**MATERIAL SAFETY DATA SHEET (MSDS)**

**Product Name: Shield Insecta KGI**

**Product Code: SH-KGI-01**

**Branding: Crop Shield**

**Updated From: Bactallion BT³ (Protector I KGI)**

## SECTION 1: Identification

**Product Name:** Shield Insecta KGI

**Product Code:** SH-KGI-01

**Recommended Use:** Microbial insect-targeting biostimulant for agricultural and horticultural crops

**Supplier:** Bactallion (Pty) Ltd

**Emergency Contact:** +27 (0)82 903 3658

"Product name: Bactallion BT³" (Updated to Shield Insecta KGI)

## SECTION 2: Hazard Identification

- Non-hazardous under GHS classification.
- Not classified as toxic, corrosive, or harmful.
- May cause mild irritation if inhaled or if contact occurs with eyes.

**Precautionary Statements:**

- Avoid inhaling dust.
- Avoid contact with eyes.
- Wash hands after handling.

## SECTION 3: Composition / Ingredients

A proprietary microbial insect-targeting blend including:

- *Bacillus thuringiensis kurstaki* (BT-KGI strain)
- *Beauveria bassiana*
- *Metarhizium anisopliae*
- *Trichoderma harzianum*
- *Rhodopseudomonas palustris*

Carrier: Maltodextrin Colour blend: Food-grade No hazardous ingredients at reportable levels.

**SECTION 4: First Aid Measures**

**Eye Contact:** Flush with clean water for 15 minutes. **Skin Contact:** Wash with soap and water. **Inhalation:** Move to fresh air. **Ingestion:** Rinse mouth; seek medical attention if discomfort persists.

**SECTION 5: Fire Fighting Measures**

- Non-flammable.
- Use water spray, foam, dry chemical, or $CO_2$.
- Firefighters should avoid inhaling combustion fumes.

**SECTION 6: Accidental Release Measures**

- Avoid creating dust.
- Sweep up and place in a sealed container.
- Wash area with water.

**SECTION 7: Handling & Storage**

**Handling:**

- Avoid dust formation.
- Use in well-ventilated areas.

**Storage:**

- Store in a cool, dry place.
- Keep sealed when not in use.
- Protect from direct sunlight and moisture.

**SECTION 8: Exposure Controls / PPE**

- No special PPE required.
- Optional: dust mask, gloves, safety glasses.

**SECTION 9: Physical & Chemical Properties**

**Appearance:** Light beige powder **Odour:** Mild, earthy **pH:** ~5.9 (10% solution) **Solubility:** Water-soluble **Density:** ~1.33 g/cm³

**SECTION 10: Stability & Reactivity**

- Stable under normal conditions.
- Avoid moisture exposure.
- No hazardous decomposition expected.

**SECTION 11: Toxicological Information**

- Non-toxic microbial formulation.
- No known chronic health effects.
- May cause mild mechanical eye irritation.

**SECTION 12: Ecological Information**

- Inherently biodegradable (OECD 302B).
- Microbes are naturally occurring soil organisms.
- No expected bioaccumulation.
- Supports natural insect suppression and crop resilience.

**SECTION 13: Disposal Considerations**

- Dispose according to local regulations.
- Packaging may be recycled if clean.

**SECTION 14: Transport Information**

- Not regulated as a dangerous good.
- No special transport requirements.

**SECTION 15: Regulatory Information**

- Complies with agricultural biostimulant regulations.
- Not classified as hazardous under GHS.

**SECTION 16: Other Information**

Prepared by: Bactallion (Pty) Ltd

Branding: **Crop Shield**

Updated: October 2026

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