

SAFETY DATA SHEET

Section 1: Identification

Product Name: Micro Flow
Product Use: Liquid plant nutrition.
Chemical Name/Synonyms: Not available.

Company: Rooted Leaf Agritech, LLC
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In emergency call 911.
For information about this SDS, please call: +1 (206) 331-4700

Section 2: Hazard(s) Identification

Hazard Classification:

Skin Irritant — Category 2 (H315)

Eye Irritant — Category 2 (H319)

Signal Word: WARNING

Hazard Statements:

H315 — Causes skin irritation

H319 — Causes serious eye irritation

Pictograms: GHS07 (Exclamation Mark)



Precautionary Statements (Prevention):

P102 — Keep out of reach of children

P103 — Read label before use

P264 — Wash skin thoroughly after handling

P280 — Wear protective gloves / eye protection / face protection

Precautionary Statements (Response):

P302+P352 — IF ON SKIN: Wash with plenty of soap and water

P321 — Specific treatment: see Section 4 of this SDS

P332+P313 — If skin irritation occurs: Get medical advice/attention

P362 — Take off contaminated clothing and wash before reuse

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 advice/attention

Precautionary Statements (Storage):

P233 — Keep container tightly closed

P235 — Keep cool

Precautionary Statements (Disposal):

P501 — Dispose of contents/container in accordance with local/regional/national regulations

Description of other hazards (HNOC): Not applicable.

Section 3: Composition/ Information on Ingredients

Chemical Name	Synonym	CAS #	Approx. Conc.
Protein hydrolyzates, soya	Hydrolyzed soy protein	68607-88-5	~6%
Iron amino acid chelate	Ferrous proteinate	Not assigned	~5%
Manganese amino acid chelate	Manganese proteinate	Not assigned	~3%
Zinc amino acid chelate	Zinc proteinate	Not assigned	~2%
Copper amino acid chelate	Copper proteinate	Not assigned	<1%
Boric acid	Boron source	10043-35-3	<1%

Section 4: First-Aid Measures

After skin contact: Flush contaminated skin with plenty of water for at least 5 minutes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

After eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get Medical attention if symptoms occur.

After inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular, or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

After swallowing: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Notes to Physician: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific Treatments: No specific treatment.

Protection of First-Aiders: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If concentrated product is encountered, comply with guidelines regarding handling

and personal protective equipment in Sections 7 and 8.

Section 5: Fire-Fighting Measures

Suitable extinguishing agents: Water spray, extinguishing powder, CO₂, or any media suitable for the surrounding fire.

Special protective actions for firefighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for firefighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6: Accidental Release Measures

Non-Emergency Personnel Precautions: No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Emergency Personnel Precautions: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information above in “nonemergency personnel.”

Measures for environmental protection: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Measures for cleaning/collecting: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7: Handling and Storage

Handling: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin, and clothing. Do not expose open wounds. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.

Storage: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool (not less than 45°F) and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8: Exposure Controls/Personal Protection

Appropriate engineering controls: Good, general ventilation will be sufficient to control worker exposure to airborne contaminants.

General protective and hygienic measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Breathing equipment: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Eye / Face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Section 9: Physical and Chemical Properties

Physical State: Liquid.

Color: Dark grey

Odor: Sweet, metallic, citrus
Odor threshold: Not available.
pH: 5.1 – 5.5
Melting point/melting range: <0°C (<32°F).
Boiling point/boiling range: 100°C (212°F).
Solubility in/Miscibility with water: Soluble in Water.

Section 10: Stability and Reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability: The product is stable.
Conditions to avoid: No specific data.
Incompatible materials: Reactive or incompatible with the following materials: oxidizing materials, reducing materials, organic materials and strong acids or bases.
Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11: Toxicological Information

Acute toxicity: Not reported.
Potential routes of exposure/potential health effects
Skin: May cause skin irritation, redness, and rash.
Eye: Redness, pain, tearing.
Inhalation: Not reported.
Ingestion: Not reported.
Carcinogenic effects: Not reported.
Mutagenic effects: Not expected to be a mutagen.
Reproductive toxicity: Not reported.
Sensitization: Not known to be a sensitizer.
Target organs: Not reported.

Section 12: Ecological Information (non-mandatory)

Ecotoxicity: No data available.
Mobility: No data available.
Biodegradation: No data available.
Bioaccumulation: No data available.
Other adverse effects: No known significant effects or critical hazards.

Section 13: Disposal Considerations (non-mandatory)

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any other federal, state, regional or local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners

may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14: Transport Information (non-mandatory)

DOT regulations: Not regulated as a hazardous material under 49 CFR (DOT). Not regulated under IMDG or IATA.

Harmonized System Commodity classification code: 310590

Section 15: Regulatory Information (non-mandatory)

SARA Section 355 (extremely hazardous substances): Not listed.

SARA Section 313 (specific toxic chemical listings): Not listed.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs): Not listed.

TSCA (Toxic Substances Control Act): Not listed.

Section 16: Other Information

SDS date of preparation/update: 1/12/2025

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