

DIPEL[®] DF BIOLOGICAL INSECTICIDE**SECTION 1: CHEMICAL PRODUCT AND COMPANY INFORMATION**

Product Name: DiPel DF Biological Insecticide
Product Use: Controls Lepidopteran caterpillars in Agricultural and Non-Agricultural Uses: Vegetables, Fruit, Vines, Oilseeds, Cereal Grains, Herbs, Tobacco, Ornamentals, Forestry, Amenity Trees and Turf.
Company: Sumitomo Chemical Australia Pty Ltd
A.B.N. 21 081 096 255
Address: 501 Victoria Avenue Chatswood NSW 2067
Telephone Number: (02) 9904-6499 (Mon–Fri 8am–5pm EST)
Emergency Telephone Number: 1800 024 973 (24 hours) (EMERGENCIES ONLY)

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Entity	CAS number	Proportion
<i>Bacillus thuringiensis</i> subsp <i>kurstaki</i>	68038-71-1	54%
Other ingredients determined not to be hazardous		46%

SECTION 3: HAZARDS IDENTIFICATION

Approved Criteria Classification: NOHSC exposure standards have not been assigned for the active ingredient or the excipients in the formulation.
SUSDP Classification: Not Scheduled
ADG Classification: Not a Dangerous Good

EMERGENCY OVERVIEW

Colour: Yellow to mustard brown
Physical description: Fine granules
Odour: Faint organic/malt odour
Major health hazards: Product is non-toxic by ingestion, skin contact or inhalation.

POTENTIAL HEALTH EFFECTS

Acute Toxicity: No adverse health effects are expected if this product is used in accordance with the label. Poisoning is unlikely to occur.

Signs and Symptoms of Systemic Effects: Direct contact with eyes may cause mild irritation. Inhalation of dust may result in respiratory tract irritation

Eye: Non-Irritant
Skin: Non-Irritant and non-sensitizer
Ingestion: Not a likely route of exposure
Inhalation: Not a likely route of exposure

SECTION 4: FIRST AID MEASURES

Scheduled Poisons:	Poison Information Centres in each State capital city can provide additional assistance for scheduled poisons. Telephone: 131126 (Australia).
Eye contact:	Remove from source of exposure. Flush with copious amounts of water. If irritation persists or signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.
Skin contact:	Remove from source of exposure. Flush with copious amounts of water. If irritation persists or signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.
Ingestion:	Remove from source of exposure. If signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.
Inhalation:	Remove from source of exposure. If signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.
Note to physician:	Medical conditions aggravated by exposure – impaired respiratory function. No known antidote, provide symptomatic/supportive care as necessary.

SECTION 5: FIRE FIGHTING MEASURES

Fire and Explosion Hazards:	Not flammable.
Extinguishing Media:	Use appropriate medium for the underlying cause of the fire.
Hazardous Decomposition Products:	None
Hazardous reactions:	None. Hazardous polymerisation will not occur.
Materials to avoid:	None
Fire Fighting:	Wear protective clothing and self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Emergency Telephone Number: 1800 024 973 (24 hours) (EMERGENCIES ONLY)

Observe precautions in Section 8: Personal Protection

Stop the source of the spill if it is safe to do so. Contain the spill to prevent further contamination of the soil, surface water, or ground water.

FOR SPILLS ON LAND

CONTAINMENT: Avoid runoff into storm sewers or other bodies of water.
CLEANUP: Recover product and place in an appropriate container for disposal. Avoid breathing dust. Ventilate and wash the spill area. Pick up wash liquid with additional absorbent and place in a chemical waste container.

FOR SPILLS IN WATER

CONTAINMENT: Avoid runoff into storm sewers or other bodies of water. Isolate contaminated water.
CLEANUP: Remove contaminated water for treatment or disposal.

SECTION 7: HANDLING AND STORAGE

Keep out of reach of children. Keep pesticide in original container. Do not store near flame, sparks or hot surfaces. Do not store or transport near food or feed. Do not contaminate food or feed. Do not put into food or drink containers. Store in a cool, dry place, out of direct sunlight.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

EYE PROTECTION:	Do not get this material in your eyes. Eye contact can be avoided by wearing protective eyewear.
RESPIRATION/VENTILATION:	Not usually required however this material may be a respiratory irritant and unless ventilation is adequate, the use of approved respiratory protection is recommended. Use only in well ventilated areas.
SKIN PROTECTION:	Avoid contact with skin or clothing. Skin contact should be minimised by wearing protective clothing including impervious gloves. Wash thoroughly with soap and water after handling.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Yellow to mustard brown fine granules
ODOUR:	Faint organic/malt odour
MELTING POINT:	Not applicable
BOILING POINT:	Not applicable
DENSITY:	0.473 g/mL
SOLUBILITY:	Suspends readily in water
VAPOUR PRESSURE:	Not determined
pH:	4.1 (10% slurry @ 24°C)

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY:	Stable. No oxidising or reducing properties.
INCOMPATIBILITY:	Alkalinity inactivates product.
HAZARDOUS DECOMPOSITION PRODUCTS:	None that are known. Hazardous polymerisation will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute (Product Specific)

Eye 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. Classified as a non-irritant.
Oral LD ₅₀ (rat):	>5,050 mg/kg (rat). EPA Toxicity Category IV
Dermal LD ₅₀ (rabbits):	>2,020 mg/kg (rabbit). EPA Toxicity Category III
Inhalation toxicity:	Due to the non-dusty characteristics of the product, the test facility was unable to generate a sufficiently high enough concentration of respirable particles. Animal test not warranted.
Irritation of the skin (rabbits):	Transient, slight or mild irritation noted in a dermal irritation study with this product. EPA Toxicity Category IV.
Sensitisation:	In a study with this product, no skin sensitization was observed.

Chronic/Carcinogenicity

No adverse effects known. None of the components are classified as carcinogens.

Teratology (Birth Defects) Information

No adverse effects known

Reproduction Information

No adverse effects known

SECTION 12: ECOLOGICAL INFORMATION

Environmental Fate**Hydrolysis:** Not available**Photolysis:** Not available**Soil half life:** Not available**Water solubility:** Not available**Ecotoxicity****Avian** Low Toxicity to fish and wildlife**Aquatic** Low Toxicity to fish and wildlife**Other non-target organisms** Low Toxicity to fish and wildlife
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.

SECTION 13: DISPOSAL CONSIDERATIONS

Puncture, or shred and bury empty containers in a local authority landfill. If not available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots. Empty containers and product should NOT be burnt.

SECTION 14: TRANSPORT INFORMATION

No special storage or transport requirements necessary.

ADG Code: Not a Dangerous Good**HAZCHEM Code:** Not Applicable

SECTION 15: REGULATORY INFORMATION

This product is registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA).

SECTION 16: OTHER INFORMATION

Abbreviations:**NA** Not Applicable**NDA** No Data Available**Revision date:** January 2006**Revision number:**

THE INFORMATION GIVEN IN THIS MSDS IS BASED ON DATA AVAILABLE TO US AS OF THE REVISION DATE GIVEN HEREIN, AND BELIEVED TO BE CORRECT. CONTACT SUMITOMO CHEMICAL AUSTRALIA TO CONFIRM IF YOU HAVE THE MOST CURRENT MSDS.