

Plant-Prod 20-20-20

SECTION 1. IDENTIFICATION

Product Identifier	Plant-Prod 20-20-20
Other Means of Identification	10528, 10529, 12094, 11456, 11375, 11686, 11098, 10749, 10889, 11606, 12055, 10531, 11435, 10169, 10529, 12094, 10528
Product Family	Plant-Prod
Recommended Use	Water Soluble Fertilizer for Plants.
Restrictions on Use	Not for human or animal use.
Manufacturer	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	November 27, 2014

SECTION 2. HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015) and the US Hazard Communication Standard (HCS 2012).

Classification

Carcinogenicity - Category 2; Reproductive toxicity - Category 1

Label Elements



Signal Word:

Danger

Hazard Statement(s):

Suspected of causing cancer.

May damage fertility or the unborn child.

Precautionary Statement(s):

Prevention:

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Wear protective gloves/protective clothing/eye protection/face protection.

Response:

IF exposed or concerned: Get medical advice/attention.

Storage:

Store locked up.

Disposal:

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

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

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Mixture:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Potassium nitrate	7757-79-1	44		
Boric acid	10043-35-3	<0.15		
Nitrilotriacetic acid, trisodium salt	5064-31-3	<0.20		

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Move to fresh air. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by Poison Centre or doctor. If breathing has stopped, trained personnel should begin rescue breathing. If ammonia gas is inhaled from heated fertilizer and breathing has stopped, begin artificial respiration. 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

Immediately call a Poison Centre or doctor.

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

Mild oxidizer. May intensify fire. If heated, could release ammonia gas.

In a fire, the following hazardous materials may be generated: corrosive, flammable ammonia; corrosive, oxidizing nitrogen oxides; corrosive phosphorous oxides; potassium oxides; metal 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. Eliminate all ignition sources. Use grounded, explosion-proof equipment.

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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. Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Only use where there is adequate ventilation. Do not breathe in this product. Do not get in eyes, on skin or on clothing. Avoid exposure during pregnancy and while nursing. Only use where there is adequate ventilation. Avoid generating dusts.

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.

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					
Boric acid	2 mg/m3	6 mg/m3				
Nitritotriacetic acid, trisodium salt			15 mg/m3			

Appropriate Engineering Controls

Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air. Provide eyewash and safety shower if contact or splash hazard exists.

Individual Protection Measures

Eye/Face Protection

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

Skin Protection

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

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	fine powder. Particle Size: Not available
Odour	Slight ammonia odour
Odour Threshold	Not applicable
pH	3.6
Melting Point/Freezing Point	Not applicable (freezing)
Initial Boiling Point/Range	Not applicable
Flash Point	Not applicable
Evaporation Rate	Not available
Flammability (solid, gas)	Will not burn.
Vapour Pressure	Not available
Decomposition Temperature	Not available

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Other Information

Physical State	Solid
Molecular Formula	Not applicable
Molecular Weight	Not available
Bulk Density	0.73 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.

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, flammable ammonia; corrosive, oxidizing nitrogen oxides; corrosive phosphorous oxides; potassium oxides; metal oxides.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Potassium nitrate		>2000 mg/kg (rat)	>5000 mg/kg (rat)
Boric acid		2660 mg/kg	
Nitrilotriacetic acid, trisodium salt		1740 mg/kg (rat)	

Skin Corrosion/Irritation

Irritation could occur with prolonged exposure to dry fertilizer or fertilizer solution. Contact with heated material may cause thermal burns.

Serious Eye Damage/Irritation

Irritation or burn could occur if fertilizer solution is splashed in eyes or dry product contacted. Heated material may cause thermal burns.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

May cause severe nose and throat irritation, lung injury. If heated could release ammonia gas.

Skin Absorption

Not absorbed through skin.

Ingestion

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

Carcinogenicity

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

Nitritotriacetic 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

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.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Acute Aquatic Toxicity

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Potassium nitrate	1378 mg/L (96-hour)	490 mg/L (Daphnia magna (water flea); 24-hour)		
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				900 mg/L (Daphnia magna (water flea); 4.2 days)

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.

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

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Canada

WHMIS 1988 Classification

Not a WHMIS controlled product.

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

All ingredients are listed on the DSL/NDSL.

SECTION 16. OTHER INFORMATION

SDS Prepared By MPPI Technical Department

Phone No. 905-793-8000

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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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