

Plant-Prod 13-6-30

SECTION 1. IDENTIFICATION

| Product Identifier | Plant-Prod 13-6-30 |
|-------------------------------------|--|
| Other Means of Identification | 10480 |
| Product Family | Plant-Prod |
| Recommended Use | Water Soluble Fertilizer for Plants. |
| Manufacturer/Supplier Identifier | Master Plant-Prod Inc., 314 Orenda Rd., Brampton, Ontario, Canada, L6T 1G1, Canada |
| Emergency Phone No. | CANUTEC, 1-613-996-6666, 24 Hours |
| Date of Preparation | January 15, 2019 |

SECTION 2. HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015).

Classification

Oxidizing solid - Category 3; Carcinogenicity - Category 2; Reproductive toxicity - Category 1 Label Elements



Signal Word: Danger Hazard Statement(s): H272 May intensify fire; oxidizer. H351 Suspected of causing cancer. H360 May damage fertility or the unborn child. Precautionary Statement(s): Prevention: P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep or store away from clothing and other combustible materials. P220 P221 Take any precaution to avoid mixing with combustibles. Wear protective gloves/protective clothing/eye protection/face protection. P280 Response: P308 + P313 IF exposed or concerned: Get medical advice/attention. P370 + P378 In case of fire: Use water spray or fog to extinguish. Storage: P405 Store locked up. Disposal: Dispose of contents and container in accordance with local, regional, national and international regulations. P501

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Other Hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No. | CAS No. % | Other Identifiers | Othor Namos |
|---------------------------------------|------------|-----------|-------------------|-------------|
| Chemical Name | CAS NO. | 78 | Other Identifiers | |
| Potassium nitrate | 7757-79-1 | 68 | | |
| Ammonium nitrate | 6484-52-2 | 8 | | |
| Boric acid | 10043-35-3 | <0.15 | | |
| Nitrilotriacetic acid, trisodium salt | 5064-31-3 | <0.2 | | |

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Move to fresh air. Get medical advice or attention if you feel unwell or are concerned. If breathing has stopped, trained personnel should begin rescue breathing.

Skin Contact

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Immediately wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 15-20 minutes. Get medical advice or attention if you feel unwell or are concerned.

Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Remove contact lenses, if present and easy to do. If eye irritation persists, get medical advice or attention.

Ingestion

For large amounts immediately call a Poison Centre or doctor. Get medical advice or attention if you feel unwell or are concerned.

Most Important Symptoms and Effects, Acute and Delayed

May cause mild irritation.

Immediate Medical Attention and Special Treatment

Special Instructions

See first aid information above. Note to Physicians: Provide general supportive measures and treat symptomatically.

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

Does not burn. Oxidizer. May intensify fire.

In a fire, the following hazardous materials may be generated: corrosive, oxidizing nitrogen oxides; corrosive phosphorous oxides; potassium oxides; magnesium oxides. metal oxides.

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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

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

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. Avoid generating dust. Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal. Avoid contact with combustibles, organics and ignition sources. Review Section 13 (Disposal Considerations) of this safety data sheet.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Do not breathe in this product. Do not get in eyes, on skin or on clothing. Only use where there is adequate ventilation. Avoid exposure during pregnancy and while nursing. Avoid release to the environment. Prevent accidental contact with incompatible chemicals.

Conditions for Safe Storage

Store in an area that is: cool, dry, out of direct sunlight and away from heat and ignition sources, separate from incompatible materials (see Section 10: Stability and Reactivity), well-ventilated. Keep out of reach of children. Store in a closed container.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

| | ACGI | HTLV® | OSH | A PEL | AIHA | WEEL |
|---------------------------------------|----------|---------|----------|---------|----------|------|
| Chemical Name | TWA | STEL | TWA | Ceiling | 8-hr TWA | TWA |
| Potassium nitrate | 5 mg/m3 | | | | | |
| Ammonium nitrate | 10 mg/m3 | | 15 mg/m3 | | | |
| Boric acid | 2 mg/m3 | 6 mg/m3 | | | | |
| Nitrilotriacetic acid, trisodium salt | | | 15 mg/m3 | | | |

Appropriate Engineering Controls

Use local exhaust ventilation and enclosure, if necessary, to control amount in the air. Provide eyewash and safety shower if contact or splash hazard exists.

Individual Protection Measures

Eye/Face Protection

When handling diluted product: wear chemical safety goggles. When handling dry concentrated product: wear protective safety glasses.

Skin Protection

Protect exposed skin using insulated gloves suitable for low temperatures, long sleeves, protective apron and trousers worn outside boots or over shoes.

Respiratory Protection

Use an appropriate NIOSH approved particulate respirator. Monitor dust levels within working area and ensure adequate ventilation.

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| Basic Physical and Chemical | Properties |
|---|--|
| Particle Size | Not available |
| Odour Threshold | Not applicable |
| рН | 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 |
| Partition Coefficient, n-Octanol/Water (Log Kow) | 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 | Not available |
| | |

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.

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

Under normal conditions of storage and use, hazardous decomposition products should not be produced. In a fire, the following hazardous materials may be generated. Corrosive, oxidizing nitrogen oxides; corrosive phosphorous oxides; potassium oxides; magnesium oxides; metal oxides.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion.

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Acute Toxicity

| Chemical Name | LC50 | LD50 (oral) | LD50 (dermal) |
|---------------------------------------|-------------------|------------------|--------------------|
| Potassium nitrate | | 3750 mg/kg (rat) | |
| Ammonium nitrate | > 88.8 mg/L (rat) | 2800 mg/kg (rat) | > 5000 mg/kg (rat) |
| Boric acid | | 2660 mg/kg | |
| Nitrilotriacetic acid, trisodium salt | | 1740 mg/kg (rat) | |

Skin Corrosion/Irritation

Repeated or prolonged exposure can irritate or burn the skin.

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

At high concentrations may cause nose and throat irritation, lung injury.

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

May cause irritation of the respiratory system.

Respiratory and/or Skin Sensitization

Mild skin sensitizer.

Carcinogenicity

| Chemical Name | IARC | ACGIH® | NTP | OSHA |
|---------------------------------------|----------|------------|-----|------------|
| Boric acid | | A4 | | |
| Nitrilotriacetic acid, trisodium salt | Group 2B | Not Listed | | Not Listed |

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.

Reproductive Toxicity

Development of Offspring

Boric acid may cause birth defects, based on animal data.

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

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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) | | |
| Boric acid | 11100 mg/L (Oncorhynchus mykiss (rainbow trout); 96-hour) | | | |

Chronic Aquatic Toxicity

| Chemical Name | NOEC Fish | EC50 Fish | NOEC Crustacea | EC50 Crustacea |
|-------------------|-----------|-----------|----------------|---|
| Potassium nitrate | | | 1 | 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

| Regulation | UN No. | Proper Shipping Name | Transport Hazard Class(es) | Packing Group |
|--------------|--------|---------------------------|-------------------------------|------------------|
| Canadian TDG | 1486 | POTASSIUM NITRATE MIXTURE | 5.1 | III |
| US DOT | 1486 | POTASSIUM NITRATE MIXTURE | 5.1 | III |

Special Precautions Not applicable

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

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

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SECTION 16. OTHER INFORMATION

| SDS Prepared By | MPPI Technical Department |
|---------------------|---|
| Phone No. | 905-793-8000 |
| Date of Preparation | January 15, 2019 |
| 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). |
| Disclaimer | To the best of our knowledge, the information contained herein is accurate. However, neither Master Plant-Prod Inc., nor any of its distributors, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Although certain hazards are described, we cannot guarantee that these are the only hazards that exist. Final determination of suitability of any product is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. |

| Product Identifier: | Plant-Prod 13-6-30 - Ver. 1 | 95 | DS No.: | 00/10 | |
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