SAFETY DATA SHEET FORM

MicroElements Brewing Nutrients - Tablets

Section 1 - PRODUCT and COMPANY IDENTIFICATION

1.1 Product Identifier
Product Name: MicroElements Brewing Nutrients - Tablets
Product Code(s): ME-BREW-TAB
Chemical Name: Mixture
Synonyms: NA

1.2 Relevant identified uses of the substance or mixture and uses advised against
Intended Product Use: Complex nutrient blend, food ingredient

1.3 Details of the supplier of the safety data sheet
Manufacturer/Distributor: Gusmer Enterprises, Inc.
Postal Address: 81 M Street, Fresno, CA 93721 USA
Telephone Number: (01)(559) 485-2692 [USA] (product info)
Hours of Operation: Monday - Friday 8:00am-5:00pm PST

1.4 Emergency telephone number
Medical Emergency: 911
Chemical Emergency: (800) 424-9300

Section 2 - HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
This product, as shipped, is not regulated as an OSHA hazardous material when used in its normal state and use.

2.2 Label Elements
Hazard Pictogram(s): Not Applicable
Signal Word: Not Applicable
Hazard Statements: Not Applicable
Precautionary Statements: Not Applicable

2.3 Emergency Overview
Appearance/Odor: Tan colored tablets with yeast like aroma.
Other Hazards: Warning: Inhalation may cause respiratory irritation, breathlessness, coughing, chest tightness, and difficulty breathing. May cause skin irritation on prolonged contact. May cause eye irritation upon direct contact. Excessive ingestion may cause intestinal discomfort (bloating, cramping, diarrhea, etc.).
Ingredients in this product are identified as flavoring compounds and NIOSH has reported the occurrence of severe lung disease in some workers who make or use flavorings. The mixture has not been tested as a whole. It contains ingredients which could be released from the mixture in concentrations which would exceed an established OSHA permissible exposure limit or ACGIH Threshold Limit Value, or could present a health risk to employees.

Section 3 - COMPOSITION / INFORMATION on INGREDIENTS

The identity of the individual components of this product is proprietary information and is considered a trade secret pursuant to 29 CFR 1910.1200. This product consists of a proprietary mixture which includes vitamins and minerals.

Ingredient(s) | Common Name & Synonyms | Percentage | CAS No.
--- | --- | --- | ---
Cellulose | NA | 15-20% | 9004-34-6

Section 4 - FIRST AID MEASURES

4.1 Description of the first aid measures
Eye Contact: Flush eyes with water as a precaution
Skin Contact: Wash off with soap and plenty of water.
Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed
Eye Contact: May cause irritation.
Skin Contact: May cause irritation. Inhalation: May cause irritation. Irritation: May cause intestinal discomfort
Chronic Effects: Not known to produce any long-term effects from continuing exposure.

4.3 Indication of any immediate medical attention and special treatment needed
Treatment: No special advice, treat symptomatically.

Section 5 - FIREFIGHTING MEASURES

5.1 Extinguishing Media
Suitable Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture
No further relevant information available.

5.3 Advice for firefighters
As in any fire, wear NIOSH-approved self contained breathing apparatus and appropriate protective clothing.
Product as supplied and shipped is highly unlikely to release sufficient dust to constitute a combustible dust explosion hazard. Depending on airborne concentration, moisture content, particle diameter, surface area and exposure to an ignition source, airborne dust may ignite and burn with explosive force in a contained area.

Section 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Avoid inhalation of dust.

6.2 Environmental precautions
None, discharge in accordance with federal, state and local laws.

6.3 Methods and materials for containment and cleaning up
If large amounts of dust are generated, collect with vacuum or suppress with water spray and sweep up. Minimize compressed air blowdown or other practices that generate high dust levels.
See Section 8 for appropriate personal protective equipment.
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Section 7 - Handling and Storage

7.1 Precautions for safe handling
Avoid generating excessive dust. If dust levels are suspected to be over PEL, wear a NIOSH approved N95 or greater respirator. Protect from excessive moisture. Maintain good housekeeping practices. Avoid contact with eyes, skin and clothing. See Section 8 for more information.

7.2 Conditions for safe storage, including any incompatibilities
Store in original container or clean, covered container. Store in cool, dry, well-ventilated area. Product should be kept sealed and dry. See Section 8 for OSHA permissible exposure limits.

Section 8 - EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control parameters

<table>
<thead>
<tr>
<th>OSHA PEL</th>
<th>NIOSH REL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL-TWA: 15 mg/m³ Total Dust / 5 mg/m³ Respirable Dust</td>
<td>REL-TWA: 10 mg/m³</td>
<td>TLV-TWA: 10 mg/m³ Total Dust</td>
</tr>
</tbody>
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8.2 Exposure controls

- **Normal Handling Conditions**
- If necessary use ventilation system to keep airborne dust concentration below permissible exposure limits. Ventilation to control dust should be considered where potential explosive concentrations and ignition sources are present. The design and operation of any exhaust system should consider the possibility of explosive concentrations of dust within the system.
- Ensure that exhaust ventilation and material transport systems involved in handling this product contain explosion relief vents or suppression systems designed and operated in accordance with applicable standards if the operating conditions justify their use.
- **Respiratory Protection:** If dust levels are suspected to be over PEL, wear a NIOSH approved N95 or greater respirator.
- **Eye Protection:** ANSI Z87+ approved dust goggles or safety glasses, if necessary, to avoid eye irritation.
- **Skin Protection:** Cover skin with clothing and/or gloves if skin dryness or irritation occurs.
- **General Hygiene:** Maintain good housekeeping practices, wash hands after handling, avoid direct eye contact. Clean up areas where dust settles to avoid excessive accumulation of this combustible material. Minimize compressed air blowdown or other practices that generate high airborne-dust concentrations.

Section 9 - PHYSICAL and CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- **Physical State:** Tablet
- **Color:** Tan colored
- **Odor:** Yeast-like aroma
- **pH:** No Data Available
- **Melting / Freezing Point (Specify):** No Data Available
- **Initial Boiling Point & Boiling Range:** No Data Available
- **Flash Point:** No Data Available
- **Evaporation Rate:** No Data Available
- **Flammability (solid, gas):** Speed of upper: No Data Available lower: No Data Available
- **Expositional Limits:** LEL: No Data Available UEL: No Data Available
- **Vapor Pressure:** No Data Available
- **Relative Density:** No Data Available
- **Solubility(ies):** Partially soluble in water
- **Partition Coefficient (n-octanol/water):** No Data Available
- **Auto-ignition Temperature:** No Data Available
- **Decomposability:** No Data Available
- **Oxidizing Properties:** No Data Available
- **Viscosity:** No Data Available

Section 10 - STABILITY and REACTIVITY

10.1 Reactivity: No Data Available
10.2 Chemical stability: Stable under recommended storage conditions.
10.3 Possibility of hazardous reactions: None
10.4 Conditions to avoid: Avoid open flame, sparks and other sources of ignition. Avoid humidity
10.5 Incompatible materials: Avoid open flame, sparks and other sources of ignition.
10.6 Hazardous decomposition products: No Data Available

Section 11 - TOXICOLOGY INFORMATION

11.1 Information on toxicological effects

- **Toxicology Data:** The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition.
- **Skin Corrosion/Irritation:** Irritant to skin and mucous membranes.
- **Serious Eye Damage/Eye irritation:** Irritating effect.
- **Respiratory or Skin Sensitization:** No sensitizing effects known.
- **STOT - Single Exposure:** May cause upper respiratory tract irritation.
- **STOT - Repeated Exposure:** Not known to produce any long-term effects from continuing exposure.
- **Aspiration Hazard:** No Data Available

11.2 Further Information

- **Mutagenicity:** No Data Available
- **Productive Toxicity:** Not classified as a carcinogen by OSHA, NTP, or IARC in their reviews.
- **Carcinogenicity:** Not classified as a carcinogen by OSHA, NTP, or IARC in their reviews.
- **IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by IARC.
- **ACGIH:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- **NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by NTP.
- **OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
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Section 12 - ECOLOGICAL INFORMATION

12.1 Toxicity
No Data Available

12.2 Persistence and degradability
No Data Available

12.3 Bioaccumulative potential
No Data Available

12.4 Mobility in soil
No Data Available

12.5 Other adverse effects
No Data Available

Section 13 - DISPOSAL CONSIDERATIONS
Substance: Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - TRANSPORTATION INFORMATION
UN Number: Not Applicable
Class: Not Applicable
Proper Shipping Name: Not Applicable
Packing Group: Not Applicable
Marine Pollutant: Not Applicable
Other Applicable Information: Not Applicable

Section 15 - REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Intended for use only by commercial manufacturers. Not intended for retail sale or use by individual consumers.

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.

Section 16 - OTHER INFORMATION
Product Number(s): ME-BREWTAB
Prepared By: Gusmer Enterprises, Inc.
Name of Preparer: Eric Anderson
Title: Corporate Safety & Regulatory Manager
Date: 12/20/2019

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GHS Hazard Warning Label
No Hazard Warning Label Required:
Not considered a hazardous material when used in its normal state and use.