SAFETY DATA SHEET
MAXI BLOOM

Section 1. Identification

**GHS product identifier** : MAXI BLOOM

**Other means of identification** : Not available.

**Product type** : Powder.

**Identified uses** : Hydroponic plant nutrient.

**Supplier's details** : General Hydroponics
2877 Giffen Ave
Santa Rosa, CA 95407
Tel: (707) 824-9376
Fax: (707) 824-9377

**Emergency telephone number (with hours of operation)** : CHEMTREC, U.S. : 1-800-424-9300 International: +1-703-527-3887 (24/7)

Section 2. Hazards identification

**OSHA/HCS status** : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

**Classification of the substance or mixture** : Not classified.

**GHS label elements**

**Signal word** : No signal word.

**Hazard statements** : No known significant effects or critical hazards.

**Precautionary statements**

**Prevention** : Not applicable.

**Response** : Not applicable.

**Storage** : Not applicable.

**Disposal** : Not applicable.

**Hazards not otherwise classified (HNOC)** : Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

**Other means of identification** : Not available.

**CAS number/other identifiers**

**CAS number** : Not applicable.

**Product code** : Not available.
Section 3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>%</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium ammonium nitrate</td>
<td>10 - 30</td>
<td>15245-12-2</td>
</tr>
<tr>
<td>Citric Acid</td>
<td>1 - 3</td>
<td>77-92-9</td>
</tr>
<tr>
<td>Cobalt nitrate</td>
<td>0 - 0.1</td>
<td>10141-05-6</td>
</tr>
</tbody>
</table>

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Section 4. First aid measures

Description of necessary first aid measures

**Eye contact**: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

**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. Maintain an open airway. Get medical attention if symptoms occur.

**Skin contact**: Flush contaminated skin with plenty of water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention if symptoms occur.

**Ingestion**: Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

**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.

Potential acute health effects

**Eye contact**: Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

**Inhalation**: Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

**Skin contact**: No known significant effects or critical hazards.

**Ingestion**: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following: irritation, redness.

Inhalation: Adverse symptoms may include the following: respiratory tract irritation, coughing.

Skin contact: No known significant effects or critical hazards.

Ingestion: No known significant effects or critical hazards.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: The exposed person may need to be kept under medical surveillance for 48 hours.
Section 4. First aid measures

**Protection of first-aiders**: If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

**Extinguishing media**

| Suitable extinguishing media | Use an extinguishing agent suitable for the surrounding fire. |
| Unsuitable extinguishing media | None known. |

**Specific hazards arising from the chemical**

| Hazardous thermal decomposition products | Decomposition products may include the following materials: carbon dioxide, carbon monoxide, nitrogen oxides, sulfur oxides, phosphorus oxides, metal oxide/oxides |

**Special protective actions for fire-fighters**: No special measures are required.

**Special protective equipment for fire-fighters**: 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

**Personal precautions, protective equipment and emergency procedures**

For **non-emergency personnel**

Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For **emergency responders**

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 in "For non-emergency personnel".

**Environmental precautions**

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).

**Methods and materials for containment and cleaning up**

**Spill**

Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
Section 7. Handling and storage

Precautions for safe handling

**Protective measures**
Put on appropriate personal protective equipment (see Section 8). Avoid breathing dust.

**Advice on general occupational hygiene**
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. Remove contaminated clothing and protective equipment before entering eating areas.

Conditions for safe storage, including any incompatibilities
Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool 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

Control parameters

**Occupational exposure limits**

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cobalt nitrate</td>
<td>ACGIH TLV (United States, 3/2015). TWA: 0.02 mg/m³, (as Co) 8 hours. Form: Inorganic</td>
</tr>
</tbody>
</table>

**Appropriate engineering controls**
Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Environmental exposure controls**
In some cases, dust collection, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

**Hygiene 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.

**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: safety glasses with side-shields. If operating conditions cause high dust concentrations to be produced, use dust goggles.

**Skin protection**

**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.

**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.

**Other skin protection**
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.
Section 8. Exposure controls/personal protection

Respiratory protection: 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.

Section 9. Physical and chemical properties

Appearance

Physical state: Solid. [Powder.]
Color: Red.
Odor: Odorless.
Odor threshold: Not available.
pH: 5.7 [Conc. (% w/w): 1%]
Melting point: Not available.
Boiling point: Not available.
Flash point: Not available.
Evaporation rate: Not available.
Flammability (solid, gas): Not available.
Lower and upper explosive (flammable) limits: Not available.
Vapor pressure: Not available.
Vapor density: Not available.
Relative density: 2.2
Solubility: Soluble in water.
Partition coefficient: n-octanol/water: Not available.
Auto-ignition temperature: Not available.
Decomposition temperature: Not available.
Viscosity: Not available.
Volatility: Not available.

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.
Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid: No specific data.
Incompatible materials: Reactive or incompatible with the following materials: reducing materials, Oil, organic solvents.
Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Section 11. Toxicological information

Information on toxicological effects

**Acute toxicity**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium ammonium nitrate</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>4715 mg/kg</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Citric Acid</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>3 g/kg</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Cobalt nitrate</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>434 mg/kg</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

**Irritation/Corrosion**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citric Acid</td>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 750 µg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 µg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>0.5 mL</td>
<td>-</td>
</tr>
</tbody>
</table>

**Sensitization**

There is no data available.

**Carcinogenicity**

There is no data available.

**Specific target organ toxicity (single exposure)**

There is no data available.

**Specific target organ toxicity (repeated exposure)**

There is no data available.

**Aspiration hazard**

There is no data available.

Information on the likely routes of exposure: Dermal contact. Eye contact. Inhalation. Ingestion.

**Potential acute health effects**

**Eye contact**: Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

**Inhalation**: Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

**Skin contact**: No known significant effects or critical hazards.

**Ingestion**: No known significant effects or critical hazards.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Eye contact**: Adverse symptoms may include the following:
- irritation
- redness

**Inhalation**: Adverse symptoms may include the following:
- respiratory tract irritation
- coughing

**Skin contact**: No known significant effects or critical hazards.

**Ingestion**: No known significant effects or critical hazards.

**Delayed and immediate effects and also chronic effects from short and long term exposure**

**Short term exposure**

**Potential immediate effects**: No known significant effects or critical hazards.

**Potential delayed effects**: No known significant effects or critical hazards.
Section 11. Toxicological information

Long term exposure
Potential immediate effects: No known significant effects or critical hazards.
Potential delayed effects: No known significant effects or critical hazards.
Potential chronic health effects
- General: Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
- Carcinogenicity: No known significant effects or critical hazards.
- Mutagenicity: No known significant effects or critical hazards.
- Teratogenicity: No known significant effects or critical hazards.
- Developmental effects: No known significant effects or critical hazards.
- Fertility effects: No known significant effects or critical hazards.

Numerical measures of toxicity
Acute toxicity estimates

<table>
<thead>
<tr>
<th>Route</th>
<th>ATE value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>9599.6 mg/kg</td>
</tr>
</tbody>
</table>

Section 12. Ecological information

Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citric Acid</td>
<td>Acute LC50 160000 µg/L Marine water</td>
<td>Crustaceans - Carcinus maenas - Adult</td>
<td>48 hours</td>
</tr>
<tr>
<td>Cobalt nitrate</td>
<td>Acute EC50 10233 µg/L Marine water</td>
<td>Crustaceans - Artemia salina - Egg</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute IC50 19.57 mg/L Marine water</td>
<td>Algae - Phaeodactylum tricornutum - Exponential growth phase</td>
<td>72 hours</td>
</tr>
<tr>
<td></td>
<td>Acute IC50 19.19 mg/L Marine water</td>
<td>Algae - Phaeodactylum tricornutum - Exponential growth phase</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 3400 µg/L Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 66800 µg/L Fresh water</td>
<td>Fish - Carassius auratus</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

Persistence and degradability
There is no data available.

Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP_{ow}</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citric Acid</td>
<td>-1.8</td>
<td>-15600</td>
<td>low</td>
</tr>
<tr>
<td>Cobalt nitrate</td>
<td>-</td>
<td>15600</td>
<td>high</td>
</tr>
</tbody>
</table>

Mobility in soil
- Soil/water partition coefficient (K_{OC}): There is no data available.

Other adverse effects: No known significant effects or critical hazards.
Section 13. Disposal considerations

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 regional 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. 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

<table>
<thead>
<tr>
<th>UN number</th>
<th>DOT Classification</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Packing group</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>Additional information</td>
<td>Remarks</td>
<td>Remarks</td>
<td>Remarks</td>
</tr>
<tr>
<td>Special Provision 34: This product is a calcium nitrate fertilizer, consisting mainly of a double salt (calcium nitrate and ammonium nitrate) containing not more than 10 percent ammonium nitrate and more than 12 percent water of crystallization.</td>
<td>Special Provision A83 (208): This product is a calcium nitrate fertilizer, consisting mainly of a double salt (calcium nitrate and ammonium nitrate) containing not more than 10 percent ammonium nitrate and more than 12 percent water of crystallization.</td>
<td>Special Provision A83 (208): This product is a calcium nitrate fertilizer, consisting mainly of a double salt (calcium nitrate and ammonium nitrate) containing not more than 10 percent ammonium nitrate and more than 12 percent water of crystallization.</td>
<td></td>
</tr>
</tbody>
</table>

AERG : Not applicable

Special precautions for user

Transport within user’s premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL and the IBC Code

Not available.

Section 15. Regulatory information

U.S. Federal regulations

TSCA 8(a) CDR Exempt/Partial exemption: Not determined
United States inventory (TSCA 8b): All components are listed or exempted.
Clean Water Act (CWA) 307: Zinc(II) EDTA disodium salt; Copper disodium EDTA
Section 15. Regulatory information

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)
- Listed

Clean Air Act Section 602 Class I Substances
- Not listed

Clean Air Act Section 602 Class II Substances
- Not listed

DEA List I Chemicals (Precursor Chemicals)
- Not listed

DEA List II Chemicals (Essential Chemicals)
- Not listed

SARA 302/304
Composition/information on ingredients
No products were found.

SARA 304 RQ
- Not applicable.

SARA 311/312
Classification
- Not applicable.

Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>Fire hazard</th>
<th>Sudden release of pressure</th>
<th>Reactive</th>
<th>Immediate (acute) health hazard</th>
<th>Delayed (chronic) health hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citric Acid</td>
<td>1 - 3</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
</tr>
<tr>
<td>Cobalt nitrate</td>
<td>0 - 0.1</td>
<td>Yes.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
<td>Yes.</td>
</tr>
</tbody>
</table>

SARA 313

<table>
<thead>
<tr>
<th>Form R - Reporting requirements</th>
<th>Product name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium nitrate</td>
<td>7757-79-1</td>
<td>10 - 30</td>
<td></td>
</tr>
<tr>
<td>Ammonium dihydrogenorthophosphate</td>
<td>7722-76-1</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations
Massachusetts
- The following components are listed: Potassium nitrate

New York
- None of the components are listed.

New Jersey
- The following components are listed: Potassium nitrate

Pennsylvania
- The following components are listed: Potassium nitrate

California Prop. 65
- No products were found.
### Section 16. Other information

#### History
- **Date of issue mm/dd/yyyy**: 05/15/2016
- **Date of previous issue**: 06/30/2015
- **Version**: 3
- **Prepared by**: KMK Regulatory Services Inc.

#### Key to abbreviations
- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- UN = United Nations

#### Notice to reader
To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.