

# Safety Data Sheet

Issue Date: 14-Jun-2007

Revision Date: 10-Sep-2015

Version 1

## 1. IDENTIFICATION

### Product Identifier

Product Name BupHer Mg

### Other means of identification

SDS # FFN 00671

UN/ID No UN1805

### Recommended use of the chemical and restrictions on use

### Details of the supplier of the safety data sheet

#### Supplier Address

Genesis Agri-Products, Inc.  
2522 Old Town Road  
Union Gap, Washington 98903

### Emergency Telephone Number

Company Phone Number Business Phone: (509) 452-0302

Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

Appearance Dark green liquid

Physical State Liquid

### Classification

Skin corrosion/irritation	Category 1	Sub-category C
Serious eye damage/eye irritation	Category 1	

### Signal Word

Danger

### Hazard Statements

Causes severe skin burns and eye damage



### Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray  
Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

Immediately call a poison center or doctor/physician

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Immediately call a poison center or doctor/physician

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

Wash contaminated clothing before reuse

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

Immediately call a poison center or doctor/physician

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other Hazards**

Toxic to aquatic life with long lasting effects

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Phosphoric Acid	7664-38-2	Proprietary
Zinc sulfate, monohydrate	7446-19-7	Proprietary
Citric Acid	77-92-9	Proprietary

\*\*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**

Individuals experiencing a chemical exposure must be taken for medical attention if any adverse effect occurs. Rescuers should be taken for medical attention, if necessary. Take a copy of the label and SDS to a health professional with the exposed individual.

**Eye Contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. "Roll" eyes to expose more surface. Seek immediate medical attention/advice.

**Skin Contact**

Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing. Wash contaminated clothing before reuse.

**Inhalation**

Remove to fresh air. Oxygen or artificial respiration if needed. Call a physician immediately.

**Ingestion**

Do not induce vomiting without medical advice. Never give anything by mouth to a person who is unconscious or convulsing. If patient is conscious and alert, dilute by drinking milk, egg whites or large quantities of water.

**Most important symptoms and effects****Symptoms**

Inhalation of vapors and/or aerosols in high concentration may cause irritation of respiratory system. Coughing. Contact will cause irritation and redness to exposed areas. Irritating to mouth, throat, and stomach if ingested.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician**

Treat symptomatically.

**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**Water spray (fog). Foam. Halon. Carbon dioxide (CO<sub>2</sub>). Dry chemical. ABC-powder.**Unsuitable Extinguishing Media** Not determined.**Specific Hazards Arising from the Chemical**

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

**Hazardous Combustion Products** Phosphorus oxides. Carbon oxides.**Sensitivity to Mechanical Impact** Not applicable.**Sensitivity to Static Discharge** Not applicable.**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. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

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

In case of a spill, clear the affected area and protect people. Uncontrolled releases should be responded to by appropriately trained personnel in proper personal protective equipment, using pre-planned procedures.

**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 spilled liquid with polypads or other suitable absorbent materials. Rinse area thoroughly. Decontaminate the area thoroughly. Place all spill residue in an appropriate container and seal. Reuse or dispose of this product in accordance with all regulations.

**7. HANDLING AND STORAGE****Precautions for safe handling****Advice on Safe Handling**

Use personal protection recommended in Section 8. Wash thoroughly after handling. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink, smoke, or apply cosmetics while handling this product. Use only in well-ventilated areas. Always open containers slowly to allow any excess pressure to vent. Ensure containers are properly labeled. Emptied container retains product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed. Inspect all incoming containers before storage to ensure that containers are properly labeled and are not damaged.

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

Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Protect from direct sunlight. Keep away from heat. Keep from freezing. Store away from incompatible materials.

**Incompatible Materials**

Strong bases. Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Phosphoric Acid 7664-38-2	STEL: 3 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup> (vacated) TWA: 1 mg/m <sup>3</sup> (vacated) STEL: 3 mg/m <sup>3</sup>	IDLH: 1000 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup>
Citric Acid 77-92-9	-	15 mg / m3 (Total)	-

### Appropriate engineering controls

**Engineering Controls** Local exhaust ventilation to maintain mist concentrations. Showers. Eyewash stations.

### Individual protection measures, such as personal protective equipment

**Eye/Face Protection** Splash goggles or safety glasses. Wear face shield for operations involving more than 5 gallons of this solution in which splashes or sprays can be generated.

**Skin and Body Protection** Wear protective Neoprene™ gloves. Use triple gloves for spill response. Wear protective clothing appropriate for task (coveralls, apron, Tyvek suit).

**Respiratory Protection** None required under normal circumstances of use. If operations generate aerosols, mists, or sprays which cause exposures in excess of the guidelines listed above, respiratory protection may be needed (e.g. air-purifying respirator with a high efficiency particulate filter) and must comply with the U.S. Federal OSHA Standard (29 CFR 1910.134), applicable U.S. state regulations, or the appropriate standards of Canada and its Provinces.

**General Hygiene Considerations** Avoid contact with skin, eyes and clothing. After handling this product, wash hands before eating, drinking, or smoking. If contact occurs, remove contaminated clothing. If needed, take first aid action shown on section 4 of this SDS. Launder 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>	Dark green liquid	<b>Odor Threshold</b>	Not established
<b>Color</b>	Dark green		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not determined	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	> 100 °C / > 212 °F	
Flash Point	Not applicable	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	n/a-liquid	
Upper Flammability Limits	Not applicable	
Lower Flammability Limit	Not applicable	
Vapor Pressure	Not established	
Vapor Density	Not established	
Specific Gravity	1.23	
Water Solubility	Completely soluble	
Solubility in other solvents	Not determined	
Partition Coefficient	Not available	
Auto-ignition Temperature	Not applicable	

<b>Decomposition Temperature</b>	Not determined
<b>Kinematic Viscosity</b>	Not determined
<b>Dynamic Viscosity</b>	Not determined
<b>Explosive Properties</b>	Not determined
<b>Oxidizing Properties</b>	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.

### Conditions to Avoid

Extreme temperatures. Contact with incompatible materials.

### Incompatible Materials

Strong bases. Strong oxidizing agents.

### Hazardous Decomposition Products

Phosphorous oxides. Carbon oxides.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

<b>Eye Contact</b>	Causes severe eye damage.
<b>Skin Contact</b>	Causes severe skin burns.
<b>Inhalation</b>	Avoid breathing vapors or mists.
<b>Ingestion</b>	Ingestion may cause irritation to mucous membranes.

### Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Phosphoric Acid 7664-38-2	= 1530 mg/kg ( Rat )	= 2740 mg/kg ( Rabbit )	> 850 mg/m <sup>3</sup> ( Rat ) 1 h
Citric Acid 77-92-9	= 3000 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

**Carcinogenicity**      Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

**Numerical measures of toxicity**

Not determined

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Toxic to aquatic life with long lasting effects.

**Component Information**

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Phosphoric Acid 7664-38-2		3 - 3.5: 96 h Gambia affinis mg/L LC50		4.6: 12 h Daphnia magna mg/L EC50
Citric Acid 77-92-9		1516: 96 h Lepomis macrochirus mg/L LC50 static		120: 72 h Daphnia magna mg/L EC50

**Persistence/Degradability**

The components of this solution are relatively stable, but will decompose over time to generate other inorganic compounds.

**Bioaccumulation**

Not determined.

**Mobility**

Chemical Name	Partition Coefficient
Citric Acid 77-92-9	-1.72

**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.

**California Hazardous Waste Status**

Chemical Name	California Hazardous Waste Status
Phosphoric Acid 7664-38-2	Corrosive
Zinc sulfate, monohydrate 7446-19-7	Toxic

**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

UN1805

**Proper Shipping Name** Phosphoric acid solution  
**Hazard Class** 8  
**Packing Group** III

**IATA**

**UN/ID No** UN1805  
**Proper Shipping Name** Phosphoric acid solution  
**Hazard Class** 8  
**Packing Group** III

**IMDG**

**UN/ID No** UN1805  
**Proper Shipping Name** Phosphoric acid solution  
**Hazard Class** 8  
**Packing Group** III  
**Marine Pollutant** This material may meet the definition of a marine pollutant

**15. REGULATORY INFORMATION**

**International Inventories**

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Phosphoric Acid	Present	X		Present		Present	X	Present	X	X
Zinc sulfate, monohydrate		X					X		X	X
Citric Acid	Present	X		Present		Present	X	Present	X	X

**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*
- AICS - Australian Inventory of Chemical Substances*

**US Federal Regulations**

**CERCLA**

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Phosphoric Acid 7664-38-2	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
Zinc sulfate, monohydrate 7446-19-7	1000 lbs	1000 lbs	1000 lbs

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Zinc sulfate, monohydrate - 7446-19-7	7446-19-7	2.82	1.0

**CWA (Clean Water Act)**

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Phosphoric Acid	5000 lb			X
Zinc sulfate, monohydrate		X		

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

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

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Phosphoric Acid 7664-38-2	X	X	X
Zinc sulfate, monohydrate 7446-19-7	X		X

**16. OTHER INFORMATION**

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

Issue Date: 14-Jun-2007  
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**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**