

**SAFETY DATA SHEET**

**Citric Down**

**SECTION 1: IDENTIFICATION OF SUBSTANCE / MIXTURE**

Product name: Citric Down  
Fertilizer formula: n/a  
Product type: Liquid  
Product usage: Hydroponic pH adjustment  
Restrictions on use: n/a  
Initial Supplier: Future Harvest Plantlife Products  
Emergency Telephone Number: 250-491-0255

**SECTION 2: HAZARD IDENTIFICATION**

**2.1 Classification of the substance or mixture**

Classification in accordance to Regulation(EC) No. 1272/2008 (CLP): Not classified

Classification according to Directive 67/548/EEC (DSD) or 1999/45/EC(DPD): Not classified

Classification according to 29 CFR 1910.1200 (OSHA HCS): Not classified

**2.2 Label elements**

H315 - Causes skin irritation

H320 - Causes eye irritation

H335 - May cause respiratory irritation

Precautionary statements (GHS-US)

P261 - Avoid breathing dust

P264 - Wash hands thoroughly after handling

P271 - Use only outdoors or in a well-ventilated area

P280 - Wear eye protection, face protection, protective clothing, protective gloves

P302+P352 - IF ON SKIN: Wash with plenty of water

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P312 - Call a POISON CENTER/doctor if you feel unwell

P337+P313 - If eye irritation persists: Get medical advice/attention

P362 - Take off contaminated clothing and wash it before reuse.

P403+P233 - Store in a well-ventilated place. Keep container tightly closed

P405 - Store locked up

P501 - Dispose of contents/container according to local, regional, national, and international regulations

### **SECTION 3: COMPOSITION / IDENTIFICATION ON INGREDIENTS**

| Chemical Name          | CAS No.   | Concentration | Other Names                         |
|------------------------|-----------|---------------|-------------------------------------|
| Monoammonium Phosphate | 7722-76-1 | 5-12%         | MAP<br>Ammonium Phosphate Monobasic |
| Citric Acid            | 77-92-9   | 10-15%        |                                     |

**Note:** 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. Occupational exposure limits, if available, are listed in section 8.

### **SECTION 4: FIRST-AID MEASURES**

#### **4.1 Description of first aid measures**

**Eyes contact:** In case of contact with eyes, rinse immediately with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

**Skin contact:** Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Get medical attention if irritation occurs.

**Inhalation:** Remove the victim from site of exposure to fresh air. If breathing is difficult, give oxygen. If not breathing give artificial respiration. Get medical attention.

**Ingestion:** Do not induce vomiting. If victim is conscious, wash mouth thoroughly with plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.

#### **4.2 Most important symptoms and effects, both acute and delayed**

Dusts may cause coughing and sneezing. Ingestion of large quantities may cause gastrointestinal irritation, vomiting and diarrhea.

#### **4.3 Indication of any immediate medical attention and special treatment needed**

Not available

### **SECTION 5: FIRE-FIGHTING MEASURES**

### **5.1 Extinguishing media**

Suitable: Use an extinguishing agent suitable for the surrounding fire.

Not suitable: Not available

### **5.2 Special hazards arising from the substance or mixture**

Non-combustible.

Hazardous thermal decomposition products: Under fire - oxides of phosphorous, Ammonia, Carbon Dioxide

### **5.3 Advice for firefighters**

Move containers from fire area if possible to do so without risk. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

### **5.4 Unusual Explosion and Fire Procedures**

Reacts with most metals to produce hydrogen which is extremely flammable and may explode. Applying to hot surfaces requires special precautions. Closed containers may explode if exposed to extreme heat.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

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

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Ventilate area of spill.

### **6.2 Environmental precautions**

Prevent entry into waterways, sewers, basements or confined areas.

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

Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust.

### **6.4 Reference to other sections**

See Section 1 for emergency contact information.

See Section 13 for additional waste treatment information.

## **SECTION 7: HANDLING AND STORAGE**

### **7.1 Precautions for safe handling**

Isolate from strong oxidizers. Do not store above 49 C / 120 F. Keep container closed and upright when not in use to prevent spills. Reacts with most metals to produce hydrogen which is extremely flammable and may explode.

Minimize dust generation and accumulation. Do not breathe dust. Avoid contact with skin and eyes. Wash thoroughly after handling.

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. Remove contaminated clothing and protective equipment before entering eating areas. See also section 8 for additional information measures.

### **7.2 Conditions for safe storage, including any incompatibilities**

Store and use away from heat, sparks, open flame or any other ignition source. Avoid contact with combustible materials. Prevent moisture pick-up in handling and storage. Packaging materials recommended: Use original container.

### **7.3 Specific use(s):**

Not available

## **SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION**

### **8.1 Control parameters**

Not applicable

**8.2 Appropriate engineering controls** General ventilation is usually adequate. Use local exhaust ventilation and enclosure, if necessary to control amount in the air.

### **8.3 Individual protection measures, such as personal protective equipment**

General information: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Eye/face protection: Wear safety glasses with side shields (or goggles).

Skin protection Hand protection: Chemical resistant gloves

Other: Wear suitable protective clothing.

Respiratory protection: In case of inadequate ventilation, use respiratory protection.

Hygiene measures: Provide eyewash station and safety shower. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

### **9.1 Information on basic physical and chemical properties**

Appearance: Clear Liquid

Odour: Odorless

Odour threshold: n/a

pH: <2.0

Initial boiling point/boiling range: > 100°C

Flash point: Not applicable

Evaporation rate: Not volatile (butyl acetate=1)

Flammability: Not flammable

Upper/lower flammability or explosive limits:

Vapor pressure: 4.5X10<sup>-15</sup> Pa at 25°C- Not Volatile

Vapor density: Not volatile Relative Density: 1.0 at 25.1±0.5°C (water=1)

Solubility(ies):

Water solubility- Miscible

Partition coefficient Octanol/Water: The product is more soluble in water;

log(octanol/water) <1

Auto-ignition temperature: Not applicable

Decomposition temperature: Not available

Viscosity: Not viscous

Explosive properties: Not explosive

Oxidizing properties: Not oxidizer

### **9.2 Other information**

Melting point/Freezing point: < 0°C

VOC: Not an organic compound

Specific Gravity: 1.10 ±0.05

Miscibility: Miscible

Fat solubility: Not applicable

Gas group: Not applicable

## **SECTION 10: STABILITY AND REACTIVITY**

### **10.1 Reactivity**

Reacts with most metals to produce hydrogen which is extremely flammable and may explode.

### **10.2 Chemical stability**

The product is stable under normal handling and storage conditions described in Section 7. Reacts with acids and alkalis.

### **10.3 Possibility of hazardous reactions**

Hazardous reactions are not expected, under normal conditions of storage and use.

### **10.4 Conditions to avoid**

Heat, open flames, sparks, static discharge, heat and other ignition sources.

### **10.5 Incompatible materials**

Strong oxidizing agents and strong bases.

### **10.6 Hazardous decomposition products**

Other decomposition products: Not available, in event of fire: see section 5.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

### **11.1 Information on likely routes of exposure**

Ingestion: Irritating. May cause nausea, stomach pain and vomiting.

Inhalation: May cause irritation to the respiratory system.

Skin contact: Causes mild skin irritation.

Eye contact: Causes eye irritation.

### **11.2 Information on toxicological effects**

Acute toxicity (list all possible routes of exposure)

Oral Product: LD 50: Approximate 5750 mg/kg Monoammonium Phosphate (rat), 5400 mg/kg Citric Acid (rat)

Dermal Product: > 7940 mg/kg (rabbit) Monoammonium Phosphate,

Inhalation Product: May cause respiratory irritation

Repeated dose toxicity Product: No data available.

Skin corrosion/irritation Product: Causes mild skin irritation.

Serious eye damage/eye irritation Product: Causes eye irritation.

Respiratory or skin sensitization Product: Causes mild skin irritation

Carcinogenicity Product: This substance has no evidence of carcinogenic properties.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans: No carcinogenic components identified  
US. National Toxicology Program (NTP) Report on Carcinogens: No carcinogenic components identified  
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): No carcinogenic components identified  
Germ cell mutagenicity  
In vitro Product: No mutagenic components identified  
In vivo Product: No mutagenic components identified  
Reproductive toxicity Product: No components toxic to reproduction  
Specific target organ toxicity - single exposure Product: None known  
Specific target organ toxicity - repeated exposure Product: None known  
Aspiration hazard Product: Not classified  
Other effects: None known

## **SECTION 12: ECOLOGICAL INFORMATION**

### **12.1 Toxicity**

Monoammonium phosphate

Toxicity to fish: (Oncorhynchus mykiss) 96-hr: LC50 = > 85.9 mg/L Monoammonium Phosphate, 440 mg/l Citric Acid

Toxicity to crustaceans: (Daphnia) 1534 mg/l Citric Acid

Toxicity to algae: Not available

### **12.2 Persistence and Degradability**

Not Established

### **12.3 Bioaccumulative potential**

The potential for bioaccumulation consider to be minimal.

### **12.4 Mobility in soil**

Soil/water partition coefficient (Koc): N/A

Mobility: Soluble in water.

### **12.5 Results of PBT and vPvB assessment**

Not applicable

### **12.6 Other adverse effects**

Substances which have an unfavorable influence on the oxygen balance and can be measured using parameters such as BOD, COD, etc.: Absent

Substances, which contribute to eutrophication: Phosphates,

## **SECTION 13: DISPOSAL CONSIDERTATIONS**

### **13.1 Waste treatment methods**

Product: Waste must be disposed of in accordance with federal, state, provincial and local environmental control regulations.

Packing: Empty containers should be taken for local recycling, recovery or waste disposal.

## **SECTION 14: TRANSPORT INFORMATION**

Canadian TDG Not Regulated  
US DOT Not Regulated

## **SECTION 15: REGULATORY INFORMATION**

TSCA inventory: Listed  
Australia AICS: On or in compliance with the inventory  
Canada DSL Inventory List: On or in compliance with the inventory  
EINECS, ELINCS or NLP: On or in compliance with the inventory  
Japan (ENCS) List: On or in compliance with the inventory  
China Inv. Existing Chemical Substances: Not in compliance with the inventory.  
Korea Existing Chemicals Inv. (KECI): On or in compliance with the inventory  
Canada NDSL Inventory: Not in compliance with the inventory.  
Philippines PICCS: On or in compliance with the inventory  
US TSCA Inventory: On or in compliance with the inventory  
New Zealand Inventory of Chemicals: On or in compliance with the inventory  
Japan ISHL Listing: On or in compliance with the inventory

## **SECTION 16: OTHER INFORMATION**

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