

Fermentation Bacteria 009

Cat. No. FBZG-001

Lot. No. (See product label)

Introduction

Description

Fermentation Bacteria 009 is a concentrated composting preparation of non-pathogenic beneficial microorganisms and macromolecule-degrading enzymes for accelerating the decomposition of organic matter and lignocellulosic waste.

Applications

Composting of agricultural, industrial, and municipal organic wastes. Decomposition of plant residues and lignocellulosic biomass. Production of humus-like compost, natural mulch, soil amendment, and fertilizer for farmland or vegetable gardens.

Product Information

Appearance

Powder; fine powder

Form

Powder

Concentration

3 billion CFU/g

pH Stability

Effective pH: 6.5-7.5

Composition

High-concentration, non-pathogenic beneficial microorganisms, including aerobic bacterial and fungal strains, supplemented with multiple macromolecule-degrading enzymes.

Function

Decomposes organic matter and cellulose-based carbohydrates through microbial enzyme activity. Supports oxidation in air, reduction, and hydrolysis in water of decomposition products. Cellulase, xylanase, amylase, and lignin-degrading enzymes release sugars from cellulose, hemicellulose, starch, and related carbohydrates. Enhances native compost microbiota and accelerates conversion of waste into stable, humus-like material.

Quality

Bacterial count: 3 billion CFU/g

Notes

Odor: Slight fermentation odor Composting normally begins with mesophilic microorganisms and may progress to thermophilic conditions as microbial metabolism generates heat. Properly maintained compost commonly reaches 90-140°F; this supports rapid decomposition and helps destroy weed seeds, insect larvae, and harmful bacteria and suppress certain disease-causing organisms.

Advantages

Reduces organic waste. Supports recovery of nutrients from organic waste.

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Reduces organic waste. Supports recovery of nutrients from organic waste. Produces natural mulch and soil amendment. Can supplement commercial fertilizers. Provides a relatively inexpensive composting approach. Improves soil structure, texture, aeration, and water-retention capacity. Helps loosen clay soil and improves moisture retention in sandy soil. Improves soil fertility and supports healthy root growth. Provides organic matter that sustains microorganisms and supports soil health and balance. Supports release of nitrogen, phosphorus, and potassium, reducing chemical fertilizer input and cost. Saves landfill space and reduces land and water pollution associated with landfill leachate. Helps suppress contaminating microorganisms and reduces odors and pathogenic substances. The combined microbial community can shorten composting fermentation time. May be used as fertilizer for farmland or vegetable gardens.

Components

Beneficial bacterial and fungal strains Multiple macromolecule-degrading enzymes

Usage

Recommended dosage: 0.025% (250 g per ton of compost). Composting piles: Add 250 g per ton. Fermentation equipment: Add 1 kg per ton.

Usage and Packaging

Package

2 kg per plastic bag 20 kg per carton 20 kg per woven bag