

Plant-Prod Solutions 14-0-14

SECTION 1. IDENTIFICATION

Product Identifier	Plant-Prod Solutions 14-0-14
Other Means of Identification	11588
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	March 27, 2019

SECTION 2. HAZARD IDENTIFICATION

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

Classification

Serious eye damage - Category 1; Specific target organ toxicity (repeated exposure) - Category 2

Label Elements



Signal Word:

Danger

Hazard Statement(s):

H318 Causes serious eye damage.

H373 May cause damage to organs (blood) through prolonged or repeated exposure.

Precautionary Statement(s):

Prevention:

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear eye protection/face protection.

Response:

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 CENTRE or doctor.

P314 Get medical advice/attention if you feel unwell.

Disposal:

P501 Dispose of contents and container in accordance with local, regional, national and international regulations.

Other Hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

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Mixture:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Potassium nitrate	7757-79-1	32		
Calcium nitrate	10124-37-5	32		
Magnesium nitrate	13446-18-9	32		

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. Mild oxidizer. May intensify fire.

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

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

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Potassium nitrate	5 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

Wear chemical safety goggles.

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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	White particles intermixed with crystals. Particle Size: Not available
Odour	Slight ammonia odour
Odour Threshold	Not applicable
pH	Not available

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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; calcium oxides; magnesium oxides; potassium 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)	
Calcium nitrate		302 mg/kg (rat)	

Magnesium nitrate		5400 mg/kg (rat)	
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Skin Corrosion/Irritation

Repeated or prolonged exposure can irritate or burn the skin.

Serious Eye Damage/Irritation

May cause serious eye damage based on information for closely related materials.

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. May cause damage to organs based on information for closely related chemicals.

Respiratory and/or Skin Sensitization

Mild skin sensitizer.

Carcinogenicity

Not known to cause cancer.

Reproductive Toxicity

Development of Offspring

No information was located.

Sexual Function and Fertility

No information was located.

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

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)		
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)
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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

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

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

All ingredients are listed on the DSL.

SECTION 16. OTHER INFORMATION

SDS Prepared By MPPI Technical Department

Phone No. 905-793-8000

Date of Preparation March 27, 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.

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