

Infosafe No™ 3NUB5 Issue Date : November 2016 ISSUED by NUFARMNZ

Product Name **DiPel® DF**

1. Identification

GHS Product Identifier	DiPel® DF
Product Code	03513
Product Type	Biological insecticide
Company Name	Nufarm NZ
Address	6 Manu Street, Otahuhu Auckland 2024 New Zealand
Telephone/Fax Number	Tel: 0-9-270 4150 Fax: 0-9-270-4159
Emergency phone number	0800 651 911
Recommended use of the chemical and restrictions on use	An organic insecticide for the control of caterpillars on fruit, vegetables and ornamental crops.
Other Information	This SDS describes, to the best of our knowledge, the properties of the concentrated product. The physical properties and some of the assessments do not apply to the properties of the product once it has been diluted for application. Acute health effects of the diluted product are likely to be much less severe.

2. Hazard Identification

Other Information	6.4A eye irritant, 9.1D aquatic toxicant, TOXICITY Harmful - may cause eye irritation. ECOTOXIC Has biocidal action against Lepidoptera.
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3. Composition/information on ingredients

Chemical Characterization	Solid		
Ingredients	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Other ingredients not disclosed by supplier	N/A	46%
	Bacillus thuringiensis subspecies kurstaki (H-3a, 3b HD1)	68038-71-1	32,000 International Units/mg

4. First-aid measures

First Aid Measures	For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately. Begin artificial respiration if the victim is not breathing. Use mouth-to-nose rather than mouth-to-mouth. Obtain medical attention.
Inhalation	Remove patient to fresh air. Lay down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance immediately.
Ingestion	Never give anything by mouth to an unconscious person. If swallowed do NOT induce vomiting. For advice, contact the National Poisons Centre (0800 764 766). Seek medical assistance immediately.
Skin	Immediately flush body and clothes with large amounts of water. Remove contaminated clothing and footwear. Wash affected areas with soap and water. If a large area is affected seek medical assistance.
Eye contact	Flush eyes with plenty of water for 15 minutes holding eyelids open if necessary. Remove contact lenses, if present and easy to do. Seek medical assistance even if there are no immediate symptoms.
First Aid Facilities	Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.
Advice to Doctor	Treat symptomatically. Medical conditions aggravated by exposure - impaired respiratory function.

5. Fire-fighting measures

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Suitable extinguishing media	Choose extinguishing media to suit the burning material. Water fog, foam, carbon dioxide or dry chemical.
Special Protective Equipment for fire fighters	Full protective clothing and self-contained breathing apparatus.
Specific Methods	Keep up wind. Do not allow washings to reach sewage or effluent systems.
Other Information	Location Certificate: Not applicable Hazardous Atmosphere Zone: Not applicable Number of Fire Extinguishers: Not applicable

6. Accidental release measures

Spills & Disposal	Wear protective clothing. Clear area of unprotected personnel. Sweep up solids without generating dust (use water to dampen). Contain and absorb liquid spills with inert material and place in waste containers. If spill does enter waterways contact the local authority. Collect in an appropriate sealable container for disposal in an approved landfill.
Personal Protection	For appropriate personal protective equipment (PPE), refer Section 8.
Environmental Precautions	Prevent from entering drains, waterways or sewers.

7. Handling and storage

Precautions for Safe Handling	Avoid skin and eye contact and inhalation of spray mist or dust. APPROVED HANDLER: Not applicable TRACKING: Not applicable RECORD KEEPING: Not applicable
Conditions for safe storage, including any incompatibilities	High temperatures will damage the bacterial spores contained in DiPel DF . Store in original container tightly closed and in a locked, dry, cool area away from foodstuffs and out of direct sunlight. Storage must be in accordance with NZS 8409 Management of Agrichemicals.
Other Information	Always read the label and any attached leaflet before use.

8. Exposure controls/personal protection

Occupational exposure limit values	No exposure limits (WES, TEL or EEL's) have been specifically assigned for this product. As with all dusts the WES for particulates not otherwise classified = 10mg/m ³ .
Appropriate engineering controls	Handle in well ventilated areas, generally natural ventilation is adequate.
Personal Protective Equipment	When opening the container, preparing spray and using the prepared spray wear safety goggles, impervious gloves, cotton overalls buttoned to the neck and wrist, and boots.
Hygiene Measures	Do not eat, drink or smoke while using. Remove protective clothing and wash hands and face thoroughly before meals and after work. Wash protective clothing daily after work.

9. Physical and chemical properties

Form	Solid
Appearance	Yellow to mustard brown fine granules
Odour	Faint organic/malt odour
Solubility in Water	Disperses in water.
pH	4.1 (10% slurry @ 24°C)
Density	0.473g/mL
Other Information	(WG) Water Dispersible Granule

10. Stability and reactivity

Chemical Stability	Stable under normal conditions of handling and storage.
Incompatible Materials	Alkalinity inactivates product.

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Hazardous Decomposition Products	None known.
Hazardous Polymerization	Hazardous polymerisation will not occur.

11. Toxicological Information

Acute Toxicity - Oral	LD50 (>5050) mg/kg (rat)
Acute Toxicity - Dermal	LD50 (>2020) mg/kg (rabbit)
Acute Toxicity - Inhalation	Due to the non-dusty characteristics of the product, the test facility was unable to generate a sufficiently high enough concentration of respirable particles. Inhalation of dust may result in respiratory tract irritation.
Skin Sensitisation	In a study with this product, no skin sensitization was observed.
Carcinogenicity	No data to support a positive result.
Reproductive Toxicity	No adverse effects known. No adverse teratological effects known.
Serious eye damage/irritation	Transient, mild to moderate irritation was observed in test animals in a study with this product. Rinsing the eyes with water dramatically reduced irritation scores.
Skin corrosion/irritation	Transient, slight or mild irritation noted in a dermal irritation study with this product.

12. Ecological information

Ecological Information	Low toxicity to fish and wildlife.
Environmental Fate	Bacillus thuringiensis subsp. kurstaki spores have a very short persistence in the environment (DT50 10h), mainly due to their u.v.-light sensitivity.
Short Summary of Assessment of Environmental Impact	DIPEL 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.

13. Disposal considerations

Product Disposal	Dispose of product only by using according to the label, or at an approved landfill.
Container Disposal	Triple rinse empty container and add rinsate to the spray tank. Recycle empty container. Otherwise crush and bury in a suitable landfill.

14. Transport information

Transport Information	It is good practice not to transport agricultural chemical products with food, food related materials and animal feedstuffs.
Storage and Transport	Not classified as Dangerous Goods for transport in New Zealand.
Other Information	Do not carry more than 3kg of DIPEL DF on a passenger service vehicle. Segregation: Check the latest Land Transport Rule Dangerous Goods Rule 45001 for additional information. Sea transport may require additional segregation. Refer NZS5433 sea segregation for details.

15. Regulatory information

National and or International Regulatory Information	Registered pursuant to the ACVM Act 1997, No. P3853 See www.foodsafety.govt.nz for registration conditions Approved pursuant to the HSNO Act 1996, Approval Code HSR000698 See www.epa.govt.nz for approval controls.
Hazard Rating Systems	NFPA/HMIS: 1-1-1
Other Information	BioGro Organic Certification: 'Permitted Input'. BioGro Number: 4027 .

16. Other Information



Safety Data Sheet

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Contact Person/Point IN AN EMERGENCY, DIAL 111 - FIRE OR POLICE
24Hr Tollfree Emergency No: 0800 651 911
24Hr Emergency No: National Poisons Centre Phone: 0800 764 766

Revisions 5 yearly review carried out. Various changes and updates made to document.

Highlighted

Other Information Supersedes SDS issued November 2011
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