

SAFETY DATA SHEET

This Safety Data Sheet complies with the Canadian Hazardous Product Regulations, the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, 29 CFR 1910 (OSHA HCS), and the European Union Directives.

1. Product and Supplier Identification

1.1 Product: Heavy Harvest Grow

1.2 Other Means of Identification: None

1.3 Product Use: Specialty Fertilizer

1.4 Restrictions on Use: See Manufacturer's Guide for use

1.5 Producer: NUTRILIFE PLANT PRODUCTS,

2286 McCallum Rd, Suite 102, Abbotsford, BC V2S 3P4 Phone: (604) 606-6069 Fax: (604) 638-5116

Supplier: As above

1.6 Emergencies: +1 (604) 606-6069

2. Hazards Identification

2.1 Classification of product or mixture

Note to reader: This product in an untested mixture and GHS classification is based on the classification of the ingredients and their concentrations. Proprietary ingredients, if any, do NOT exhibit any health effects not listed in this SDS.

GHS Classification: Serious Eye Damage/Irritation, Category 2A

2.2 GHS Label Elements, including precautionary statements

Pictogram:



Signal Word: Warning

GHS Hazard Statements: H319: Causes serious eye irritation

GHS Precautionary Statements:

Prevention: P280: Wear protective gloves/protective clothing/eye

protection/face protection

P264: Wash hands and exposed skin after handling.

Response: P305+P351+P338: IF IN EYES: Rinse cautiously with water for

several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical attention.

Storage: None

Disposal: None

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS: None.

2.4 Additional Information

Primary Routes of Entry:

Skin Contact: Yes
Skin Absorption: No
Eye Contact: Yes
Ingestion: No
Inhalation: No

Emergency Overview: Caution. May irritate eye and skin.

Effects of Short-Term (Acute) Exposure:

Inhalation: This product is in liquid form. If misted, inhalation may cause irritation of the upper respiratory tract.

Skin Contact: Irritation of the skin may occur causing redness and/or rash.

Eye Contact: If in contact with eyes, irritation may occur causing transient tearing.

Ingestion: Low toxicity, but ingestion of gross amounts may cause irritation of the gastro-intestinal tract.

Effects of Long-Term (Chronic) Exposure:

No long term health effects are known or expected.

Medical Conditions Aggravated By Exposure: Persons who are predisposed to skin problems may be more susceptible to skin irritation if this product comes in contact with the skin.

3. Composition

3.1 Mixture composition

Component	% (w/w)	GHS Classification	
Calcium Nitrate CAS No 35054-52-5 EC No 233-332-1	10 - 15	Oxidizing Solids, Category 3, H272	
Magnesium Sulphate CAS No 7487-88-9 EC No231-298-2	5 - 10	No GHS Classification	
Calcium Chloride CAS No 10043-52-4 EC No 233-140-8	2 - 5	Eye Irritant, Category 2A, H319	
Mono Potassium Phosphate CAS No 7778-77-0 EC No 231-913-4	2 - 5	No GHS Classification	
Potassium Sulphate CAS No 7778-80-5 EC No 231-915-5	2 - 5	No GHS Classification	
Ammonium Nitrate CAS No 6484-52-2 EC No 229-347-8	2 - 5	Oxidizing Solids, Category 3, H272 Eye Irritant, Category 2A, H319 Acute Toxicity, Oral, Category 5, H303	
Diammonium Phosphate CAS No 7722-76-1 EC No 231-764-5	0.8 – 1.3	No GHS Classification	
Water CAS No 7732-18-5 EC No 231-791-2	60- 70	No GHS Classification	
Undisclosed ingredients or those considered non-hazardous	None	Not applicable	

4. First Aid Measures

4.1 Description of First Aid Measures

Notes to Physician: Treat symptomatically.

In case of eye contact: Immediately flush eyes with plenty of water for 15 minutes, lifting eyelids occasionally to ensure proper lavage of the eyes. Get immediate medical attention.

In case of skin contact: Wash affected area immediately with mild soap and water. Remove contaminated clothing and wash before reuse.

If inhalation: Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention. If breathing has stopped, a trained person should perform artificial respiration.

If ingestion: Rinse mouth. Never give anything by mouth to an unconscious or convulsing person. Seek immediate medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of vomitus into the lungs.

4.2 Most important symptoms and effects, both acute and delayed

Effects of Short-Term (Acute) Exposure:

Inhalation: This product is in liquid form. If misted, inhalation may cause irritation of the upper respiratory tract.

Skin Contact: Irritation of the skin may occur causing redness and/or rash.

Eye Contact: If in contact with eyes, irritation may occur causing transient tearing.

Ingestion: Low toxicity, but ingestion of gross amounts may cause irritation of the gastro-intestinal tract.

Effects of Long-Term (Chronic) Exposure:

No long term health effects are known or expected.

Medical Conditions Aggravated By Exposure: Persons who are predisposed to skin problems may be more susceptible to skin irritation if this product comes in contact with the skin.

4.3 Indication of any immediate medical attention and special treatment needed None

5. Fire Fighting Measures

5.1 Extinguishing Media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or CO2.

5.2 Special hazards arising from mixture: Mildly oxidizing liquid. Exposure to heat and when evaporated to dryness, may cause hazardous decomposition.

Advice for firefighters: Evacuate area and fight fire from a safe distance or a protected location. Stop leak if safe to do so. Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Do not enter confined fire space without proper personal protection. Use approved positive pressure self-contained breathing apparatus. If possible, isolate materials not yet involved in the fire, and move containers from fire area if this can be done without risk, protect personnel.

5.3 Further Information:

Hazardous Decomposition Products: May decompose on heating, releasing oxides of nitrogen and sulphur.

Sensitivity to Impact: No. Sensitivity to Static Discharge: No

HAZARDOUS MATERIALS INFORMATION SYSTEM (HMIS) HAZARD INDEX:

HEALTH: 1

CHRONIC: None indicated

FLAMMABILITY: 0
PHYSICAL: 0

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

All spill responders involved in a cleanup of this product must follow good industrial hygiene practices. Use personal protective equipment. Avoid breathing vapours, mist or gas. If used indoors, ensure adequate ventilation. Extinguish all sources of ignition. Absorb spilled material on inert absorbent and shovel into approved containers, properly labeled for disposal.

Respiratory Protection: If misted or atomized, wear a NIOSH approved N95 mask.

Skin protection: Wear clothing to protect for contact with skin. Wear gloves when handling.

Eye and Face Protection: Wear eye protection with side panels if there is a chance of splashing into eyes.

Footwear: No specific recommendation.

Other: None

6.2 Environmental precautions

This is a specialty fertilizer designed to promote growth of plants and vegetation. Prevent from spilling into natural waterways, sewers or drains.

6.3 Methods and materials for containment and cleanup

Clean up spills immediately to protect the environment from entry into sewers or water courses. Absorb onto inert material and scoop or shovel up material and place in an appropriate, properly labeled container for disposal.

Remedial Measures: Do not use unprotected hands to collect spilled material. Ensure proper protective equipment is used to prevent contact with skin and eyes.

Large Spills: Dike with earth, sand or inert sorbent material to contain spill. Remove liquid with compatible pumps or vacuum equipment. Place in suitable container for disposal. Flush area with water.

Small Spills: Flush area with water and protect from discharge into drains and waterways.

6.4 Other information: None

6.5 Reference to other sections

For disposal, see Section 13.

7. Handling and Storage

7.1 Precautions for safe handling

Handling Procedures: Keep container tightly closed when not in use. Handle opened containers carefully. Avoid methods of use that will cause misting of product. Launder clothing before reuse. Wash face and hands thoroughly after handling and before eating, drinking, or using tobacco products. Empty containers may contain hazardous product residues. Avoid contact with eyes, skin and clothing. Never use air pressure to empty a container.

7.2 Conditions for safe storage, including incompatibilities

Storage: *Keep out of reach of children*: Do not store the product in metal containers, especially bronze, brass or alloys. Store in a dry area.

7.3 Specific end use(s)

No other uses except those mentioned in Section 1.2

8. Exposure Controls, Personal Protection

8.1 Control parameters

Components with workplace control parameters

<u>Calcium Nitrate</u>, <u>CAS No 35054-52-5</u>: Lowest PEL USA 5 mg/m³ (Tennessee, California, Michigan and Oregon) Lowest PEL Canada 3 mg/m³ (Ontario), respirable dust

Potassium Sulphate, CAS No 7778-80-5: Inorganic Dust, 5 mg/m3

Monopotassium Phosphate, CAS No 7778-77-0: ACGIH*, 10 mg/m3 Inhalable dust),

3 mg/m³ (respirable dust)

Diammonium Phosphate, CAS No 18-46-0: ACGIH, 10 mg/m³ Inhalable dust),

3 mg/m3 (respirable dust)

* ACGIH: American Conference of Governmental Industrial Hygienists. Exposure limits may vary from time to time and from one jurisdiction to another. Check with local regulatory agency for the exposure limits in your area.

8.2 Exposure Controls

Engineering Controls: Under manufacturer's recommended use, no particular engineering controls required. If use causes workplace control parameters to be reached, use adequate ventilation to reduce concentrations in air.

Respiratory Protection: If misted or atomized, wear a NIOSH approved N95 mask.

Skin protection: Wear clothing to protect for contact with skin. Wear gloves when handling.

Eye and Face Protection: Wear eye protection with side panels if there is a chance of splashing into eyes.

Footwear: No specific recommendation.

Other: None

Control of environmental exposure: Prevent form entering waterways, sewers or drains.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: Pale brown/yellow liquid

Odour: Mild

Odour Threshold:

pH:

No data available

Flash Point:

Evaporation Rate:

Flammability:

Upper Explosion Limit:

Lower Explosion Limit:

Vapour Pressure:

Vapour Density:

No data available

Relative Density: ≈1.01 gm/cm³ (water = 1)
Solubility: Completely miscible
Partition Coefficient: No data available
Autoignition Temperature: No data available
Decomposition Temperature: Not available
Viscosity: Not available
Explosive Properties: Not available
Oxidizing Properties: No data

Oxidizing Properties: No data Percent Volatiles: No data

9.2 Other safety information: None

10. Stability and Reactivity

10.1 Reactivity

Not reactive under recommended storage conditions

10.2 Chemical Stability

Stable under recommended storage conditions. Storage should be in a dry, clean area away from sunlight or excessive heat. Store away from strong oxidizers and strong reducing agents.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

High temperatures (above 25°C)

10.5 Incompatible materials

Strong oxidizers, metals such as bronze and brass.

10.6 Hazardous decomposition products

None known

11. Toxicological Information

11.1 Information on toxicological effects

Acute toxicity

No GHS classification

Skin corrosion/irritation

No GHS classification

Serious eye damage/eye irritation

Serious Eye Damage/Irritation, Category 2A, H319: Causes serious eye irritation

Respiratory or skin sensitization

No GHS classification

Germ Cell Mutagenicity

No GHS classification

Carcinogenicity

No GHS classification

Reproductive toxicity

No GHS classification

Specific Target Organ Toxicity - Single exposure

No GHS classification

Specific Target Organ Toxicity - Repeated exposure

No GHS classification

Aspiration Hazard

No GHS classification

Aquatic Toxicity

No GHS classification

Additional information

Relevant toxicity data:

Component	LD ₅₀	LC ₅₀
Calcium Nitrate CAS No 35054-52-5	302 mg/kg (oral/rat)	No data
Magnesium Sulphate CAS No 7487-88-9	>2000 mg/kg (oral/rat)	>2000 mg/l (inhalation/rabbit)
Calcium Chloride CAS No 10043-52-4	2300 mg/kg (oral/rat)	No data
Mono Potassium Phosphate CAS No 7778-77-0	>4640 mg/kg (dermal/rabbit)	No data
Potassium Sulphate CAS No 7778-80-5	>6000 mg/kg (oral/rat)	No data

12. Ecological Information

12.1 Toxicity

Magnesium Sulphate, CAS No 7487-88-9

Toxicity Fish Species: LC₅₀ Pimephales Promelas (Fathead Minnow): 2820 mg/l – 96

hr

Toxicity to daphnia and other:

Aquatic Invertebrates

Toxicity to Algae:

EC₅₀ Daphnia Magna (Water Flea): 340 mg/l – 48 hr

EC₅₀ Desmodesmus Subspicatus (Green Algae) – 2700 mg/l -

72 hr

Potassium Sulphate, CAS No 7778-80-5

Toxicity Fish Species: LC₅₀ Pimephales Promelas (Fathead Minnow): 680 mg/l – 96

hr

Calcium Chloride, CAS No 10043-52-4

Toxicity Fish Species: LC₅₀ Leopomis Macrochirus,(Bluegill Sunfish): 10650 mg/l –

96 hr

Toxicity to daphnia and other:

Aquatic Invertebrates

 EC_{50} Daphnia Magna (Water Flea): 2400 mg/l – 48 hr

Toxicity to Algae: No data

Ammonium Nitrate, CAS No 6484-52-2

Toxicity Fish Species: LC₅₀, Cyprinus Carpio (Carp): 1.15 – 1.72 mg NH₃/l, 48 hour

Toxicity to daphnia and other: EC₅₀ Daphnia Magna (Water Flea): 555 mg/l – 48 hr

Aquatic Invertebrates

Toxicity to Algae: No data

12.2 Persistence and degradability

No data

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Not conducted

12.6 Other adverse effects

No data available

13. Disposal Considerations

13.1 Waste treatment methods

Product:

Dispose of product according to all applicable local, state (provincial), and federal regulations. Offer to a licensed disposal company, properly contained and labeled.

Contaminated Packaging:

As above. Ensure all packagings are leakproof and properly labeled.

14. Transport Information

Transport of Dangerous Goods (TDG and CLR): Not regulated for transport

United States Department of Transport (49CFR): Not regulated for transport

International Air Transport Association (IATA): Not regulated for transport

International Maritime Organization (IMO): Not regulated for transport

15. Regulatory Information

CANADIAN FEDERAL REGULATIONS:

CEPA, DOMESTIC SUBSTANCES LIST: All ingredients listed

AMERICAN FEDERAL REGULATIONS:

TSCA: (Toxic Substance Control Act): All ingredients listed

SARA 302 Extremely hazardous substance: No chemicals in this product are listed

SARA 311/312 Hazardous chemical: Acute Health Hazard

SARA 313 (TRI reporting): Ammonium Nitrate, CAS No 6484-52-2 is subject to the reporting levels established by SARA Title III, Section 313

Other State Regulations:

Massachusetts Right to Know Components:

Ammonium Nitrate, CAS No 6484-52-2 Rev Date 1993-04-24

Pennsylvania Right to Know Components:

Calcium Nitrate, CAS No 35054-52-5 Rev Date No data Magnesium Sulphate, CAS No 7487-88-9 Rev Date No data

Calcium Chloride, CAS No 10043-52-4
Potassium Sulphate, CAS No 7778-80-5
Rev Date No data
Rev Date No data
Rev Date No data
Rev Date No data
Rev Date 1993-04-24
Diammonium Phosphate, CAS No 7722-76-1
Rev Date No data

New Jersey Right to Know Components:

Calcium Nitrate, CAS No 35054-52-5 Rev Date No data Magnesium Sulphate, CAS No 7487-88-9 Rev Date No data

Calcium Chloride, CAS No 10043-52-4

Potassium Sulphate, CAS No 7778-80-5

Ammonium Nitrate, CAS No 6484-52-2

Diammonium Phosphate, CAS No 7722-76-1

Rev Date No data

Rev Date 1993-04-24

Rev Date No data

the State

California Prop 65 Components: This product does not contain any chemicals known to

of California to cause cancer, birth defects, or any other reproductive harm.

OTHER: None

16. Other Information

Original Preparation Date: August 16, 2018

Prepared by: Technical Department

Disclaimer: This Safety Data Sheet (SDS) was prepared using information provided by CCINFO, ingredient supplier SDS and other relevant sources. This product has been classified using weight of evidence, expert judgment and previous testing as per Part 1.3 of the Seventh Edition of The Globally Harmonized System of Classification and Labeling of Chemicals (GHS). The information in this SDS is offered for your consideration and guidance when exposed to this product. Nutrilife Plant Products expressly disclaims all expressed or implied warranties and assumes no responsibilities for the accuracy or completeness of the data contained herein. The data in this SDS does not apply to use with any other product or in any other process.

This Safety Data Sheet may not be changed, or altered in any way without the expressed knowledge and permission of Nutrilife Plant Products.

Revisions: None