



QUICKROOTS™ DRY PLANTER BOX

Material Safety Data Sheet

SUGAR BEET

SECTION 1. CHEMICAL AND COMPANY IDENTIFICATION.

Product Name:	QuickRoots™
Formula:	Planter box formulation for sugar beet
Chemical Family:	Bacteria/Fungi
Product Code:	NZBSD-1012
Company Name:	Novozymes BioAg, Inc. 3003 9 th Avenue SW Watertown, SD 57201 605-753-7770 (Tel.)



INGREDIENTS	CAS NUMBER	% WT
<i>Bacillus amyloliquefaciens</i> TJ1000: 2.50x10 ⁹ colony forming units per gram (CFU/g)	Not Available	15.92
<i>Trichoderma virens</i> GI-3: 5.00x10 ⁸ colony forming units per gram (CFU/g)	Not Available	19.18
Talc	14807-96-6	25.00
Inert Ingredients	Not Available	39.90
	Total:	100.00

Emergency Overview:

Individuals allergic to molds and/or fungi should avoid using this product. If use by allergic individuals is unavoidable, absorption by eye or skin contact, inhalation or ingestion must be prevented to minimize the chance of allergic reaction.

In Case of Emergency Call: 1-888-744-5662

Available 24 hours a day 7 days a week from April 1st to June 15th,
otherwise available from 8:00am to 4:30pm CST, Monday to Friday.

QuickRoots™ Dry Planter Box is a registered trademark of Novozymes A/S



SECTION 2. HAZARDS IDENTIFICATION.

Ingredient	Threshold Limit Value (%)	Permissible Exposure Limit	Comments
Talc	20-40 TWA	2 mg/m ³ from respirable fraction	See Section XVI (OSHA)
Other Ingredients	60-80 TWA as particles, not otherwise regulated (PNOR)	15 mg/m ³ total dust 5 mg/m ³ 3 respirable dust	

First Aid Measures:

Skin: Wash off with water.
 Ingestion: Unlikely to be toxic by ingestion.
 Inhalation: Allow the victim to rest in a well-ventilated area if high concentration is inhaled and mechanical irritation or discomfort occurs. Seek medical attention if irritation persists.

Pigments: Not Available	Base Metal: Not Available
Catalyst: Not Available	Alloys: Not Available
Vehicle: Not Available	Metallic Coatings: Not Available
Solvents: Not Available	Filler Metal Plus Coating or Core Flux: Not Available
Additives: Not Available	Others: Not Available

Topical ocular exposure to the dry powder may result in mild eye irritation. Topical dermal exposure may result in mild skin irritation.

Not an acute hazard. May cause mechanical eye or skin irritation in high concentrations. As with all mineral spills, minimize during clean-up. Do not breathe dust. Prolonged inhalation may cause lung injury. Product can become slippery when wet.

Target Organs: Pulmonary System (chronic risk).

SECTION 3. PHYSICAL DATA.

Boiling Point (deg F):	Not Available
Specific Gravity (H2O=1):	Not Available
Vapor Pressure (mm Hg):	Not Available
Viscosity:	Not Available
Physical State:	Granular/Dry Powder
Color:	Tan/Green Tint
Odor:	Dusty or musty odor.

In Case of Emergency Call: 1-888-744-5662

Available 24 hours a day 7 days a week from April 1st to June 15th, otherwise available from 8:00am to 4:30pm CST, Monday to Friday.



SECTION 4. FIRE AND EXPLOSION HAZARD DATA.

Flash Point:	Not Applicable
Flammable Limits:	Not Applicable
Extinguishing Media:	Water
Specific Fire Fighting Procedures:	None
Unusual Fire and Explosion Hazards:	None
Unusual Fire and Explosion Hazards:	None
Products of Combustion:	Not Applicable
Fire Hazards in Presence of Various Substances:	None
Explosion Hazards in Presence of Various Substances:	None
Fire Fighting Media and Instructions:	Product will not burn, use appropriate extinguishing media for surrounding fire.
Special Remarks on Fire Hazards:	Not available.
Special Remarks on Explosion Hazards:	Not available.

SECTION 5. HEALTH HAZARD DATA.

Effects of Overexposure:	Potential Allergen
Emergency First Aid Procedures:	Rinse with Water.

SECTION 6. REACTIVITY DATA.

Stability:	Stable
Incompatibility:	Not Applicable
Hazardous Decomposition Products:	Not Applicable
Hazardous Polymerization:	Will not occur

SECTION 7. SPILL OR LEAK PROCEDURES.

Material release or spill actions: Non-toxic, water wash
Waste Disposal Method: Landfill

SECTION 8. SPECIAL PROTECTION INFORMATION.

Respiratory Protection:	Mist/Dust Mask
Ventilation:	Local Exhaust
Special:	Not Applicable
Protective Gloves:	Latex or plastic
Eye Protection:	Goggles
Other Protective Equipment:	Not Applicable

SECTION 9. SPECIAL PRECAUTIONS.

Precautions to be taken in handling and storage.

AVOID INHALATION AND CONTACT WITH EYES
Other precautions – None

In Case of Emergency Call: 1-888-744-5662

Available 24 hours a day 7 days a week from April 1st to June 15th,
otherwise available from 8:00am to 4:30pm CST, Monday to Friday.



SECTION 10. TRANSPORTATION INFORMATION.

Product should be properly labeled for transport. The transport of this product is not regulated by the Dept. of Transportation (DOT) as it is not a Hazardous Material.

SECTION 11. TOXICOLOGICAL INFORMATION.

Routes of Entry: Inhalation & Ingestion.

ACUTE EFFECTS

Eye Contact: Not a primary eye irritant.
May cause mechanical irritation.

Skin Contact: Mechanical skin irritation is possible, but unlikely. Not absorbed through skin.
Possible granuloma formation in open wounds (requires repeated, massive applications).

Sensitization: Not a sensitizer.

Ingestion: Not an ingestion hazard.

Inhalation: High concentrations may cause mechanical irritation and discomfort.
Repeated exposure may cause chronic effects.

CHRONIC EFFECTS

Carcinogenic Effects: See remarks.

Mutagenic & Teratogenic Effects: None known.

Developmental Toxicity: None known.

Remarks:

TALC: Prolonged exposure to excessive airborne concentrations of talc can result in scarring of the lungs (pneumoconiosis) or of the covering of the lungs (pleural thickening). Pneumoconiosis may produce symptoms of cough or shortness of breath. Pleural thickening usually produces no symptoms. Conditions can be determined by chest radiographic examination and pulmonary function test (FEV and FVC). Bronchial irritation may cause sputum production.

New York State talc has been tested as a whole and in parts in several animal studies with no carcinogenic association demonstrated. Epidemiologic studies in humans have been interpreted in conflicting ways with no clear evidence of an increased risk in lung tumors in association with exposure. Human, animal and in-vitro tests of basic product ingredients do not show a carcinogenic effect.

Excessive exposure to any dust may aggravate pre-existing respiratory conditions.

This information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.

Note: This product contains beneficial microorganisms. Novozymes exclusively uses non-pathogenic beneficial microorganisms that are considered to be non-allergenic, non-irritating and non-sensitizing when used as directed. Exposure to very high levels of airborne microbial spores may result in very rare respiratory impairments or cause an allergic reaction in sensitized individuals. A Material Safety Data Sheet is supplied with all products.

Revision Date 09/18/2013

In Case of Emergency Call: 1-888-744-5662

Available 24 hours a day 7 days a week from April 1st to June 15th,
otherwise available from 8:00am to 4:30pm CST, Monday to Friday.

QuickRoots™ Dry Planter Box is a registered trademark of Novozymes A/S