

MATERIAL SAFETY DATA SHEET
BIONUTRIENTS™ TOTAL-PAK FOR TREES

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Company : Growth Products, Ltd.
80 Lafayette Avenue
White Plains, NY 10603
Phone Number: 800-648-7626
Chemical Name / Common Name: Bacillus subtilis, Potassium Humate
Product Use: Microbial Inoculant/Soil Amendment

Section 2 – HAZARDOUS INGREDIENTS

% **ACTIVE INGREDIENT:** Bacillus subtilis, 0.07% (Megaterium, Licheniformis) **CAS#:** 9013-01-8
% **OTHER INGREDIENTS:** Plant Nutrients, 79.9% **CAS#** NA
Potassium Humate, 17% **CAS#** 68514-28-3

Section 3 – PHYSICAL DATA

Physical State:	Powder	Evaporation Rate:	Not Applicable
Color:	Brown	Boiling Point:	Not Applicable
Odor:	Organic Sweet Odor	Freezing Point:	Not Applicable
Bulk Density:	41.82 / cu ft.	Viscosity:	Not Applicable
Storage Life at 70F:	>2 Years	Flash Point/Method:	Not Applicable
pH – 21C:	4.5	Vapor Pressure:	N/A
Solubility In Water:	99%		

Section 4 – FIRE AND EXPLOSION HAZARD

Explosion properties	Noncombustible
Flammable Limit	N/A
Extinguishing Media	Foam, CO ₂ , Dry Chemical, Water Spray
Special Fire Fighting Procedures	None
Unusual Fire and Explosion Hazards	None

Section 5 – HEALTH HAZARD INFORMATION

EFFECTS OF OVEREXPOSURE ACUTE (SHORT TERM EXPOSURE):

Repeated contact may cause moderate irritation and dermal and respiratory sensitization for hypersensitive individuals.

CHRONIC (LONG TERM EXPOSURE):

None known

Section 6 – Emergency and First Aid Procedures

INHALATION: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth to mouth. Get medical attention.

EYE CONTACT: Flush eyes with plenty of water. Call a physician if irritation persists

SKIN CONTACT: Wash with plenty of soap and water. Get medical attention if irritation persists.

Section 7: TOXICITY INFORMATION

ACUTE TOXICITY (LETHAL DOSES)

DERMAL LD₅₀: 0.5 ml dose level for rabbits

ORAL LD₅₀: 5000 mg/kg dosage level for rats

ACUTE TOXICITY (IRRITATION, SENSITIZATION)

EFFECTS TO EYES: No corneal or iridal effects were noted at a dose of 0.1 ml for rabbits

EFFECTS TO INGESTION: Non toxic or pathogenic

EFFECTS TO SKIN: Moderate irritation, reversible within 7 days

CARCINOGENICITY DATE: N/E

Section 8: REACTIVITY DATA

STABILITY: Stable

CONDITIONS TO AVOID: N/E

HAZARDOUS DECOMPOSITION PRODUCTS OF DRY MATERIAL: CO, CO₂, NH₃

HAZARDOUS POLMERIZATION: Will not occur

Section 9: SPECIAL PROTECTION INFORMATION

PROTECTIVE GLOVES: Gloves

EYE PROTECTION: None

OTHER PROTECTION: Dust mask in case of dust occurrence

RESPIRATORY PROTECTION OR REQUIRED VENTILATION:

Wear NIOSH approved dust respirator

Section 10 – SPILL AND LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Prevent product from entering drinking water supplies. Collect powder material and package for disposal according to local, state, and federal regulations.

WASTE DISPOSAL PRECEDURES:

This product is likely to have a pH less than 8.5 and would not be considered a federal hazardous waste according to EPA regulation 40CFR 261. Dispose in accordance with state and local regulation.

REPORTABLE QUANTITY UNDER CERCLA: N/A

Section 11 – STORAGE AND HANDLING INFORMATION

STORAGE TEMPERATURE:

MAX 100° F MIN 32° F INDOOR OUTDOOR REFRIG.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Store in a dry place out of direct sunlight and away from heat sources. Keep from overheating or freezing.

Section 12 – TRANSPORTATION INFORMATION

DOT UN STATUS: This material is not regulated hazardous material for transportation

OTHER PRECAUTIONS:

Read entire label before using

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ABBREVIATIONS:

N/E – NOT ESTABLISHED

N/A – NOT APPLICABLE