



## MATERIAL SAFETY DATA SHEET

### Manufacturer/information service:

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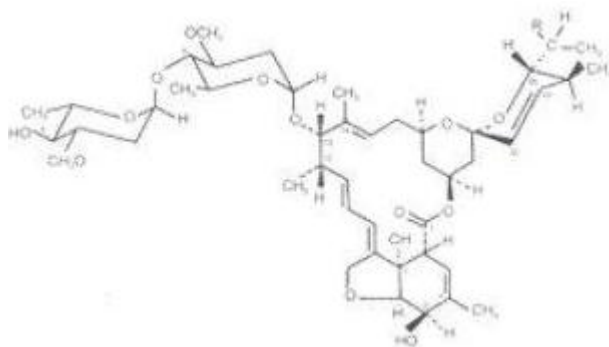
### 1. Chemical Product Identification

Common Name: Bacillus thuringiensis 8000 IU/mg WP

Molecular Formula:  $C_{22}H_{32}N_5O_{16}P$

Molecular Weight: 625.9

Structural Formula:



Chemical Name: Bacillus thuringiensis

Form: Powder

Color: Grey white to brown

Odor: Slight fish odour

CAS No.: 68038-71-1

### 2. Composition / Information On Ingredients

Composition	CAS No.	Content
Bacillus thuringiensis	68038-71-1	8000 IU/mg

### 3. Hazards Identification



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Notes to Physician: There is no specific antidote if this product is ingested. If a large amount has been ingested emesis is inadequate, lavage stomach. Treat symptomatically.

Symptoms of Acute Exposure: Exposure may result in eye irritation. A skin sensitization(allergic) reaction may occur in sensitive individuals.

Hazardous Decomposition Products: None Known.

Unusual Fire, Explosion and Reactivity Hazards: None Known.

#### 4. First Aid Measures

If poisoning is suspected, immediately contact a physician, the nearest hospital, or the nearest Poison Control Center. Tell the person contacted the complete product name, and the type and amount of exposure. Describe any symptoms and follow the advice given:

Inhalation: Move victim from contaminated area to fresh air. Apply artificial respiration if necessary.

Ingestion: If victim is fully conscious, give a large quantity of water to drink and induce vomiting. Never give anything by mouth to an unconscious person.

Skin contact: Wash with plenty of soap and water, including hair and under fingernails. Do not apply any medicating agents except on the advice of a physician. Remove contaminated clothing and decontaminate prior to use.

Eyes contact: Immediately rinse eyes with a large amount of running water. Hold eyelids apart to rinse the entire surface of the eyes and lids. Do not apply any medicating agents except on the advice of a physician.

Notes to Physician: There is no specific antidote if this product is ingested. If a large amount has been ingested and emesis is inadequate, lavage stomach. Treat symptomatically.

#### 5. Fire-Fighting Measures

Fire and Explosion:

FLASH POINT(Test Method): Not Available

FLAMMABLE LIMITS(% in Air): Not Available

Autoignition Temperature: Not Available

Flammability: Not Applicable

UNUSUAL FIRE,EXPLOSION and REACTIVITY HAZARDS: None Known

IN CASE OF FIRE: Use dry chemical, foam, or CO2 extinguishing media. Wear full protective clothing and self-contained breathing apparatus.



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Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion.

Prevent use of contaminated buildings, area, and equipment until decontaminated.

## 6. Accidental Release Measures

### IN CASE OF SPILL OR LEAK:

Wear chemical safety glasses with side shields or chemical goggles, rubber gloves, rubber boots, long-sleeved shirt, long pants, head covering, and NIOSH-approved chemical cartridge pesticide respirator with organic vapor pre-cartridges or a supplied-air respirator. For small spills, cover with an absorbent material such as pet litter, Sweep up, and place in an approved chemical container. Wash the spill area with water containing a strong detergent, absorb with pet litter or other absorbent material, sweep up and place in a chemical container. Seal the container and handle in an approved manner. Flush the area with water to remove any residue. Do not allow wash water to contaminate water supplies.

## 7. Handling And Storage

Store the material in a well-ventilated, secure area out of the reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco usage, and cosmetic application in areas where there is a potential for exposure to the material, Always wash thoroughly after handling.

## 8. Exposure Controls/Personal Protection

INGESTION: Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Always wash thoroughly after handling.

EYE CONTACT: To avoid eye contact, wear safety glasses with side shields or chemical goggles.

SKIN CONTACT: To avoid skin contact, wear rubber gloves, rubber boots, long-sleeved shirt, long pants and a head covering.

INHALATION: To avoid breathing mist or vapors, wear a NIOSH-approved chemical cartridge pesticide respirator with organic vapor pre-cartridges or a supplied-air respirator.

## 9. Physical and Chemical Properties



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Appearance: Grey white to brown powder

Odour: Slight fish odour

pH: 6.0-7.5

Fineness (through 75 $\mu$ m sieve):  $\geq$ 98%

Suspensibility:  $\geq$ 70%

Wetting Time:  $\leq$ 180s

Moisture:  $\leq$ 4.0%

## 10. Stability and Reactivity

Stability: Stable at normal condition.

Hazardous Polymerization: Will Not Occur.

Conditions to Avoid: None Known.

HAZARDOUS DECOMPOSITION PRODUCTS: None Known.

## 11. Toxicological Information

Acute oral LD50 for rats: >5050 a.i.mg/kg

Acute dermal LD50 for rats: >5000 a.i.mg/kg

Acute inhalation toxicity LC50 (4 h) for rats: >5.4 a.i.mg/L

Skin irritation: Non-irritating to skin (rabbits)

Eye irritation: Non-irritating to eyes (rabbits)

Skin sensitization for guinea pig: Non-sensitizing.

## 12. Ecological And Ecotoxicological Information

Effects on birds: Acute oral LC50 for Bobwhite quail is more than 3077 a.i. mg/kg

Effects on fish: Acute 96 h LC50 for Rainbow trout is 370 a.i.mg/L

Effects on Daphnia magna: Acute 48 h EC50 for Daphnia magna is 25 a.i. mg/L

Effects on bees: The acute oral 48 h LD50 is >100 a.i. $\mu$ g/bee

## 13. Disposal Considerations

DISPOSAL: Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.



**14. Transport Information**

Not applicable.

**15. Regulatory Information**

Not applicable.

**16. Other Information**

All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are presented in good faith and believed to be correct. This information applies to the product as such. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear. It is the responsibility of persons on receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produce formulations containing this product, it is the recipients sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.