

Safety Data Sheet

BFG Grower Select 17-5-17 with Chelates

SECTION 1. IDENTIFICATION

Product Identifier BFG Grower Select 17-5-17 with Chelates
Other Means of Identification 12481
Product Family Custom
Recommended Use Water Soluble Fertilizer for Plants.
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 11, 2019

SECTION 2. HAZARD IDENTIFICATION

Classified according to the US Hazard Communication Standard (HCS 2012).

Classification

Oxidizing solid - Category 3; Serious eye damage - Category 1; Reproductive toxicity - Category 1; Specific target organ toxicity (repeated exposure) - Category 2

Label Elements



Signal Word:

Danger

Hazard Statement(s):

H272 May intensify fire; oxidizer.

H318 Causes serious eye damage.

H360 May damage fertility or the unborn child.

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

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.

P220 Keep or store away from clothing and other combustible materials.

P221 Take any precaution to avoid mixing with combustibles.

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

P280 Wear protective gloves/protective clothing/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.

P308 + P313 IF exposed or concerned: Get medical advice/attention.

P310 Immediately call a POISON CENTRE or doctor.
P314 Get medical advice/attention if you feel unwell.
P370 + P378 In case of fire: Use water spray or fog to extinguish.
Storage:
P405 Store locked up.
Disposal:
P501 Dispose of contents and container in accordance with local, regional, national and international regulations.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Potassium nitrate	7757-79-1	36		
Calcium nitrate	10124-37-5	23		
Ammonium nitrate	6484-52-2	20		
Magnesium nitrate	13446-18-9	12		
Boric acid	10043-35-3	<0.15		

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.

Skin Contact

Rinse with lukewarm, gently flowing water for 5 minutes. Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). 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 at least 30 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

Immediately call a Poison Centre or doctor.

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 spray or fog.

Unsuitable Extinguishing Media

DO NOT use water jet.

Specific Hazards Arising from the Product

Oxidizer. May intensify fire.

Product Identifier: BFG Grower Select 17-5-17 with Chelates - Ver. 1
Date of Preparation: November 11, 2019
Date of Last Revision:

SDS No.: 0537

Page 02 of 07

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

Special Protective Equipment and Precautions for Fire-fighters

Wear SCBA and full protective clothing.

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.

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. 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. Avoid exposure during pregnancy and while nursing. Avoid generating dusts. Only use where there is adequate ventilation.

Conditions for Safe Storage

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

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					
Ammonium nitrate	10 mg/m3		15 mg/m3			
Boric acid	2 mg/m3	6 mg/m3				

Appropriate Engineering Controls

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

Individual Protection Measures

Eye/Face Protection

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

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 prills intermixed with granules and powder. Particle Size: Not available

Product Identifier: BFG Grower Select 17-5-17 with Chelates - Ver. 1

SDS No.: 0537

Date of Preparation: November 11, 2019

Date of Last Revision:

Page 03 of 07

Odour	Slight ammonia odour
Odour Threshold	Not available
pH	2.86 (10% solution)
Melting Point/Freezing Point	Not available (melting); Not available (freezing)
Initial Boiling Point/Range	Not available
Flash Point	Not available
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	< 336 g/L in water
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Other Information	
Physical State	Solid
Molecular Formula	Not applicable
Molecular Weight	Not applicable
Bulk Density	Not available
Critical Temperature	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. Open flames, sparks, static discharge, heat and other ignition sources. Water, moisture or humidity.

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; calcium oxides; magnesium oxides; potassium oxides; metal oxides.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Chemical Name	LD50 (oral)	
Potassium nitrate	>2000 mg/kg (rat)	
Ammonium nitrate	2800 mg/kg (rat)	
Calcium nitrate	302 mg/kg (rat)	

Magnesium nitrate	5400 mg/kg (rat)	
Boric acid	2660 mg/kg	

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

Very low vapour activity. 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.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

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

Respiratory and/or Skin Sensitization

Mild skin sensitizer.

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Boric acid		A4		

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.

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

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)		
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)			
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)

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)

All ingredients are listed on the DSL or are not required to be listed.

CEPA - National Pollutant Release Inventory (NPRI)

No ingredients are listed in the NPRI.

USA

Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are listed on the TSCA Inventory.

SECTION 16. OTHER INFORMATION

SDS Prepared By	MPPI Technical Department
Phone No.	905-793-8000
Date of Preparation	November 11, 2019
References	CHEMINFO database. 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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Page 07 of 07