

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 Micro

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: None (see note below)

Note: Although individual ingredients have specific GHS Classifications, cut-off values for those ingredients are below classification thresholds. For clay, containing quartz, the product is liquid and is not in respirable form.

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: May produce minor skin and eye irritation.

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 or atomized, 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 splashed into the eye, irritation may occur causing transient tearing and redness.

Ingestion: Ingestion of more than a mouthful 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	
Molasses CAS No 8052-35-5 EC No None	2 - 5	No GHS Classification	
Chelating Agent, Iron CAS No 12389-75-2 EC No None 235-627-0	0.2 - 0.5	No GHS Classification	
Micronutrient Mix CAS No none (mixture)	0.2 – 0.5	Reproductive Toxicity, Category 1B Specific Target Organ Toxicity, Repeat Exposure, Category 2 Lungs	
Sea Water Brine* CAS No None (Mixture)	0.2 – 0.5	No GHS Classification	
Bentonite Clay (Aluminum Phyllosilicate clay) CAS No Mixture EC No Mixture	0.1 – 0.5	Carcinogenicity, Category 1 (respiratory), Quartz	
Chelating Agent, Copper CAS No 14025-15-1 EC No 237-864-5	<0.06	Acute Toxicity, Oral, Category 4 Eye Irritation, Category 2A	
Chelating Agent, Manganese CAS No 15375-84-5 EC No 239-407-5	<0.06	No GHS Classification	
Cobaltous Chloride CAS No 7791-13-1 EC No 231-589-4	<0.06	Acute Toxicity, Oral, Category 4 Respiratory Sensitization, Category 1 Skin Sensitization, Category 1 Germ Cell Mutagenicity, Category 2 Carcinogenicity, Category 1B Reproductive Toxicity, Category 1 Acute Aquatic Toxicity, Category 1 Chronic Aquatic Toxicity, Category 1	
Water CAS No 7732-18-5 EC No 231-791-2	90 - 96	No GHS Classification	

Note: Sea Water Brine is known to contain the following ions

Concentration Range (ppm)	lons (in decreasing concentration)
380 - 19400	Chloride, Sodium, Magnsium, Sulphur, Calcium, Potassium
0.1 - 380	Bromine, Inorganic Carbon, Strontium, Boron, Silicon, Organic Carbon, Aluminum, Fluorine, Nitrogen (as Nitrate), Organic NitrogenRubidium, Lithium Phosphorous as Phosphate

4. First Aid Measures

4.1 Description of First Aid Measures

Notes to Physician: Treat symptomatically for any route of entry.

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 contaminate 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: Drink plenty of water if more than a mouthful is ingested. 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 liquid 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 or atomized, 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 splashed into the eye, irritation may occur causing transient tearing and redness.

Ingestion: Ingestion of more than a mouthful may cause irritation of the gastro-intestinal tract. Nausea, vomiting, diarrhea and disorientation may occur if copious amount 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.

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

5. Fire Fighting Measures

5.1 Extinguishing Media

Suitable extinguishing media: This product does not support combustion. Use satisfactory extinguishing medium for surrounding fire.

5.2 Special hazards arising from mixture: No special hazards are known.

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. Otherwise, fire-exposed containers or tanks should be cooled by application of hose streams and this should begin as soon as possible and should concentrate on any unwetted portions of the container.

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: 0

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

Boric Acid, CAS No 10043-35-3 ACGIH* TLV-TWA 2.0 mg/m³ Cobaltous Chloride, CAS No 7791-13-1 ACGIH TLV-TWA 0.02 mg/m³

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.

^{*} 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.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Note: Typical values are marked *

Appearance: Pale brown/yellow liquid

Odour: Mild

Odour Threshold:

pH:

No data available

None Flash Point: **Evaporation Rate:** As for water 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:** \approx 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 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

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
Boric Acid CAS No 10043-35-3	2660 mg/kg (oral/rat)	No data
Cobaltous Chloride CAS No 1415-93-6	766 mg/kg (oral/rat) >2000mg/kg (dermal/rabbit)	No data
Ethylenediaminetetraacetic Acid, Copper Disodium Complex CAS No 14025-15-1	956.99 mg/kg (oral/rat), calculated	No data

12. Ecological Information

12.1 Toxicity

Cobaltous Chloride, CAS No 7791-13-1

Toxicity to fish: LC₅₀, Cyprinus Carpio (Carp): 0.33 mg/l, 96 hour

Toxicity to Daphnia and

Other Aquatic Invertebrates: EC₅₀, Daphnia Magna (water Flea): 1.1 – 1.6 mg/l, 48

hour

Toxicity to algae: EC₅₀, Chlorella Vulgaris (fresh Water Algae, 0.5 mg/l,

96 hour

Boric Acid, CAS No 10043-35-3

Toxicity to fish: LC₅₀, Ptychocheilus Lucius: (Colorado Pikeminnow):

279 mg/l, 96 hour

Toxicity to Daphnia and

Other Aquatic Invertebrates: EC₅₀, Daphnia Magna (water Flea): 52.3 mg/l, 21 day

EC₅₀, Daphnia Magna (water Flea): 133 mg/l, 48 hour

Toxicity to algae: No data

Ethylenediaminetetraacetic Acid, Copper Disodium Complex, CAS No14025-15-1

Toxicity to fish: 555 mg/l, OECD Test Guideline 203

Toxicity to Daphnia and

Other Aquatic Invertebrates: 109.2 mg/l, OECD Test Guideline 202 Toxicity to algae: 109.2 mg/l, OECD Test Guideline 209

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 listed

SARA 311/312 Hazardous chemical: Cobaltous Chloride: Acute Health, Chronic Health

Boric Acid: Chronic Health

SARA 313 (TRI reporting): Cobaltous Chloride, CAS No 7791-13-1 Rev Date: 2009-07-17.

Other State Regulations:

Massachusetts Right to Know Components:

No ingredients listed.

Pennsylvania Right to Know Components:

Diethylenetriaminepentaacetic Acid, Ferric Sodium Hydrogen Complex

CAS No 12389-75-2

Ethylenediaminetetraacetic Acid, Copper Disodium Complex

CAS No 14025-15-1

Ethylenediaminetetraacetic Acid, Manganese-Disodium Complex

CAS No 15375-84-5

Cobaltous Chloride, CAS No 7791-13-1

Boric Acid, CAS No 10043-35-3 (Component of Micronutrient Mix)

Water CAS No 7732-18-5

New Jersey Right to Know Components:

Diethylenetriaminepentaacetic Acid, Ferric Sodium Hydrogen Complex

CAS No 12389-75-2

Ethylenediaminetetraacetic Acid, Copper Disodium Complex

CAS No 14025-15-1

Ethylenediaminetetraacetic Acid, Manganese-Disodium Complex

CAS No 15375-84-5

Cobaltous Chloride, CAS No 7791-13-1

Boric Acid, CAS No 10043-35-3 (Component of Micronutrient Mix)

Water CAS No 7732-18-5

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 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: None