SECTION 1: IDENTIFICATION

1.1. Product Identifier
Product Form: Mixture
Product Name: Tower Garden® Mineral Blend A

1.2. Intended Use of the Product
Nutrient solution for the Tower Garden® aeroponic growing system.

1.3. Name, Address, and Telephone of the Responsible Party
Company
The Juice Plus+ Company
140 Crescent Drive
Collierville, TN 38017
901-850-3000
www.towergarden.com

1.4. Emergency Telephone Number
Emergency Number: 1-800-262-8200
CHEMTREC

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture
GHS-US/CA Classification
Eye Dam. 1 H318
Full text of hazard classes and H-statements: see section 16

2.2. Label Elements
GHS-US/CA Labeling
Hazard Pictograms (GHS-US/CA):

Signal Word (GHS-US/CA): Danger
Precautionary Statements (GHS-US/CA):
P280 - Wear protective gloves, protective clothing, and eye protection.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor.

2.3. Other Hazards
Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-US/CA)
No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance
Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product Identifier</th>
<th>% *</th>
<th>GHS Ingredient Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>(CAS-No.) 7732-18-5</td>
<td>83.4</td>
<td>Not classified</td>
</tr>
<tr>
<td>Nitric acid, ammonium calcium salt</td>
<td>(CAS-No.) 15245-12-2</td>
<td>16</td>
<td>Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318</td>
</tr>
<tr>
<td>Monosodium ferric EDTA</td>
<td>(CAS-No.) 15708-41-5</td>
<td>0.57 - 0.6</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

Full text of H-phrases: see section 16
*Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

**SECTION 4: FIRST AID MEASURES**

4.1. **Description of First-aid Measures**
   - **General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
   - **Inhalation:** When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.
   - **Skin Contact:** Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.
   - **Eye Contact:** Rinse cautiously with water for at least 60 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
   - **Ingestion:** Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. **Most Important Symptoms and Effects Both Acute and Delayed**
   - **General:** Causes serious eye damage.
   - **Inhalation:** Prolonged exposure may cause irritation.
   - **Skin Contact:** Prolonged exposure may cause skin irritation.
   - **Eye Contact:** Causes permanent damage to the cornea, iris, or conjunctiva.
   - **Ingestion:** Ingestion may cause adverse effects.
   - **Chronic Symptoms:** None expected under normal conditions of use.

4.3. **Indication of Any Immediate Medical Attention and Special Treatment Needed**
   If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

**SECTION 5: FIRE-FIGHTING MEASURES**

5.1. **Extinguishing Media**
   - **Suitable Extinguishing Media:** Water spray, dry chemical, foam, carbon dioxide.
   - **Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. **Special Hazards Arising From the Substance or Mixture**
   - **Fire Hazard:** Not considered flammable but may burn at high temperatures.
   - **Explosion Hazard:** Product is not explosive.
   - **Reactivity:** Hazardous reactions will not occur under normal conditions.

5.3. **Advice for Firefighters**
   - **Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.
   - **Firefighting Instructions:** Use water spray or fog for cooling exposed containers.
   - **Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.
   - **Hazardous Combustion Products:** Carbon oxides (CO, CO₂). Nitrogen oxides. Metal oxides.

**Reference to Other Sections**
Refer to Section 9 for flammability properties.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

6.1. **Personal Precautions, Protective Equipment and Emergency Procedures**
   - **General Measures:** Do not breathe vapor, mist or spray. Do not get in eyes, on skin, or on clothing.
   - 6.1.1. **For Non-Emergency Personnel**
     - **Protective Equipment:** Use appropriate personal protective equipment (PPE).
     - **Emergency Procedures:** Evacuate unnecessary personnel.
   - 6.1.2. **For Emergency Personnel**
     - **Protective Equipment:** Equip cleanup crew with proper protection.
     - **Emergency Procedures:** Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2. **Environmental Precautions**
   Prevent entry to sewers and public waters.
6.3. Methods and Materials for Containment and Cleaning Up
For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections
See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling
Precautions for Safe Handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid breathing vapors, mist, spray. Do not get in eyes, on skin, or on clothing.
Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities
Technical Measures: Comply with applicable regulations.
Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.
Incompatible Materials: Strong acids, strong bases, strong oxidizers.

7.3. Specific End Use(s)
Nutrient solution for the Tower Garden® aeroponic growing system.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters
For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

8.2. Exposure Controls
Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Materials for Protective Clothing: Chemically resistant materials and fabrics.
Hand Protection: Wear protective gloves.
Eye and Face Protection: Chemical safety goggles.
Skin and Body Protection: Wear suitable protective clothing.
Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.
Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties
<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Yellow</td>
</tr>
<tr>
<td>Odor</td>
<td>Not available</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>5.3</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>Not available</td>
</tr>
</tbody>
</table>
Boiling Point: Not available
Flash Point: Not available
Auto-ignition Temperature: Not available
Decomposition Temperature: Not available
Flammability (solid, gas): Not applicable
Lower Flammable Limit: Not available
Upper Flammable Limit: Not available
Vapor Pressure: Not available
Relative Vapor Density at 20°C: Not available
Relative Density: Not available
Specific Gravity: Not available
Solubility: Not available
Partition Coefficient: N-Octanol/Water: Not available
Viscosity: Not available

SECTION 10: STABILITY AND REACTIVITY
10.1. Reactivity: Hazardous reactions will not occur under normal conditions.
10.2. Chemical Stability: Stable under recommended handling and storage conditions (see section 7).
10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
10.4. Conditions to Avoid: Direct sunlight, extremely high or low temperatures, and incompatible materials.
10.5. Incompatible Materials: Strong acids, strong bases, strong oxidizers.
10.6. Hazardous Decomposition Products: None expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION
11.1. Information on Toxicological Effects - Product
Acute Toxicity (Oral): Not classified
Acute Toxicity (Dermal): Not classified
Acute Toxicity (Inhalation): Not classified
LD50 and LC50 Data: Not available
Skin Corrosion/Irritation: Not classified
pH: 5.3
Eye Damage/Irritation: Causes serious eye damage.
pH: 5.3
Respiratory or Skin Sensitization: Not classified
Germ Cell Mutagenicity: Not classified
Carcinogenicity: Not classified
Specific Target Organ Toxicity (Repeated Exposure): Not classified
Reproductive Toxicity: Not classified
Specific Target Organ Toxicity (Single Exposure): Not classified
Aspiration Hazard: Not classified
Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation.
Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation.
Symptoms/Injuries After Eye Contact: Causes permanent damage to the cornea, iris, or conjunctiva.
Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.
Chronic Symptoms: None expected under normal conditions of use.
11.2. Information on Toxicological Effects - Ingredient(s)

<table>
<thead>
<tr>
<th>Nitric acid, ammonium calcium salt (15245-12-2)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 Oral Rat</td>
<td>2000 mg/kg</td>
</tr>
<tr>
<td>Monosodium ferric EDTA (15708-41-5)</td>
<td></td>
</tr>
<tr>
<td>LD50 Oral Rat</td>
<td>5 g/kg</td>
</tr>
</tbody>
</table>
### SECTION 12: ECOLOGICAL INFORMATION

**12.1. Toxicity**

Ecology - General: Not classified.

**12.2. Persistence and Degradability**

<table>
<thead>
<tr>
<th>Tower Garden® Mineral Blend A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistence and Degradability</td>
</tr>
</tbody>
</table>

**12.3. Bioaccumulative Potential**

<table>
<thead>
<tr>
<th>Tower Garden® Mineral Blend A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioaccumulative Potential</td>
</tr>
</tbody>
</table>

**12.4. Mobility in Soil**

<table>
<thead>
<tr>
<th>Tower Garden® Mineral Blend A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility in Soil</td>
</tr>
</tbody>
</table>

**12.5. Other Adverse Effects**

Other Information: Avoid release to the environment.

### SECTION 13: DISPOSAL CONSIDERATIONS

**13.1. Waste treatment methods**

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions.

Ecology - Waste Materials: Avoid release to the environment.

### SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

**14.1. In Accordance with DOT**

Not regulated for transport

**14.2. In Accordance with IMDG**

Not regulated for transport

**14.3. In Accordance with IATA**

Not regulated for transport

**14.4. In Accordance with TDG**

Not regulated for transport

### SECTION 15: REGULATORY INFORMATION

**15.1. US Federal Regulations**

<table>
<thead>
<tr>
<th>Tower Garden® Mineral Blend A</th>
</tr>
</thead>
<tbody>
<tr>
<td>SARA Section 311/312 Hazard Classes</td>
</tr>
<tr>
<td>Nitric acid, ammonium calcium salt (15245-12-2)</td>
</tr>
<tr>
<td>Monosodium ferric EDTA (15708-41-5)</td>
</tr>
<tr>
<td>Water (7732-18-5)</td>
</tr>
</tbody>
</table>

**15.2. US State Regulations**

Neither this product nor its chemical components appear on any US state lists.

**15.3. Canadian Regulations**

<table>
<thead>
<tr>
<th>Tower Garden® Mineral Blend A</th>
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</table>

### SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest Revision: 10/05/2017
Other Information:
This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada’s Hazardous Products Regulations (HPR) SOR/2015-17.

GHS Full Text Phrases:

<table>
<thead>
<tr>
<th>Acute Tox. 4 (Oral)</th>
<th>Acute toxicity (oral) Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Dam. 1</td>
<td>Serious eye damage/eye irritation Category 1</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage</td>
</tr>
</tbody>
</table>

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

NA GHS SDS 2015 (Can, US, Mex)