

Plant-Prod Solutions 14-0-7

SECTION 1. IDENTIFICATION

Product Identifier Plant-Prod Solutions 14-0-7

Other Means of Identification

11615

Product Family

Plant-Prod

Recommended Use

Water Soluble Fertilizer for Plants.

Restrictions on Use

Not applicable.

Manufacturer/Supplier Master Plant-Prod Inc., 314 Orenda Rd., Brampton, Ontario, Canada, L6T 1G1

Identifier

Emergency Phone No. CANUTEC, 1-613-996-6666, 24 Hours

Date of Preparation

May 12, 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	
Magnesium nitrate	10377-60-3	32	
Potassium nitrate	7757-79-1	16	
Ammonium nitrate	6484-52-2	13	
Citric acid	77-92-9	1	

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.

Product Identifier: Plant-Prod Solutions 14-0-7

Date of Preparation: May 12, 2015 Page 01 of 06

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; very toxic carbon monoxide, carbon dioxide; corrosive, oxidizing nitrogen oxides; magnesium oxides; potassium 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

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

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

Product Identifier: Plant-Prod Solutions 14-0-7

Date of Preparation: May 12, 2015 Page 02 of 06

Potassium nitrate	5 mg/m3			
Ammonium nitrate	10 mg/m3	15 mg/m3		

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 Slight ammonia odour

Odour Threshold Not applicable pH Not available

Melting Point/Freezing Point Not available (melting); Not available (freezing)

Initial Boiling Point/RangeNot applicableFlash PointNot applicableEvaporation RateNot availableFlammability (solid, gas)Will not burn.

Upper/Lower Flammability or

Explosive Limit

Not available (upper); Not available (lower)

Vapour PressureNot availableVapour Density (air = 1)Not availableRelative Density (water = 1)Not available

Solubility Not available in water

Partition Coefficient, Not available

n-Octanol/Water (Log Kow)

Auto-ignition TemperatureNot availableDecomposition TemperatureNot available

Viscosity Not available (kinematic); Not available (dynamic)

Other Information

Physical State Solid

Molecular FormulaNot applicableMolecular WeightNot availableBulk Density1.25 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.

Product Identifier: Plant-Prod Solutions 14-0-7

Date of Preparation: May 12, 2015 Page 03 of 06

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; very toxic carbon monoxide, carbon dioxide; corrosive, oxidizing nitrogen oxides; potassium 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)	
Calcium nitrate		302 mg/kg (rat)	
Magnesium nitrate		5400 mg/kg (rat)	
Citric acid		11700 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.

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

No information was located.

Product Identifier: Plant-Prod Solutions 14-0-7

Date of Preparation: May 12, 2015 Page 04 of 06

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

Product Identifier: Plant-Prod Solutions 14-0-7

Date of Preparation: May 12, 2015 Page 05 of 06

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** May 12, 2015

Revision Indicators The following SDS content was changed on October 15, 2015:

SECTION 12. ECOLOGICAL INFORMATION; Acute Aquatic Toxicity. The following SDS content was changed on October 15, 2015: SECTION 12. ECOLOGICAL INFORMATION; Acute Aquatic Toxicity. The following SDS content was changed on October 15, 2015:

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SECTION 12. ECOLOGICAL INFORMATION; Chronic Aquatic Toxicity.

The following SDS content was changed on October 15, 2015:

SECTION 12. ECOLOGICAL INFORMATION; Chronic Aquatic Toxicity.

The following SDS content was changed on January 18, 2016: SECTION 12. ECOLOGICAL INFORMATION; Acute Aquatic Toxicity. The following SDS content was changed on January 18, 2016:

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).

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 Solutions 14-0-7

Date of Preparation: May 12, 2015 Page 06 of 06

