



## MATERIAL SAFETY DATA SHEET

For Bio-T-Plus™

Date of last amendment: 22 Apr 2013

### 1. IDENTIFICATION OF THE SUBSTANCE

- **Product name:** Bio-T-Plus™
- Bacillus thuringiensis var. kurstaki, spore crystalline complex, immune modulator for pest.
- **Supplier:** SINERIA HOLLAND BV  
Randwycksingel 20-A015  
6229 EE Maastricht The Netherlands  
www.sineria.com

### 2. HAZARDS IDENTIFICATION

- A product of low toxicity concerning contact, oral or exposure by inhalation.
- None known chronic health hazards and not expected to have carcinogenic or mutagenic properties.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

- **Product name:** Bio-T-Plus™
- Bacillus thuringiensis var. kurstaki, consisting of spore crystalline, exo toxin, nutrient, medium, residues, common salts and kaolin.
- **Contains:**  $9 \times 10^7$  spores/mg Bacillus thuringiensis var. Kurstaki Serotype H-3a, 3b Strain Z-52
- **Formulation:** Wettable Powder
- **CAS No:** 68038-71-1
- **HS Code:** 380850.00.00

### 4. FIRST AID MEASURES

- **General advice:** If poisoning occurs, contact a doctor or the Poisons Information Centre. Show the label of the product.

- **Ingestion:** If swallowed, induce vomiting. Never give anything by mouth to an unconscious person.
- **Inhalation:** If inhaled, move to fresh air. If not breathing, give artificial respiration, preferably mouth to mouth. If breathing is difficult, give oxygen and seek medical attention.
- **Skin contact:** Flush skin with water after contact and wash thoroughly using soap.
- **Eye contact:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Seek medical attention.

## 5. **FIRE-FIGHTING MEASURES**

- **Suitable extinguishing media:** Use carbon dioxide, chemical foam or dry extinguishing powder.
- **Specific hazards:** Decomposed products include mainly carbon oxides.
- **Special protective equipment:** Wear protective clothing and use self-containing breathing apparatus.

## 6. **ACCIDENTAL RELEASE MEASURES**

- **Personal precautions:** Wear appropriate safety clothing during clean-up activities (including but not limited to safety glasses, rubber glove and shoes, appropriate mask).
- **Methods for cleaning-up:**
  - Recover the remaining material as appropriate.
  - Collect and contain contaminated and spilt material for disposal.
  - Place spilt material in appropriate container for disposal according to local procedures and regulations.
  - Wash with plenty of water the spill area

- Do not flush material to public sewer systems or any waterways.
- Ensure adequate decontamination of tools and equipment following clean-up.

## **7. HANDLING AND STORING**

- **Handling:** Use good personal hygiene. Do not ingest or inhale. Avoid contact with eyes or skin.
- Do not smoke, drink or eat while working with Bio-T-Plus.
- **Storage:**
  - The product should be stored in compliance with local regulations.
  - Store in a cool dry place in the original container, away from excessive heat and open flame, in a well-ventilated area.
  - Do not store near food, animal feeding stuff, fertilizers or seeds.
  - Keep out of reach of children.

## **8. EXPOSURE CONTROL / PERSONAL PROTECTION**

- **Toxicity:** Low toxic material
- **Eye/Face protection:** Face shield, goggles.
- **Skin and body protection:** Protective clothing, covering the whole of the body. Also, wear appropriate rubber gloves.
- **Hygiene measures:** Wash hands and exposed skin before eating, drinking or smoking after work.
- **Inhalation protection:** Use respirator mask with suitable filter for WP formulations

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

- **State:** Powder
- **Colour:** White to light brown
- **Odour:** Little fish-odour
- **Bulk Density:** 0.8 – 0.95
- **Melting point (°C):** 76.5-79.0°C

- **Auto ignition temperature (°C):** Not applicable
- **Vapour pressure (mm Hg):** 0.019 mPa at 25°C

## **10. STABILITY AND REACTIVITY**

- **Stability:** Stable under normal conditions
- **Conditions to avoid:** Open flames or other high temperature sources
- **Materials to avoid:** None known
- **Hazardous decomposition products:** Not expected

## **11. TOXICOLOGICAL INFORMATION**

- **Acute toxicity Oral (rat):** LD50 ≥ 2000 mg/kg (M + F)
- **Acute toxicity Dermal (rat):** LD50 ≥ 2000 mg/kg (M + F)
- **Skin irritation (rabbit):** None
- **Eye irritation (rabbit):** Mild irritant
- **Long term toxicity:** None
- **Chronic toxicity:** Non- carcinogenic, non-teratogenic, non-mutagenic. Not harmful on laboratory animals.

## **12. ECOLOGICAL INFORMATION**

- Low toxicity to bees, fish and wildlife
- Dietary LC50 to Japanese Quail > 5.000ppm

## **13. DISPOSAL CONSIDERATION**

- **Wastes from residues / Unused products:** Dispose of in accordance with local state and federal regulations. Do not contaminate water, food or feed by storage or disposal.
- **Contaminated packaging:** Same as indicated for wastes from residues/ unused products above.



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#### **14. TRANSFORMATION INFORMATION**

- **DOT Hazard Class:** Not Regulated
- **IATA/CAO:** Not Regulated
- **IMO:** Not Regulated

#### **15. REGULATORY INFORMATION**

##### ***U.S. Federal Regulations***

- **OSHA:** Not applicable
- **TSCA:** Exempt
- **CERCLA:** None

#### **16. OTHER INFORMATION**

The information contained in the Material Safety Data Sheet is correct to the best of our knowledge at the date of issue. It is intended as a guide for the safe use, handling, disposal, storage and transportation and is not intended as a warranty or as a specification. The information relates only to the product specified and may not be suitable for use with other materials or in processes other than those specifically described herein.

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