



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: Oxidizing Solids, Category 3
Serious Eye Damage/Irritation, Category 2A

2.2 GHS Label Elements, including precautionary statements

Pictogram:



Signal Word: Warning

GHS Hazard Statements: H272: May intensify fire, oxidizer
H319: Causes serious eye irritation

GHS Precautionary Statements:

Prevention:	P210: Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking P220: Keep away from clothing and other combustible materials. P280: Wear protective gloves/protective clothing/eye protection/face protection P264: Wash hands and exposed skin after handling.
Response:	P370+P378: In case of fire: Use water spray, alcohol resistant foam, dry chemical or carbon dioxide to extinguish fire. 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:	P501: Dispose of contents and container in compliance with all federal, provincial (state) and local regulations.

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 solid form (prill or granule). If dusted, 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 lachrymation of the eyes.

Ingestion: Ingestion may cause irritation of the gastro-intestinal tract. Nausea, vomiting, diarrhea and disorientation may occur if copious amounts are ingested.

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	30 - 50	Oxidizing Solids, Category 3, H272
Magnesium Sulphate CAS No 7487-88-9 EC No 231-298-2	20 - 25	No GHS Classification
Calcium Chloride CAS No 10043-52-4 EC No 233-140-8	10 - 15	Eye Irritant, Category 2A, H319
Mono Potassium Phosphate CAS No 7778-77-0 EC No 231-913-4	8 - 12	No GHS Classification
Potassium Sulphate CAS No 7778-80-5 EC No 231-915-5	8 - 12	No GHS Classification
Ammonium Nitrate CAS No 6484-52-2 EC No 229-347-8	7 - 10	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	0.2 – 0.5	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 solid form (prill or granule). If dusted, 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 lachrymation of the eyes.

Ingestion: Ingestion may cause irritation of the gastro-intestinal tract. Nausea, vomiting, diarrhea and disorientation may occur if copious amounts are ingested.

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.

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: Strong oxidizer. Contact with combustible materials may cause a fire. Release of oxygen may support combustion. Contact with incompatible materials (e.g. metals, alkalis and reducing agents) will cause hazardous decomposition resulting in the release of large quantities of heat, steam and oxygen gas. Exposure to heat may cause hazardous decomposition. A severe detonation hazard may exist when mixed with organic liquids, e.g. kerosene or gasoline, or combustible materials.

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: Yes, ammonium nitrate.

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 application of this specialty fertilizer causes dusting to occur, wear a NIOSH approved N95 mask.

Skin protection: Wear clothing to protect for contact with skin. Wear gloves when handling and when removing gloves use care to prevent contact with outer surface of the glove.

Eye and Face Protection: Wear eye protection with side shields if there is a chance of product contacting the 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. 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 or sand to contain spill. Scoop or shovel material into appropriate approved containers, label for disposal. Small remaining material may be swept up. Do not create dust.

Small Spills: Do not create dust when sweeping up a small spill. Place salvaged material in appropriate labelled containers for disposal.

6.4 Other information: None

6.4.1 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 dusting 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.

7.2 Conditions for safe storage, including incompatibilities

Storage: Keep out of reach of children: Store in original containers provided when purchased. Store in a cool, dry, well-ventilated area away from incompatible materials. Store away from sources of ignition. Ingredients in this product are hygroscopic, keep container closed when not in use.

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

Calcium Nitrate, CAS No 35054-52-5: 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 application of this specialty fertilizer causes dusting to occur, wear a NIOSH approved N95 mask.

Skin protection: Wear impervious clothing to protect for contact with skin. Wear gloves when handling and when removing gloves use care to prevent contact with outer surface of the glove. Nitrile gloves are recommended.

Eye and Face Protection: Wear eye protection with side shields if there is a chance of product contacting the eyes.

Footwear: No specific recommendation.

Other: None

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

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance:	Solid, white granules or prills
Odour:	No data available
Odour Threshold:	No data available
pH:	5 – 7 (110 g/l in water) Calcium Nitrate
Melting Point/Freezing Point:	400°C (752°F) Calcium Nitrate
Initial Boiling Point:	No data available
Flash Point:	None
Evaporation Rate:	Not applicable
Flammability:	Not flammable
Upper Explosion Limit:	No data available
Lower Explosion Limit:	No data available
Vapour Pressure:	No data available
Vapour Density:	No data available
Relative Density:	1.108 gm/cm ³ (water = 1)
Solubility:	>100 g/l Calcium Nitrate
Partition Coefficient:	No data available
Autoignition Temperature:	No data available
Decomposition Temperature:	Not available
Viscosity:	Not available
Explosive Properties:	Not available
Oxidizing Properties:	Strong oxidizer
Percent Volatiles:	No data

9.2 Other safety information: None

10. Stability and Reactivity

10.1 Reactivity

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 incompatible materials, ignition sources and open flames.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Avoid contamination by any source. Keep away from metals, dust and organic materials. Strong acids, Permanganates, Chlorates, Chlorites, Copper Zinc, Brass, Bronze, Galvanized Metals.

10.5 Incompatible materials

Reducing agents, strong acids or bases and powdered metals. Calcium Chloride reacts with Boron Trifluoride. Permanganates, Chlorates, Chlorites, Copper, Zinc, Brass, Bronze, Galvanized Metals.

10.6 Hazardous decomposition products

May decompose upon heating to produce oxides of nitrogen and sulphur.

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

Heavy Harvest Grow

Magnesium Sulphate, CAS No 7487-88-9

hr	Toxicity Fish Species:	LC ₅₀ Pimephales Promelas (Fathead Minnow): 2820 mg/l – 96
	Toxicity to daphnia and other: Aquatic Invertebrates	EC ₅₀ Daphnia Magna (Water Flea): 340 mg/l – 48 hr
72 hr	Toxicity to Algae:	EC ₅₀ Desmodesmus Subspicatus (Green Algae) – 2700 mg/l -

Potassium Sulphate, CAS No 7778-80-5

hr	Toxicity Fish Species:	LC ₅₀ Pimephales Promelas (Fathead Minnow): 680 mg/l – 96
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Calcium Chloride, CAS No 10043-52-4

96 hr	Toxicity Fish Species:	LC ₅₀ Lepomis Macrochirus,(Bluegill Sunfish): 10650 mg/l –
	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:	LC ₅₀ , Cyprinus Carpio (Carp): 1.15 – 1.72 mg NH ₃ /l, 48 hour
	Toxicity to daphnia and other: Aquatic Invertebrates	EC ₅₀ Daphnia Magna (Water Flea): 555 mg/l – 48 hr
	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): UN 1479, OXIDIZING SOLID, N.O.S. (Calcium Nitrate, Ammonium Nitrate), Class 5.1, PGIII

United States Department of Transport (49CFR): UN 1479, OXIDIZING SOLID, N.O.S. (Calcium Nitrate, Ammonium Nitrate), Class 5.1, PGIII

International Air Transport Association (IATA): UN 1479, OXIDIZING SOLID, N.O.S. (Calcium Nitrate, Ammonium Nitrate), Class 5.1, PGIII

International Maritime Organization (IMO): UN 1479, OXIDIZING SOLID, N.O.S. (Calcium Nitrate, Ammonium Nitrate), Class 5.1, PGIII: Stowage Category B, Separated from powdered metals, ammonium compounds, cyanides and peroxides, EmS No F-A, S-Q

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: Reactivity Hazard, Acute Health Hazard, Chronic 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 Rev Date No data

Potassium Sulphate, CAS No 7778-80-5 Rev Date No data

Ammonium Nitrate, CAS No 6484-52-2 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 Rev Date No data

Potassium Sulphate, CAS No 7778-80-5 Rev Date No data

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

Diammonium Phosphate, CAS No 7722-76-1 Rev Date No data

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

OTHER:
None

16. Other Information

Original Preparation Date: August 9, 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.

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Revisions: None