YIELD-QUEST

Safety Data Sheet
HempGlo Stalk Boom

SECTION 1: Identification

1.1 Product identifier

Product name	HempGlo Stalk Boom

1.2 Recommended use of the chemical and restrictions on use

liquid fertilizer

1.3 Supplier's details

Name	Yield Quest
Address	400 South Central Ave / PO Box 190 Humboldt TN 38343
Telephone	731-784-0605

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200)

2.2 GHS label elements, including precautionary statements

Pictogram

Precautionary statement(s)

P264	Wash … thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P330	Rinse mouth.

SECTION 3: Composition/information on ingredients

3.1 Mixtures

Hazardous components

1. Manganese Glucoheptonate

Concentration	Not specified

2. Zinc sulfate

Concentration	Not specified
EC no.	231-793-3
CAS no.	7733-02-0
Index no.	030-006-00-9

- Acute toxicity, oral, Cat. 4
- Eye damage/irritation, Cat. 1
- Hazardous to the aquatic environment, short-term (acute), Cat. 1
- Hazardous to the aquatic environment, long-term (chronic), Cat. 1

H302	Harmful if swallowed
H318	Causes serious eye damage
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

3. Iron Glucoheptonate

Concentration	Not specified

4. Iron(II) sulfate heptahydrate

Concentration	Not specified
EC no.	231-753-5
CAS no.	7782-63-0
Index no.	026-003-01-4

- Acute toxicity, oral, Cat. 4
- Skin corrosion/irritation, Cat. 2
- Serious eye damage/eye irritation, Cat. 2

H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation

5. Boric acid

Concentration	Not specified
EC no.	233-139-2
CAS no.	10043-35-3
Index no.	005-007-00-2

- Toxic to reproduction, Cat. 1B

H360FD

6. Sodium molybdate

Concentration	Not specified
EC no.	231-551-7

CAS no.	7631-95-0

7. Cobalt sulfate heptahydrate

Concentration	Not specified
CAS no.	10026-24-1

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

If inhaled	Remove to fresh air. If breathing becomes difficult, contact a medical physician. Give artificial respiration if victim is not breathing and obtain immediate medical attention.
In case of skin contact	Wash thoroughly with soap and water. Remove contaminated clothing and wash before reuse. Seek medical attention if skin becomes irritated.
In case of eye contact	Flush immediately with water for at least 15 minutes, lifting the upper and lower eyelids occasionally. Call a physician if eye irritation persists.
If swallowed	Call physician or Poison Control Center immediately for most current information. Dilute with large amounts of water. Do not induce vomiting unless directed to do so by a medical professional. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. If vomiting occurs, keep head lower than hips to prevent introduction of fluid into the lungs.

4.2 Most important symptoms/effects, acute and delayed

Eyes: May cause inflammation, redness, and possible damage with prolonged exposure.
Skin: Prolonged or repeated exposure may cause skin ulcerations and /or burns.
Inhalation: It may cause headaches, nausea, or weakness in case of prolonged exposure. Oxygen can be administered if breathing becomes difficult.
Ingestion: May result in nausea, vomiting, diarrhea, digestive disorders

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Water spray, Foam, Carbon Dioxide, Dry-Chemical.

5.2 Special protective actions for fire-fighters

Wear positive pressure, self-contained breathing apparatus (SCBA) and goggles. Avoid exposure to smoke or fumes. Contain any liquid runoff.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For small or incidental spills, the minimum personal protective equipment should be rubber gloves, rubber apron, and chemical goggles. Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. Gas masks with ammonia canister or SCBA gear may be required. For large spills, contain by diking with soil or other non-combustible absorbent material. Dilution with

water will reduce the release of ammonia vapors. Keep material out of sewers, storm drains, and surface waters. Comply with all applicable government regulations on spill reporting, handling, and waste disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Keep away from incompatible materials. Do not breathe mists. Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Wash with soap and water after handling.

7.2 Conditions for safe storage, including any incompatibilities

Store out of direct sunlight (above 40˚F) in a dry, well-ventilated area. This product should be stored in tanks constructed of stainless steel, fiberglass, polypropylene, or polyethylene. Valves should be inspected on a regular basis and replaced as needed to prevent leakage.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. Boric acid (CAS: 10043-35-3 EC: 233-139-2)
TWA: 2.000000
mg/m3; USA (ACGIH)
Upper Respiratory Tract irritation. Not classifiable as a human carcinogen varies

STEL: 6.000000
mg/m3; USA (ACGIH)
Upper Respiratory Tract irritation. Not classifiable as a human carcinogen varies

TWA: 2.000000
mg/m3; USA (ACGIH)
Upper Respiratory Tract irritation. Not classifiable as a human carcinogen varies

TWA: 2.000000
mg/m3; USA (ACGIH)
Upper Respiratory Tract irritation. Not classifiable as a human carcinogen varies

STEL: 6.000000
mg/m3; USA (ACGIH)
Upper Respiratory Tract irritation. Not classifiable as a human carcinogen varies

STEL: 6.000000
mg/m3; USA (ACGIH)
Upper Respiratory Tract irritation. Not classifiable as a human carcinogen varies

TWA: 2 mg/m3; USA (ACGIH)
Upper Respiratory Tract irritation. Not classifiable as a human carcinogen varies

STEL: 6 mg/m3; USA (ACGIH)
Upper Respiratory Tract irritation. Not classifiable as a human carcinogen varies

2. Sodium molybdate (CAS: 7631-95-0 EC: 231-551-7)
TLV® (Inhalation): 0.5 mg/m3 (ACGIH)
Lower Respiratory Tract irritation. Confirmed animal carcinogen with unknown relevance to humans

PEL-TWA (Inhalation): 0.5 mg/m3 (Cal/OSHA)

PEL-TWA (Inhalation): 5 mg/m3 (OSHA)

8.2 Appropriate engineering controls

Use with adequate ventilation to keep airborne levels below recommended exposure limits.

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

Eye/face protection
Chemical dust/splash goggles or full-face shield to prevent eye contact. As a general rule, contact lenses should not be worn when working with chemicals because they contribute to the severity of an eye injury.

Skin protection
Rubber gloves with gauntlets.

Body protection
Use body protection appropriate for task. Chemical-resistant coveralls and rubber aprons are generally acceptable.

Respiratory protection
If work conditions generate vapors or mist, wear a NIOSH approved respirator appropriate for those emission levels. Appropriate respirator may be a full facepiece respirator, an SCBA in the pressure demand mode, or a supplied-air respirator

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)	clear liquid
Odor	NA
Odor threshold	NA
pH	NA
Melting point/freezing point	32F
Initial boiling point and boiling range	212F
Flash point	NA
Evaporation rate	NA
Flammability (solid, gas)	NA
Upper/lower flammability limits	NA
Vapor pressure	NA
Vapor density	NA
Relative density	9.3 lbs/gal
Solubility(ies)	NA
Partition coefficient: n-octanol/water	NA
Auto-ignition temperature	NA
Decomposition temperature	NA
Viscosity	NA
Explosive properties	NA
Oxidizing properties	NA

SECTION 10: Stability and reactivity

10.1 Reactivity
stable under normal conditions and pressure

10.2 Conditions to avoid
strong acids and bases

10.3 Incompatible materials

Boric acid: Potassium, Acid anhydrides

Sodium molybdate: Strong oxidizing agents

10.4 Hazardous decomposition products

Boric acid: Hazardous decomposition products formed under fire conditions. - Borane/boron oxides
Other decomposition products - No data available
In the event of fire: see section 5

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity
May cause severe gastrointestinal irritation, vomiting, stomach cramps, and diarrhea.

Skin corrosion/irritation
Moderate irritant, especially with prolonged exposure. May cause skin ulceration and/or burns.

Serious eye damage/irritation
Moderate irritant. May cause redness, burning, inflammation, and/or damage.

Respiratory or skin sensitization
May cause irritation to mucous membranes, coughing, or breathing difficulties. If exposed to decomposition gases remove from area immediately.

SECTION 12: Ecological information

Toxicity
May be harmful to fish, livestock, and wildlife. Dissolved mineral salts may cause irritation of the digestive tract. Non-persistent. Non-cumulative when applied using normal agricultural practices.

SECTION 13: Disposal considerations

Disposal of the product
Do not contaminate lakes, streams, ponds, estuaries, oceans, or other waters by discharge of waste effluents or equipment rinsate. Dispose of waste effluents according to federal, state, and local regulations. Chemical additions or other alterations of this product may invalidate any disposal information in this SDS.

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

Chemical name: Ferrous sulfate
CAS number: 7782-63-0

No components are subject to the Massachusetts Right to Know Act.

New Jersey Right To Know Components
Common name: ZINC SULFATE
CAS number: 7733-02-0

Boric acid
CAS-No. 10043-35-3

Pennsylvania Right To Know Components
Chemical name: Sulfuric acid, zinc salt (1:1)
CAS number: 7733-02-0

Chemical name: Ferrous sulfate
CAS number: 7782-63-0

Boric acid
CAS-No. 10043-35-3

SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

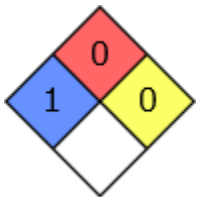
SARA 313 Components
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards
Chronic Health Hazard

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Chemical name: Cobalt sulfate heptahydrate
CAS number: 10026-24-1
00/00/0000 - Cancer

NFPA Rating



SECTION 16: Other information

The information and recommendations herein are taken from data contained in independent, industry recognized references including NIOSH, OSHA, ANSI, and NFPA. This information is, as of date listed above, true and accurate to the best of Yield Quest knowledge. It is intended for use by persons possessing technical knowledge and at their own discretion and risk. Since actual use is beyond our control, no guarantee, express or implied, and no liability is assumed by Yield Quest in conjunction with the use of this information. Actual conditions of use and handling may require consideration of information other than, or in addition to, that which is provided herein.