

# **Technical Data Sheet**

# Trichoderma koningiopsis

Soil Probiotic for Plant Health & Crop Vigor

Trichoderma koningiopsis is a spore-forming, plant-beneficial fungus used as a microbial inoculant and biostimulant to support plant health, root development, and soil function. Known for its strong enzymatic activity and rapid rhizosphere colonization, this biofertilizer enhances nutrient cycling, accelerates organic matter decomposition, and promotes a resilient microbial environment around roots. By enhancing nutrient uptake and supporting stress adaptation, it supports crop vigor and performance across diverse conditions. Widely used in sustainable and organic systems, it contributes to long-term soil fertility and plant resilience.

- Stimulates root growth and development through microbial metabolite activity
- Enhances nutrient availability via enzymatic decomposition of organic material
- Improves soil structure and aggregation through active organic matter transformation
- Promotes balanced microbial communities in the root zone
- Supports plant health and stress tolerance under drought, salinity, and nutrient-limited conditions

## **Technical Data**

### Concentration (CFU/g):

- 15 billion (1.5  $\times$  10<sup>10</sup>) CFU/g dry powder
- Custom concentrations available upon request

## Particle Size (Mesh):

• Passes through 100 mesh sieve

### **Packaging Options:**

- 22 lb (10 kg) pails
- 44 lb (20 kg) pails
- 340 lb (155 kg) drums
- Smaller custom packaging available on request

## Shelf-life:

- 6 months at room temperature
- 18 months refrigerated

#### **Storage Recommendations:**

- Store in a cool, dry location away from direct sunlight.
- Reseal container tightly after each use.





## **Application Rates**

## Soil Application (Drip, Drench, or Fertigation)

#### Dosage:

 100–200 grams per acre (250–500 grams per hectare)

## Frequency:

- Apply during early root establishment or transplanting
- Reapply every 2–4 weeks depending on crop cycle and stress level

#### **Application Method:**

- Dissolve thoroughly in water (ensure enough dilution volume to fully saturate the root zone)
- Use an agitation tank or manual stirring to maintain microbial suspension
- Apply through drip irrigation lines, microsprayers, or fertigation systems, positioning flow as close to the root zone as possible
- Flush the system after application to prevent clogging or residue buildup
- Do not tank mix with herbicides, fungicides, bactericides, or chemical pesticides

## **In-Furrow**

### Dosage:

• 25–50 grams per acre (60–125 grams per hectare)

## Frequency:

 Apply once at planting to target root initiation and early growth stages

## Application Method:

- Dissolve microbial powder thoroughly in water
- Apply directly into the seed furrow or planting trench at seeding time
- If using irrigation systems for delivery, ensure solution contacts the root zone
- Maintain agitation to prevent settling

### When tank-mixing with fertilizers:

- Dilute fertilizer fully in water first before adding microbes
- Do not mix with herbicides, fungicides, bactericides, or pesticides

## Foliar Spray

### Dosage:

 50–100 grams per acre (125–250 grams per hectare)

### Frequency:

- Apply during vegetative growth or during periods of high stress or pest pressure
- Reapply every 7–14 days during periods of high stress

#### Application Method:

- Apply in the early morning or evening to reduce UV exposure
- Use a non-ionic surfactant or wetting agent for improved adhesion
- Ensure thorough coverage of foliage, including undersides of leaves
- Agitate spray solution continuously during application

## **Seed Treatment**

#### Dosage:

3–5 grams per kg of seed

## Frequency:

Single application before planting

## Application Method:

- Mix thoroughly with a sticking agent (e.g., sugar solution, gum arabic)
- Coat seeds evenly, ensuring full surface coverage
- Allow seeds to dry gently in the shade before sowing

### **Composting or Organic Matter Amendment**

## Dosage:

 20–40 grams per ton of compost, organic substrate, or potting mix

#### Frequency:

 Single application before use or at the beginning of composting/soil blending

## Application Method:

- For composting, first dissolve powder in water.
  Then spray piles and turn to evenly distribute product through the piles/windrows.
- For organic matter amendment, evenly mix the dry microbial powder into the growing media during turning or mixing

**Disclaimer:** Results may vary depending on environmental conditions, application rates, and management practices. The manufacturer makes no guarantee of specific results. Seller's liability is limited to replacement of product or refund of purchase price. Manufacturer is not responsible for misuse, mishandling, or application under adverse conditions beyond its control. This product is not registered for pesticidal use with the U.S. Environmental Protection Agency. It is intended as a soil amendment / microbial inoculant only. Keep out of reach of children.

