

Plant-Prod 14-0-14

SECTION 1. IDENTIFICATION

| | |
|---|---|
| Product Identifier | Plant-Prod 14-0-14 |
| Other Means of Identification | 10555, 10556 |
| Product Family | Plant-Prod |
| Recommended Use | Water Soluble Fertilizer for Plants. |
| Restrictions on Use | Not applicable. |
| Manufacturer/Supplier Identifier | Master Plant-Prod Inc., 314 Orenda Rd. , Brampton, Ontario, Canada, L6T 1G1 |
| Emergency Phone No. | CANUTEC, 1-613-996-6666, 24 Hours |
| Date of Preparation | July 27, 2015 |

SECTION 2. HAZARD IDENTIFICATION

Classification

Not classified under any hazard class.

Label Elements

Not applicable

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

| Chemical Name | CAS No. | % | Other Identifiers |
|-------------------|------------|----|-------------------|
| Calcium nitrate | 10124-37-5 | 32 | |
| Potassium nitrate | 7757-79-1 | 31 | |
| Magnesium nitrate | 13446-18-9 | 31 | |
| Ammonium nitrate | 6484-52-2 | 6 | |

SECTION 4. FIRST-AID MEASURES

First-aid Measures**Inhalation**

Move to fresh air. If breathing has stopped, trained personnel should begin rescue breathing. Call a Poison Centre or doctor.

Skin Contact

Immediately wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 15-20 minutes. Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Call a Poison Centre or doctor if you feel unwell.

Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for at least 30 minutes, while holding the eyelid(s) open. Immediately call a Poison Centre or doctor.

Ingestion

For large amounts immediately call a Poison Centre or doctor. Rinse mouth with water. Never give anything by mouth if person is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting.

Most Important Symptoms and Effects, Acute and Delayed

May cause mild irritation.

Immediate Medical Attention and Special Treatment

Special Instructions

Not applicable.

Medical Conditions Aggravated by Exposure

None known.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Use flooding quantities of water or other suitable extinguishing agent.

Unsuitable Extinguishing Media

DO NOT use water jet.

Specific Hazards Arising from the Product

Mild oxidizer. May intensify fire.

Corrosive, flammable ammonia; corrosive, oxidizing nitrogen oxides; potassium oxides; calcium oxides; magnesium oxides; cyanuric acid.

Special Protective Equipment and Precautions for Fire-fighters

Wear SCBA and full protective clothing. Oxidizer. Prevent contact with flammable and combustible materials. Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Use the personal protective equipment recommended in Section 8 of this safety data sheet. Remove or isolate incompatible materials as well as other hazardous materials. Eliminate all ignition sources. Use grounded, explosion-proof equipment.

Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway.

Methods and Materials for Containment and Cleaning Up

Contain the spill. Avoid contact with combustibles, organics and ignition sources. Sweep up spilled material and use or dispose of in approved manner.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid repeated or prolonged skin contact. Do not get in eyes. Only use where there is adequate ventilation.

Conditions for Safe Storage

Store in an area that is: cool, dry, well-ventilated. Keep out of reach of children. Store in a closed container. Keep separate from acids, alkalis, reducing agents and combustibles.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

| Chemical Name | ACGIH TLV® | | OSHA PEL | | AIHA WEEL | |
|---------------|------------|------|----------|---------|-----------|-----|
| | TWA | STEL | TWA | Ceiling | 8-hr TWA | TWA |

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| | | | | | |
|-------------------|----------------------|--|----------------------|--|--|
| Potassium nitrate | 5 mg/m ³ | | | | |
| Ammonium nitrate | 10 mg/m ³ | | 15 mg/m ³ | | |

Appropriate Engineering Controls

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

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

Respiratory Protection

Use an appropriate respirator or dust mask.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

| | |
|--|--|
| Appearance | Blue prills. Particle Size: Not available |
| Odour | Not available |
| Odour Threshold | Not applicable |
| pH | Not available |
| Melting Point/Freezing Point | Not available (melting); Not available (freezing) |
| Initial Boiling Point/Range | Not applicable |
| Flash Point | Not applicable |
| Evaporation Rate | Not available |
| Flammability (solid, gas) | Will not burn. |
| Upper/Lower Flammability or Explosive Limit | Not available (upper); Not available (lower) |
| Vapour Pressure | Not available |
| Vapour Density (air = 1) | Not available |
| Relative Density (water = 1) | Not available |
| Solubility | Not available in water; Not available (in other liquids) |
| Partition Coefficient, n-Octanol/Water (Log K_{ow}) | Not available |
| Auto-ignition Temperature | Not available |
| Decomposition Temperature | Not available |
| Viscosity | Not available (kinematic); Not available (dynamic) |
| Other Information | |
| Physical State | Solid |
| Molecular Formula | Not applicable |
| Molecular Weight | Not available |
| Bulk Density | 1.34 kg/L |

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions of use. May intensify fire.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

None expected under normal conditions of storage and use.

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Conditions to Avoid

Heat. Water, moisture or humidity. Open flames, sparks, static discharge, heat and other ignition sources.

Incompatible Materials

Strong acids, strong alkaloids, oxidizers, organics.

Hazardous Decomposition Products

Corrosive, flammable ammonia; corrosive, oxidizing nitrogen oxides; potassium oxides; calcium oxides; magnesium oxides.

SECTION 11. TOXICOLOGICAL INFORMATION**Likely Routes of Exposure**

Inhalation; skin contact; eye contact; ingestion.

Acute Toxicity

| Chemical Name | LC50 | LD50 (oral) | LD50 (dermal) |
|-------------------|------|------------------|---------------|
| Potassium nitrate | | 3750 mg/kg (rat) | |
| Ammonium nitrate | | 2800 mg/kg (rat) | |
| Magnesium nitrate | | 5400 mg/kg (rat) | |
| Calcium nitrate | | 302 mg/kg (rat) | |

Skin Corrosion/Irritation

Irritation could occur with prolonged exposure to dry fertilizer or fertilizer solution.

Serious Eye Damage/Irritation

Irritation or burn could occur if fertilizer solution is splashed in eyes or dry product contacted.

STOT (Specific Target Organ Toxicity) - Single Exposure**Inhalation**

Very low vapour activity. May cause nose and throat irritation. Symptoms may include coughing, shortness of breath, difficult breathing and tightness in the chest.

Skin Absorption

Not absorbed through skin.

Ingestion

If large amounts are swallowed symptoms may include nausea, vomiting, stomach cramps and diarrhea.

Aspiration Hazard

No information was located.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

No information was located.

Respiratory and/or Skin Sensitization

Skin sensitizer.

Carcinogenicity

Nitrilotriacetic Acid (NTA) and its salts were determined to be "possibly carcinogenic to humans by IARC, a compound which "may reasonably be anticipated to be a carcinogen" by NTP and a "select carcinogen" by OSHA.

Key to Abbreviations

ACGIH® = American Conference of Governmental Industrial Hygienists. IARC = International Agency for Research on Cancer. NTP = National Toxicology Program. OSHA = US Occupational Safety and Health Administration.

Reproductive Toxicity**Development of Offspring**

No information was located.

Sexual Function and Fertility

Boric acid may impair male fertility, based on animal data.

Effects on or via Lactation

No information was located.

Germ Cell Mutagenicity

No information was located.

Interactive Effects

No information was located.

SECTION 12. ECOLOGICAL INFORMATION

This section is not required by WHMIS. Environmental information was not located.

Ecotoxicity**Acute Aquatic Toxicity**

| Chemical Name | LC50 Fish | EC50 Crustacea | ErC50 Aquatic Plants | ErC50 Algae |
|-------------------|---|---|----------------------|-------------|
| Potassium nitrate | | 490 mg/L (Daphnia magna (water flea); 24-hour) | | |
| Ammonium nitrate | 6000 mg/L (Oncorhynchus mykiss (rainbow trout); 96-hour) | 555 mg/L (Daphnia magna (water flea); 24-hour; fresh water; static) | | |
| Calcium nitrate | 447 mg/L (Labeo boga (fresh water); 48-hour; fresh water) | | | |

Chronic Aquatic Toxicity

| Chemical Name | NOEC Fish | EC50 Fish | NOEC Crustacea | EC50 Crustacea |
|-------------------|-----------|-----------|----------------|---|
| Potassium nitrate | | | | 900 mg/L (Daphnia magna (water flea); 4.2 days) |

Persistence and Degradability

No information was located.

Bioaccumulative Potential

No information was located.

Mobility in Soil

No information was located.

Other Adverse Effects

There is no information available.

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal Methods**

Contact local environmental authorities for approved disposal or recycling methods in your jurisdiction.

SECTION 14. TRANSPORT INFORMATION

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations. Not regulated under IATA Regulations.

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

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SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

WHMIS 1988 Classification

Not a WHMIS controlled product.

SECTION 16. OTHER INFORMATION

SDS Prepared By MPPI Technical Department

Phone No. 905-793-8000

Date of Preparation July 27, 2015

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SECTION 12. ECOLOGICAL INFORMATION; Acute Aquatic Toxicity.
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SECTION 12. ECOLOGICAL INFORMATION; Acute Aquatic Toxicity.

References CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS).
Registry of Toxic Effects of Chemical Substances (RTECS®) database. Dassault
Systèmes/BIOVIA ("BIOVIA"). Available from Canadian Centre for Occupational Health and
Safety (CCOHS).

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