with skin as this may cause mild skin irritation. Spillage onto clothing damages clothing articles made from cotton or cotton blends.

7.2 Storage: Store in a dry, ventilated areas and away from incompatible materials and chemicals. Keep at temperatures above 45 degrees F to avoid product ingredient precipitation/fall out. Keep container closed when not in use. Always store product in its original container. Containers should be properly resealed and stored upright to prevent leakage.

7.3 Incompatible Products: Strong bases, oxidizers. Acetylene, Potassium Chlorate, Hydroxylamine, Magnesium, and reactive metals

Section 8: Exposure Controls/Personal Protection

NOTE: STABITROL: Trade Secret liquid

Stabitrol is a Trade Secret mixture that contains sulfur and may cause mild skin irritation to sensitive individuals.

Stabitrol is a Trade Secret mixture that can cause severe eye damage in its concentrate form.

Chemical Name	OSHA PEL	OSHA PEL (ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Copper sulfate,Zinc sulfate	TWA (mg/m3)	0.1 mg/m3 (fume) 1 mg/m3 (dust and mist)	mg/mg3	0.2 mg/mg3 (fume)
Acid Blue 9	n/a	n/a	n/a	n/a
Stabitrol	n/a	n/a	n/a	n/a

General protective and hygienic measures: Protective chemical safety goggles, gloves, long-sleeves and long pants to prevent skin irritation from splashes. Wash hands before eating, drinking, or smoking.

Breathing equipment: If irritation occurs, wear approved respiratory protection should be worn.

Protection of hands: Wear gloves. Wash hands if exposed.

Eye protection: Always wear safety goggles when pouring concentrate product from container.

Environmental Protection: Avoid release to environment that is not in accordance to product label.

Section 9: Physical and Chemical Properties

Physical State: Liquid

Appearance: Deep Blue

Odor: Mild Sweet

Odor threshold: n/a

pH: 1.0 pH *does not burn human or animal skin tissue

Melting point/melting range: n/a

Boiling point/boiling range: 220F

Flash point: n/a

Evaporation rate: n/a

Flammability: n/a

Upper/lower flammability or explosive limits: n/a

Auto ignition temperature: n/a

Danger of explosion: n/a

Vapor pressure: n/a

Vapor density: n/a

Relative density: 1.19

Solubility in/Miscibility with water: completely soluble in water

Section 10: Stability and Reactivity

Reactivity: Hazardous reactions will not occur under normal conditions. Copper sulfate can undergo hazardous reaction with acetylene, potassium chlorate, strong bases, hydroxylamine, magnesium.

Chemical stability: Stable under recommended handling and storage conditions (see section 7).

Conditions to avoid: Direct sunlight, extremely high or low temperatures, and incompatible materials

Incompatible materials: strong bases, strong oxidizers, acetylene, potassium chlorate, hydroxylamine, magnesium.

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decompositions products should not be produced.

Section 11: Toxicological Information

Acute toxicity: Not Classified

Copper Sulfate LD50 Oral Rat 960 mg/kg

Potential routes of exposure/potential health effects

Skin: not classified

Eye: Serious eye damage can occur

Inhalation: not classified

Ingestion: not classified

Carcinogenic effects: not classified

Mutagenic effects: not classified

Reproductive toxicity: not classified

Sensitization: mild skin irritation. Severe eye damage

Target organs: not classified

Section 12: Ecological Information (non-mandatory)

Ecology – General Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Ecotoxicity:

Sulfuric acid, copper(2+) salt (1:1) pentahydrate (7758-99-8), Zinc Sulfate (7733-02-0)

LC50 Fish 1	0.66 (0.66- 1.15) mg/l (exposure time: 96 h- Species Lepomis macrochirus (semi-static)
EC50 Daphnia	0.147 (0.147 – 0.227) mg/l (exposure time: 48 h – Species Daphnia magna (Static)
LC50 Fish 2	0.09 (0.09 – 0.19) mg/l (exposure time: 96 h – Species Lepomis macrochirus (static)

Persistence and Degradability:

Hoof It

Persistence and Degradability	Not Established
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Sulfuric acid, copper(2+) salt (1:1) pentahydrate (7758-99-8) , Zinc Sulfate (7733-02-0)

Persistence and Degradability	Not Established
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Bioaccumulative Potential:

Hoof 1 Copper

Bioaccumulative Potential	Not established
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Mobility in Soil: Not Established

Other Information: n/a

Section 13: Disposal Considerations (non-mandatory)

Waste Disposal Recommendations: Dispose in a safe manner in accordance with local, state, and federal regulations.

Ecology – Waste Materials: Avoid release into the environment

Section 14: Transport Information (non-mandatory)

In Accordance with DOT: Transportation Information

LTQ exemption when packaged in Limited Quantity of 1.25 gal or less per unit.

Proper Shipping Name: Liquid, Copper Sulfate

- **Hazard class:** 8 corrosive to aluminum and other soft metals (CFR 173.136)
- **UN-No. DOT** 1760
- **DOT NA No.** UN1760
- **Hazardous Label:** 8- Corrosive
- **Packing Group:** III – minor danger

DOT Special Provisions: 49 CFR172.102

IB3 – Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H and 31H2) Composite 31HZ1 and (31HA2, 31HB2, 31HN2, 31HD2, and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to kPa at 50 C (1.1 bar at 122

F) or 130 kPa at 55 C (1.3 bar at 131 F) are authorized except for UN2672 (also see Special Provisions IP8 in Table 2 for UN2672).
T7 – 4 178.274(d)(2) Normal.....178.275(d)(3)
TP1 The maximum degree of filling must not exceed the degree of filling determined by the following:
Degree of filling = $97 / 1 + a(tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees Celsius of the liquid during filling.
TP28 – A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

DOT Packaging Exceptions (49 CFR 173.xxx)	LTQ Less than 1.25 gallons	154
DOT Packaging Non Bulk (49 CFR 173.xxx)		203
DOT Packaging Bulk (49 CFR 173.xxx)		241
DOT Quantity Limitations Passenger Aircraft/rail (49CFR173.xxx)		5 L
DOT Quantity limitations Cargo Aircraft only (49 CFR 173.xxx)		60 L
DOT Vessel Stowage Location	A – The material may be stowed “on deck” or “under deck and on a passenger vessel.	
DOT Vessel Stowage Other:	40 – Stow “clear of living quarters”	

Section 15: Regulatory Information (non-mandatory)

US Federal Regulations

SARA Section 355 (extremely hazardous substances): No additional information available

SARA Section 313 (specific toxic chemical listings): No addition information available

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs): No additional information available

TSCA (Toxic Substances Control Act): No additional information available

Section 16: Other Information

SDS date of preparation/update: 02/2022