

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: Nutriboost 1

1.2 Other Means of Identification: None

1.3 Product Use: Horticulture applications, plant growth

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: No GHS Classification

2.2 GHS Label Elements, including precautionary statements

Pictogram: None

Signal Word: None

GHS Hazard Statements: None

GHS Precautionary Statements:

Prevention: None

Response: None

Storage: None

Disposal: None

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS: Mild, transient eye irritation may occur.

2.4 Additional Information

Primary Routes of Entry:

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

Emergency Overview: Caution. May irritate eye and skin, primarily from splashes.

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
Acetic Acid, Glacial CAS No 64-19-7 EC No 215-809-6	3.5 – 5.0	Flammable Liquid, Category 3, H226 Serious Eye Damage/Irritation, Category 1, H318 Skin Corrosion/Irritation, Category 1A, H314
Thiamine (as hydrochloride) CAS No 67-03-8 EC No Not known	< 0.1	No GHS Classification
Molasses CAS No 8052-35-5 EC No None	<0.1	No GHS Classification
Magnesium Sulphate CAS No 7487-88-9 EC No231-298-2	Trace	No GHS Classification
Calcium Chloride CAS No 10043-52-4 EC No 233-140-8	Trace	Eye Irritant, Category 2A, H319
Water CAS No 7732-18-5 EC No 231-791-2	93 - 97	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: Never give anything by mouth to an unconscious or convulsing person. Rinse mouth. Seek immediate medical attention. Give a glass of water to dilute contents of stomach. 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

In the case of shortness of breath, give oxygen. Keep victim warm and under observation. Symptoms may be delayed (burns). In the case of lung irritation first treat with dexamethasone aerosol (spray). In the case of choking: gastroscopy inclusive of aspiration and acidosis compensation.

5. Fire Fighting Measures

5.1 Extinguishing Media

Suitable extinguishing media: Does not support combustion. Use any method suitable for surrounding fire.

5.2 Special hazards arising from mixture: In combustion, emits oxides of carbon and nitrogen.

General 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: No hazardous decomposition products.

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 mist or aerosols. If used indoors, ensure adequate ventilation. Shovel product saturated waste into approved containers, properly labeled for disposal.

Respiratory Protection: If application of this product causes misting to occur, wear a NIOSH approved N95 mask or suitable respirator to prevent inhalation of aerosols and mists.

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

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 contaminated soil 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 contaminated material into appropriate approved containers, label for disposal.

Small Spills: Place salvaged material in appropriate labelled containers for disposal. Flush area with water ensuring runoff does not enter drains or sewers.

6.4 Other information: None

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.

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. 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

Acetic Acid, Glacial, CAS No 64-19-7 25 mg/m3, 10 ppm ACGIH, PEL

15 ppm, NIOSH, TLV-STEL 10 ppm, NIOSH, TLV-TWA

* ACGIH: American Conference of Governmental Industrial Hygienists. NIOSH: National Institute for Occupational Safety and Health. 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 product causes misting to occur, wear a NIOSH approved N95 mask or suitable respirator to prevent inhalation of aerosols and mists.

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

Control of environmental exposure: This is a specialty product 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: Slight yellow liquid Odour: Sweet Vinegar Odour Threshold: No data available

pH: 2.5

Melting Point/Freezing Point: No data available

Initial Boiling Point: 95°C

Flash Point: None to boiling

Evaporation Rate: <1 (n-butyl acetate = 1)No data available

Flammability:

Upper Explosion Limit:
Lower Explosion Limit:
Vapour Pressure:

Vapour Density:

Not flammable
No data available
No data available
No data available

Relative Density:

Solubility:

Partition Coefficient:

Autoignition Temperature:

Decomposition Temperature:

Viscosity:

Explosive Properties:

1.0125

Not available

No data available

Not available

Not available

None

Explosive Properties: None
Oxidizing Properties: None
Percent Volatiles: No data

9.2 Other safety information: None

10. Stability and Reactivity

10.1 Reactivity

None under recommended storage conditions

10.2 Chemical Stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerization does not occur

10.4 Conditions to avoid

None known

10.5 Incompatible materials

Strong oxidizing agents. Strong alkalis. Amines. Cyanides. Sulfides. Metals

10.6 Hazardous decomposition products

Thermal decomposition of this product can generate carbon monoxide and carbon dioxide.

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

No GHS classification

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
Acetic Acid, Glacial CAS No 64-19-7	1060 mg/kg (dermal/rabbit)	11.4 mg/l (Inhalation/rat, 4 hours)
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
Thiamine (as hydrochloride) CAS No 67-03-8	3710 mg/kg (oral/rat)	No data

12. Ecological Information

12.1 Toxicity

Acetic Acid, Glacial, CAS No 64-19-7

Toxicity Fish Species: LC₅₀ Pimephales Promelas (Fathead Minnow): 79 mg/l – 96 hr

LC₅₀ Lepomis Macrochirus (Bluegil): 75 mg/l – 96 hr

Toxicity to daphnia and other:

Aquatic Invertebrates

 EC_{50} Daphnia Magna (Water Flea): 65 mg/l – 48 hr

Toxicity to Algae: No data

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:

EC₅₀ Daphnia Magna (Water Flea): 2400 mg/l – 48 hr

Aquatic Invertebrates

Toxicity to Algae: No data

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

 EC_{50} Daphnia Magna (Water Flea): 340 mg/l - 48 hr

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

72 hr

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: Listed

AMERICAN FEDERAL REGULATIONS:

TSCA: (Toxic Substance Control Act): Listed

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

SARA 311/312 Hazardous chemical: Acute Health Hazard, Chronic health Hazard

SARA 313 (TRI reporting): No chemicals in this product are subject to the reporting requirements.

Other State Regulations:

Massachusetts Right to Know Components:

Acetic Acid, Glacial, CAS No 64-19-7

Pennsylvania Right to Know Components:

Acetic Acid, Glacial, CAS No 64-19-7 Magnesium Sulphate, CAS No 7487-88-9 Calcium Chloride, CAS No 10043-52-4

New Jersey Right to Know Components:

Acetic Acid, Glacial, CAS No 64-19-7 Magnesium Sulphate, CAS No 7487-88-9 Calcium Chloride, CAS No 10043-52-4

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 13, 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: August 29, 2018: Correction of concentrations and GHS classification.