

Safety Data Sheet Phloem 3150

SECTION 1: Identification

1.1 Product identifier

Product name Phloem 3150

1.4 Supplier's details

Name Source to Source
Address 3233 South I Street
Tulare, CA 93274
United States

Telephone 866.727.4572

1.5 Emergency phone number(s)

1.800.424.9300

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

- Eye damage/irritation (chapter 3.3), Cat. 1
- Skin corrosion/irritation (chapter 3.2), Cat. 1
- Specific target organ toxicity, repeated exposure (chapter 3.9), Cat. 2

2.2 GHS label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H314 Causes severe skin burns and eye damage
H318 Causes serious eye damage
H373 May cause damage to organs through prolonged or repeated exposure
H411 Toxic to aquatic life with long lasting effects

Precautionary statement(s)

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash thoroughly after handling.

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P280
P301+P330+P331
P303+P361+P353

P304+P340
P305+P351+P338

P310
P314
P363
P405
P501

Wear protective gloves/protective clothing/eye protection/face protection.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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/doctor if concerned.
Get medical advice/attention if you feel unwell.
Wash contaminated clothing before reuse.
Store locked up.
Dispose of contents/container to local and federal regulations.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Other names / synonyms Phloem 3150, a foliar micronutrient blend

Hazardous components

1. inert ingredients

Concentration 71.19 - 74.78 % (Weight)

2. Proprietary, non hazardous material

Concentration 0.94 - 0.94 % (Weight)

3. Zinc sulfate monohydrate

Concentration 8.56 - 8.56 % (Weight)
EC no. 231-793-3
CAS no. 7733-02-0
Index no. 030-006-00-9

4. MANGANESE (II) SULFATE MONOHYDRATE

Concentration 3.48 - 3.48 % (Weight)
CAS no. 10034-96-5

5. COPPER SULFATE PENTAHYDRATE

Concentration 2.19 - 2.19 % (Weight)
CAS no. 7758-99-8

6. D-glycero-D-gulo-Heptonic acid, sodium salt (1:1)

Concentration 2.4 - 3.59 % (Weight)
CAS no. 13007-85-7

7. BORIC ACID

Concentration 0.19 - 0.19 % (Weight)
EC no. 233-139-2
CAS no. 10043-35-3

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8. CITRIC ACID

Concentration	7.46 - 9.86 %
CAS no.	77-92-9

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

If inhaled	Move victim to fresh air. If breathing is difficult, give oxygen. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.
In case of skin contact	If on skin: Wash with plenty of water . Take off contaminated clothing and wash before reuse. If skin irritation occurs: Get medical advice/attention.
In case of eye contact	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 swallowed	If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Get medical attention.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

SMALL FIRES: Dry chemical, CO₂, water spray or regular foam.
LARGE FIRE: Water spray, fog or regular foam.

5.2 Specific hazards arising from the chemical

No data available.

Further information

Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.

Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ventilate enclosed areas. Do not walk through spilled material. Wear appropriate personal protective equipment, avoid direct contact.

As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. Keep out of low areas. Keep unauthorized personnel away. Stay upwind.

6.2 Environmental precautions

Do not contaminate any watercourse or other body of water by direct application, disposal, or cleaning of equipment.

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6.3 Methods and materials for containment and cleaning up

Stop leak if you can do it without risk.

SMALL SPILLS: Take up with sand or other non-combustible absorbent material and place into containers for later disposal.

LARGE SPILLS: Dike far ahead of spill for later disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use only in well ventilated areas. Agitate before use. Wear appropriate personal protective equipment, avoid direct contact. Do not breathe mist, vapours and/or spray. Avoid contact with skin, eyes, and clothing. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

7.2 Conditions for safe storage, including any incompatibilities

Store in a sealed container in cool, dry location, at temperatures above freezing. Triple rinse and dispose of containers according to local and federal regulations.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. Zinc sulfate monohydrate (CAS: 7733-02-0 EC: 231-793-3)

TWA (Inhalation): 15 mg/m³ 8 hours; USA (OSHA)

Total dust.

2. MANGANESE (II) SULFATE MONOHYDRATE (CAS: 10034-96-5)

TWA (Inhalation): 0.2 mg/m³; USA (ACGIH)

Respirable fraction

3. MANGANESE (II) SULFATE MONOHYDRATE (CAS: 10034-96-5)

STEL (Inhalation): 3 mg/m³; USA (NIOSH)

Fume.

4. MANGANESE (II) SULFATE MONOHYDRATE (CAS: 10034-96-5)

TWA (Inhalation): 1 mg/m³; USA (NIOSH)

Fume.

5. COPPER SULFATE PENTAHYDRATE (CAS: 7758-99-8)

TWA (Inhalation): 0.2 mg/m³ (ACGIH)

fume

6. COPPER SULFATE PENTAHYDRATE (CAS: 7758-99-8)

TWA (Inhalation): 0.1 mg/m³ (OSHA)

fume

7. COPPER SULFATE PENTAHYDRATE (CAS: 7758-99-8)

TWA (Inhalation): 0.1 mg/m³ (NIOSH)

fume

8.2 Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

8.3 Individual protection measures, such as personal protective equipment (PPE)

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Eye/face protection

Wear safety goggles.

Skin protection

Wear appropriate gloves.

Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134. Use a NIOSH/MSHA approved respirator if exposure limits are exceeded or symptoms are experienced.

Environmental exposure controls

Follow best practice for site management and disposal of waste.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)	dark brown
Odor	sweet
Odor threshold	Not Available
pH	1.56
Melting point/freezing point	Not Available
Initial boiling point and boiling range	Not Available
Flash point	Not Available
Evaporation rate	Not Available
Flammability (solid, gas)	Not Available
Upper/lower flammability limits	Not Available
Upper/lower explosive limits	Not Available
Vapor pressure	Not Available
Vapor density	Not Available
Relative density	Not Available
Solubility(ies)	100%
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available
Viscosity	Not Available
Explosive properties	Not Available
Oxidizing properties	Not Available

Other safety information

Specific Gravity: 1.196

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

Hazardous polymerization will not occur.

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10.4 Conditions to avoid

No data available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

No data available

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Citric Acid

Acute Toxicity: Ingestion/Oral-Rat LD50 • 3 g/kg; Inhalation-Rat TCLo • 180 mg/m³; Lungs, Thorax, or Respiration:Other changes; Liver:Liver function tests impaired; Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels:Dehydrogenases;
Irritation: Eye-Rabbit • 750 µg 24 Hour(s) • Severe irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Mild irritation

Copper Sulfate Pentahydrate

Acute Toxicity: Ingestion/Oral-Rat LD50 • 300 mg/kg; Ingestion/Oral-Human TDLo • 272 mg/kg; Liver:Other changes; Kidney, Ureter, and Bladder:Other changes; Blood:Other hemolysis with or without anemia; Skin-Rat LD50 • >2 g/kg

Boric Acid

Acute Toxicity: Ingestion/Oral-Rat LD50 • 2500 mg/kg; Behavioral:Convulsions or effect on seizure threshold; Behavioral:Ataxia;

Irritation: Skin-Human • 15 mg 3 Day(s)-Intermittent • Mild irritation;

Multi-dose Toxicity: Ingestion/Oral-Rat TDLo • 1000 mg/kg 10 Day(s)-Intermittent; Kidney, Ureter, and Bladder:Changes in tubules (including acute renal failure, acute tubular necrosis);

Reproductive: Ingestion/Oral-Rat TDLo • 3260 mg/kg (1-20D preg); Reproductive Effects:Specific Developmental Abnormalities:Central nervous system; Ingestion/Oral-Rat TDLo • 76 mg/kg (20D preg); Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus)

Zinc Sulfate

Acute Toxicity: Ingestion/Oral-Mouse LD50 • 564 to 2949 mg/kg bw (rat) Dermal LD50>2000 mg/kg bw (rat)

Serious eye damage: Strong irritant

Mutagen: Not mutagenic

Manganese Sulfate monohydrate

Multi-dose Toxicity: Inhalation-Rat TCLo • 0.1 mg/m³ 90 Day(s)-Intermittent; Brain and

Coverings:Changes

in brain-weight;

Mutagen: Micronucleus test • Ingestion/Oral-Mouse • 205 mg/kg 24 Hour(s)-Continuous;

Reproductive: Ingestion/Oral-Mouse TDLo • 513 mg/kg (5D male); Reproductive Effects:Paternal Effects:Spermatogenesis;

Tumorigen / Carcinogen: Ingestion/Oral-Mouse TDLo • 1314 g/kg 2 Year(s)-Continuous;

Tumorigenic:Equivocal tumorigenic agent by RTECS criteria; Endocrine:Thyroid tumors

SECTION 12: Ecological information

Toxicity

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Material data lacking.

Persistence and degradability

Material data lacking.

Bioaccumulative potential

Material data lacking.

Mobility in soil

Material data lacking.

Other adverse effects

No studies have been found.

SECTION 13: Disposal considerations

Disposal of the product

Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Disposal of contaminated packaging

Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

SECTION 14: Transport information

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Massachusetts Right To Know Components

Chemical name: Zinc sulfate

CAS number: 7733-02-0

New Jersey Right To Know Components

Common name: ZINC SULFATE

CAS number: 7733-02-0

Pennsylvania Right To Know Components

Chemical name: Sulfuric acid, zinc salt (1:1)

CAS number: 7733-02-0

SECTION 16: Other information

16.1 Further information/disclaimer

Reasonable care has been taken in the preparation of this information, but the supplier gives no warranty of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the

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purchaser will make his own tests to determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental and/or consequential property damage arising out of the use of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights. Read the Safety Data Sheet before handling product.