

MATERIAL SAFETY DATA SHEET BIO – T PLUS

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Trade name	BIO – T PLUS
Chemical name	Bacillus thuringiensis var. kurstaki
Company	BioDalia Microbiological Technologies
Address	19239 Kibbutz Dalia, Israel
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2. COMPOSITION / INFORMATION ON INGREDIENTS

Aqueous Suspension
 Active Ingredient: Bacillus thuringiensis
 var. kurstaki, 16000 International
 Units (ITU) per milligram - 1.2% (Equivalent to 1.28 billion ITU/LITER)
 Preservatives - 1.0%
 Formulation - 7.0%
 Inert fermentation remains - 6.8%
 Water - Approx. 84.0%
 Total - 100.0%

3. HAZARDS INFORMATION

Specific risks	May be an irritant to eyes, skin and respiratory system.
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4. FIRST AID MEASURES

Symptoms and effects	Irritating to eyes and skin Irritating to respiratory system
General	In all cases of doubt, or when symptoms persist, seek medical advice.



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Eye contact	Rinse immediately and as long as possible with plenty of water. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek medical advice if irritation persists. In case of inadequate first aid measures there is a possibility of persistent effect to the eye.
Skin contact	Remove contaminated clothing. After contact with skin, wash immediately with soap and plenty of water. Seek medical advice if irritation develops. Wash clothing before reuse.
Inhalation	Not likely to occur
Ingestion	Rinse mouth with water. Do not drink. Do not induce vomiting because of risk of aspiration. Seek medical advice.
Advice to physician	For further advice, call: +972-48541900, Israeli Poison Information Center

5. FIRE FIGHTING MEASURES

Extinguishing media	All extinguishing products are permitted; Non flammable (aqueous)
Unsuitable extinguishing media	None known
Special exposure hazards	None known
Protective equipment	No special equipment needed

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Avoid contact with eyes and skin
Personal protection	Wear safety goggles, gloves
Environmental precautions	None, safe for the environment



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Tolerance	Exempt on all raw agricultural commodities when applied preharvest or postharvest to growing crops
Other information	For personal protection, see Section 8

7. HANDLING AND STORAGE

Handling	Avoid contact with skin and eyes
Storage	Store in a cool dry area. Temperature should not exceed 28°C for long shelf life. Recommended storage temperature: 4°C. To maintain quality, protect from frost.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits	No exposure limit has been established
Personal protection:	Avoid contact with eyes and skin
Respiratory	No specific recommendations
Hand protection	Gloves
Eye protection	Safety goggles
Skin and body protection	Suitable clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Viscous Liquid
Color	Brown
Odor	Typical
pH value	4.5 ± 0.5
Melting point	NA
Boiling point	NA
Flash point	NA (aqueous)
Solubility in water	100% dispersion in cold water
Solubility in other solvents	Not determined
Flammability	NA
Autoignition temperature	NA



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Explosive properties	None
Explosion limit	NA
Oxidizing properties	None
Vapor pressure	VP of water
Density	Approx. 1020 g/l (20° C)
Bulk density	NA

10. STABILITY AND REACTIVITY

Stability	No decomposition if stored and handled properly.
Conditions to avoid	Do not store above 28°C. Do not freeze. Do not expose to the sun.
Materials to avoid	Do not expose to oxygen, acids and bases.
Hazardous decomposition products	No typical hazardous decomposition products known.

11. TOXICOLOGICAL INFORMATION

Name	BIO - T PLUS	
Active ingredient of Bacillus	Delta-endotoxin crystals and viable spores thuringiensis, var. kurstaki (B.t.k.)	
Acute toxicity	Non-toxic and non-harmful effects on humans, domestic animals, wildlife, beneficial insects, fish, and other aquatic life	
Toxicity:		
Acute oral toxicity in rat, LD 50 (OECD 423)	>2000 mg/kg	
Acute dermal toxicity in rat, LD 50 (OECD 402)	>2000 mg/kg	
Acute inhalation toxicity in rat, LC 50 (OECD 403)	>1.27 mg/L air	
Irritation:		
Acute dermal irritation in rabbit (OECD 404)	Not classified	
Acute eye irritation in rabbit (OECD 405)	Not classified	



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Skin sensitization potential (OECD 429)

May cause an allergic skin reaction

12. ECOLOGICAL INFORMATION

Information	Readily biodegradable. Non-toxic. Non-harmful effects on humans, domestic animals, wildlife, beneficial insects, fish, and other aquatic life. Safe for the environment. Tolerance exempt on all raw agricultural commodities when applied preharvest or postharvest to growing crops.
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13. DISPOSAL CONSIDERATIONS

Product	Pesticide disposal - May be disposed of on site or at an approved waste disposal facility.
Contaminated packaging	Container disposal - Triple rinse, then puncture and dispose of in a sanitary landfill, or if permitted by the authorities, by burning. Do not re-use container.

14. TRANSPORT INFORMATION

UN NUMBER -	NA
ADR/AID	Not regulated
ICAO/IAT	Not regulated
IMDG	Not regulated
OTHER INFORMATION	Protect material from direct sunlight. Containers must be stored in a shaded area. Temperature must be below 28°C.

15. REGULATORY INFORMATION

Product label name	BIO – T PLUS
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Registration

Registered in ISRAEL

Registration no. 1306/בדג/94, 7088/בדג /00
for Organic Agriculture, by the Ministry of
Agriculture Plant Protection and Inspection
Services, Israel. Certified for use in
agriculture and organic agriculture.

16. OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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