

BioBit DF

HAZARDOUS, NON-DANGEROUS GOODS

1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name:	BioBit DF
Recommended use:	An organic insecticide for the control of caterpillars on fruit, vegetable and ornamental crops.
Registered to:	Valent BioSciences Corporation 870 Technology Way Libertyville, Illinois, USA 60048
NZ Agent:	Sumitomo Chemical Australia Pty Ltd A.B.N. 21 081 096 255 242 Beecroft Road, Epping NSW, AUSTRALIA 2121
Distributed by:	Grochem (AgriNova New Zealand Limited)
Company No.:	9429036821501
Street Address:	15 Sunlight Grove Porirua New Zealand
Telephone:	+64 4 237 0905
Email:	grochem@grochem.com
Emergency telephone:	New Zealand 0800 CHEMCALL – 24 hours (0800 243 6225) Australia 1800 127 406 Other locations +64 4 917 9888 or The National Poisons Centre 0800 POISON (0800 764 766)

2. HAZARDS IDENTIFICATION

This material is hazardous according to criteria of EPA New Zealand.



Signal Word:	Warning
Hazard Classifications:	Eye Irritation – Category 2 Designed for Biocidal Action (Biocidal against Lepidoptera. Do not apply in a way that adversely affects native Lepidoptera found only in region of application. Avoid contamination of water supply with product or container).
Hazard Statements:	H319 – Causes serious eye irritation. H413 – May cause long lasting harmful effects to aquatic life.
Prevention Precautionary Statements:	P102 – Keep out of reach of children. P103 – Read carefully and follow all instructions. P264 – Wash hands, face, and all exposed skin thoroughly after handling. P273 – Avoid release to the environment. P280 – Wear protective gloves/protective clothing including eye/face protection and suitable respirator.

Response Precautionary Statements:	P101 – If medical advice is needed, have product container or label at hand. P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 – If eye irritation persists: Get medical advice/attention.
Storage Precautionary Statement:	Not allocated
Disposal Precautionary Statement:	P501 – Dispose of contents/container in accordance with local, regional, national and international regulations.
DANGEROUS GOOD CLASSIFICATION:	Not classified as Dangerous Goods by the criteria of the “Australian Code for the Transport of Dangerous Goods by Road & Rail” and the “New Zealand NZS5433: Transport of Dangerous Goods on Land”.

3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS NO	PROPORTION
<i>Bacillus thuringiensis</i> subsp <i>kurstaki</i>	68038-71-1	54 % (w/w)
Ingredients determined to be Non-Hazardous		Balance

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

Inhalation:	Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.
Skin Contact:	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If swelling, redness, blistering or irritation occurs seek medical assistance.
Eye contact:	If in eyes, hold eyelids apart and flush the eyes continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a Doctor; or for at least 15 minutes and transport to Doctor or Hospital.
Ingestion:	Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Seek medical advice.
PPE for First Aiders:	Wear overalls, gloves, safety glasses. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.
Notes to physician:	Treat symptomatically.

5. FIRE FIGHTING MEASURES

Hazchem Code:	Not applicable.
Suitable extinguishing media:	If material is involved in a fire use water fog (or if unavailable fine water spray), alcohol resistant foam, standard foam, dry agent (carbon dioxide, dry chemical powder).
Specific hazards:	Combustible material.
Firefighting further advice:	On burning or decomposing may emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion or decomposition.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILLS:	Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours or dust. Wipe up with absorbent (clean rag or paper towels). Collect and seal in properly labelled containers or drums for disposal.
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LARGE SPILLS

Clear area of all unprotected personnel. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of dust. Work up wind or increase ventilation. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up but avoid generating dust. Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.

Dangerous Goods - Initial Emergency Response Guide No:

Not applicable

7. HANDLING AND STORAGE

Handling: Avoid eye contact and repeated or prolonged skin contact. Avoid inhalation of dust.

Storage: Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Store away from sources of heat and/or ignition. Keep container standing upright. Keep containers closed when not in use - check regularly for spills.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits: No value assigned for this specific material by WorkSafe New Zealand.

Biological Limit Values: As per the WorkSafe New Zealand the ingredients in this material do not have a Biological Limit Allocated.

Engineering Measures: Natural ventilation should be adequate under normal use conditions.

Personal Protection Equipment: OVERALLS, GLOVES, SAFETY GLASSES.
Personal protective equipment (PPE) must be suitable for the nature of the work and any hazard associated with the work as identified by the risk assessment conducted. Wear overalls, gloves, safety glasses. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Hygiene measures: Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid eye contact and repeated or prolonged skin contact. Avoid inhalation of dust. Ensure that eyewash stations and safety showers are close to the workstation location.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Powder	Solubility:	Suspends readily in water
Colour:	Yellow/brown	Density:	0.473 kg/L
Odour:	Faint organic/malt	pH:	4.1(10% slurry at 24°C)

10. STABILITY AND REACTIVITY

Chemical stability: This material is thermally stable when stored and used as directed.

Conditions to avoid: Elevated temperatures and sources of ignition.

Incompatible materials: Oxidising agents. Alkalis will inactivate product

Hazardous decomposition products: Oxides of carbon and nitrogen, smoke and other toxic fumes.

Hazardous reactions: No known hazardous reactions.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

ACUTE EFFECTS

Inhalation:	Material may be an irritant to mucous membranes and respiratory tract.
Skin contact:	Contact with skin may result in irritation.
Ingestion:	Swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract.
Eye contact:	An eye irritant. Exposure to the dust may cause discomfort due to particulate nature. May cause physical irritation to the eyes.

ACUTE TOXICITY

Inhalation:	This material has been classified as not hazardous for acute inhalation exposure. Acute toxicity estimate (based on ingredients): LC50 > 5.0 mg/L for dust.
Skin contact:	This material has been classified as not hazardous for acute dermal exposure. Acute toxicity estimate (based on ingredients): LD50 > 2,000 mg/Kg bw
Ingestion:	This material has been classified as not hazardous for acute ingestion exposure. Acute toxicity estimate (based on ingredients): LD50 > 2,000 mg/Kg bw
Corrosion/Irritancy:	Eye: this material has been classified as a Category 2 Hazard (reversible effects to eyes). Skin: this material has been classified as not corrosive or irritating to skin.
Sensitisation:	Inhalation: this material has been classified as not a respiratory sensitiser. Skin: this material has been classified as not a skin sensitiser.
Aspiration hazard:	This material has been classified as not an aspiration hazard.
Specific target organ toxicity (single exposure):	This material has been classified as not a specific hazard to target organs by a single exposure.

CHRONIC TOXICITY

Mutagenicity:	This material has been classified as non-hazardous.
Carcinogenicity:	This material has been classified as non-hazardous.
Reproductive toxicity (including via lactation):	This material has been classified as non-hazardous.
Specific target organ toxicity (repeat exposure):	This material has been classified as non-hazardous.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Biobit® DF is toxic only to caterpillars of certain lepidopterous insects (moths and butterflies). It does not harm beneficial insects and mite predators, and leaves no harmful crop residues.

Acute aquatic hazard:	This material has been classified as not hazardous for acute aquatic exposure. Acute toxicity estimate (based on ingredients): > 100 mg/L
Chronic aquatic hazard:	This material has been classified as a Category Chronic 4 Hazard.
Ecotoxicity in the soil environment:	This material has been classified as non-hazardous.
Ecotoxicity to terrestrial vertebrates:	This material has been classified as non-hazardous.
Ecotoxicity to terrestrial invertebrates:	This material has been classified as non-hazardous.
Ecotoxicity:	No information available.
Persistence and degradability:	No information available.
Bioaccumulative potential:	No information available.
Mobility:	No information available

13. DISPOSAL CONSIDERATIONS

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible, material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT

Not classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

MARINE TRANSPORT

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

AIR TRANSPORT

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

15. REGULATORY INFORMATION

Regulatory status:

Registered pursuant to the ACVM Act 1997, No. P7693.
See www.foodsafety.govt.nz for registration conditions.

Approved Pursuant to the HSNO Act 1996, Number HSR000698.
See www.epa.govt.nz for approval conditions.

HSNO Controls:

Trigger quantities for this substance:

SDS must be available for	0.1kg
Signage	10,000kg
Emergency Plan	10,000kg

16. OTHER INFORMATION

Reason for issue:

5 Yearly Revision

This information was prepared in good faith from the best information available at the time of issue. It is based on the present level of research and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorised use of this information or for any modified or altered versions.

If you are an employer, it is your duty to tell your employees, and any others that may be affected, of any hazards described in this sheet and of any precautions that should be taken.

Safety Data Sheets are updated frequently. Please ensure you have a current copy.

This SDS summarises our best knowledge of the health and safety hazard information available for this product and how to safely handle and use it. Since the use of this information and the conditions of the use of this product are not under the control of Grochem, it is the user's responsibility to determine conditions of safe use of the product.