

SAFETY DATA SHEET

Section 1: Identification: Product identifier and chemical identity

Product Identifier:	PROCLAIM® OPTI Insecticide
Other Means of Identification:	Proper shipping name: Environmentally Hazardous Substance, Solid, N.O.S. (Emamectin benzoate). Applicable only for marine and air transport
	Product code: A16955P
Recommended Use:	Insecticide for the control of various lepidopteran pests in fruit and vegetable crops as per the Directions for Use
Details of manufacturer or importer	Syngenta Australia Pty Ltd ABN 33 002 933 717
Address:	Level 1, 2-4 Lyonpark Road MACQUARIE PARK NSW 2113 AUSTRALIA
Website:	syngenta.com.au
Phone Number:	(02) 8876 8444
Emergency Phone Number:	24 hours - 1800 033 111

Section 2: Hazards identification

Classification of the Hazardous Chemical:	Acute toxicity – Oral – Category 4 Specific target organ toxicity – repeated exposure – Category 2
Signal Word:	Warning
Hazard Statement(s):	H302 Harmful if swallowed. H373 May cause damage to organs through prolonged or repeated exposure
Precautionary Statement(s):	P102 Keep out of reach of children. P103 Read label before use. P260 Do not breathe dust/mist/vapours/spray. P264 Wash hands thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P330 Rinse mouth. P309 + P311 IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. P501 Dispose of contents/container to an approved waste management facility in accordance with local, State and Territory regulations.

Hazard Symbols:



Section 3: Composition and information on ingredients

SUBSTANCE	
Chemical Identity of Pure Substance:	Emamectin-benzoate
Synonym:	MK244 Avermectin B1, 4"-deoxy-4"-(methylamino)-,(4"R)-, benzoate (salt)
CAS Number:	155569-91-8

MIXTURE		
Chemical Identity of Ingredients:	CAS No	Proportion (%w/w)
Emamectin benzoate	155569-91-8	5
other ingredients determined not to be hazardous	-	to 100

Section 4: First aid measures

Description of Necessary First Aid Measures:	<p>In case of poisoning by any exposure route get to a doctor or hospital quickly. Phone Poisons Information Centre on 131 126. Have the product label or SDS with you when calling or going for treatment.</p> <p>Ingestion: If swallowed, seek medical advice immediately and show this container or label. DO NOT induce vomiting.</p> <p>Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.</p> <p>Skin contact: Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.</p> <p>Inhalation: Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician or Poison Information Centre immediately.</p>
Symptoms Caused by Exposure:	Poisoning symptoms in laboratory animals were lack of coordination, tremors and dilatation of the pupil.
Medical Attention and Special Treatment:	<p>This material is believed to enhance GABA activity in animals. It is probably wise to avoid drugs that enhance GABA activity (barbiturates, benzodiazepines, valproic acid) in patients with potentially toxic mectin exposure. Toxicity can be minimized by early administration of chemical absorbents (e.g. activated charcoal).</p> <p>If toxicity from exposure has progressed to cause severe vomiting, the extent of resultant fluid and electrolyte imbalance should be gauged. Appropriate supportive parenteral fluid replacement therapy should be given, along with other required supportive measures as indicated by clinical signs, symptoms and measurements.</p>

Section 5: Fire fighting measures

Suitable Extinguishing Equipment:	<p>Small fires: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. DO NOT use a solid water stream as it may scatter and spread fire.</p> <p>Large fires: Use alcohol resistant foam or water spray. DO NOT use a solid water stream as it may scatter and spread fire</p>
Specific Hazards Arising from the Chemical:	As this product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion. Combustion or thermal decomposition will evolve toxic and irritant vapours. Exposure to decomposition products may be a hazard to health.
Special Protective Equipment and Precautions for Fire Fighters:	<p>When fighting a major fire wear full protective clothing and self contained breathing apparatus.</p> <p>Do not allow run-off from fire fighting to enter drains or water courses.</p> <p>Cool closed containers exposed to fire with water spray.</p>

Section 6: Accidental release measures

Personal Precautions, Protective Equipment and Emergency Procedures:	In case of spillage it is important to take all steps necessary to <ul style="list-style-type: none"> • Avoid eye and skin contact • Avoid contamination of waterways
Environmental precautions:	Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.
Methods and Materials for Containment and Clean Up:	<p>Procedure for spill</p> <ol style="list-style-type: none"> (1) Keep all bystanders away (2) Wear full length clothing and PVC gloves (3) Reposition any leaking containers so as to minimise further leakage (4) For a product spill: Sweep granule concentrates into a pile. For a prepared spray spill: Dam and absorb spill with an absorbent material (eg sand or soil) (5) Shovel the absorbed spill into drums (6) Disposal of the absorbed material will depend upon the extent of the spill <ul style="list-style-type: none"> • For quantities up to 50 kg of product bury in a secure landfill site • For quantities greater than 50 kg seek advice from the manufacturer (use emergency contact number below) before attempting disposal. Contain in a secure location until disposal method is established (7) Decontaminate spill area with detergent and water and rinse with the smallest volume of water practicable

Section 7: Handling and storage

Precautions for Safe Handling:	Harmful if swallowed. May irritate the eyes and skin. Avoid contact with eyes and skin. Wash hands after use.
Conditions for Safe Storage, Including any Incompatibilities:	Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight

Section 8: Exposure controls and personal protection

ALWAYS READ AND FOLLOW THE LABEL INSTRUCTIONS AND WARNINGS

	Component	Exposure limit	Value type
National Exposure Standards:	Silicium oxide	4 mg/m ³	TWA (inhalable dust)
Syngenta Exposure Standards:	Emamectin benzoate	0.02 mg/m ³	TWA
Biological Limit Values:	No biological limit allocated		
Engineering Controls:	No special requirements. Product is used outdoors.		
Personal Protective Equipment:	Harmful if swallowed. May irritate the eyes and skin. Avoid contact with eyes and skin. Wash hands after use.		

Section 9: Physical and chemical properties

Appearance:	brown to dark brown granules	Boiling Point/Range:	Not applicable
Odour:	Not determined	Freezing/Melting Point:	Not available
pH:	7 - 11 (1% w/v water)	Solubility:	Not determined
Vapour Pressure:	Not determined	Specific Gravity or Density:	0.452 g/cm ³
Vapour Density:	Not available		

Flash Point:	Does not flash	Explosive Properties:	Not explosive
Upper and Lower Flammable (Explosive) Limits in Air:	Not highly flammable	Oxidising Properties:	Not oxidising
Min. Ignition Temperature:	223±5°C	Combustibility:	Not applicable
		Corrosiveness:	Not corrosive

Section 10: Stability and reactivity

Reactivity:	No information available
Chemical Stability:	Stable at normal ambient temperature and pressure.
Possibility of Hazardous Reactions:	None known. Hazardous polymerization does not occur.
Conditions to Avoid:	None known.
Incompatible Materials:	None known.
Hazardous Decomposition Products:	Combustion or thermal decomposition will evolve toxic and irritant vapours.

Section 11: Toxicological information

Health Effects from Likely Routes of Exposure:	
Acute	<p>Oral toxicity: HARMFUL Tests on rats indicate this product is harmful following single doses of undiluted product. LD₅₀ = 2000 mg/kg</p> <p>Dermal toxicity: LOW TOXICITY Tests on rats indicate this product has low toxicity following skin contact with undiluted product. LD₅₀ = >2000 mg/kg</p> <p>Inhalation: LOW TOXICITY Tests on rats indicate this product is not harmful due to inhalation of the undiluted product. LC₅₀ (4 h) = >2.49 mg/L</p> <p>Skin irritation: NON IRRITANT (Rabbit)</p> <p>Eye irritation: NON IRRITANT (Rabbit)</p> <p>Sensitisation: NOT A SKIN SENSITISER (Guinea Pig)</p>
Chronic	Did not show carcinogenic, teratogenic or mutagenic effects in animal experiments. Reproductive toxicity noted in rats that is not relevant to humans. Central nervous system effects in chronic/subchronic animal tests. No adverse effects in humans are expected at levels below the occupational exposure limit and when the product is handled and used according to the label. This information applies to Emamectin benzoate.

Section 12: Ecological information

Ecotoxicity	<p>Toxicity to fish: Moderately toxic to fish <i>Cyprinus carpio</i> (common carp): 96h LC₅₀ = 4.5 mg/L <i>Oncorhynchus mykiss</i> (Rainbow trout): 96h LC₅₀ = 15 mg/L</p> <p>Toxicity to daphnia and other aquatic invertebrates: Very highly toxic to aquatic invertebrates <i>Daphnia magna</i> (Water flea): 48 h EC₅₀ = 0.011 mg/L</p> <p>Toxicity to algae: Low toxicity to algae <i>Pseudokirchneriella subcapitata</i> (green algae): 96 h E_bC₅₀ = >100 mg/L 96 h E_rC₅₀ = >100 mg/L</p>
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Toxicity to soil dwelling organisms:	Practically non-toxic to earthworms <i>Eisenia foetida</i> (earthworm): 14 d LC ₅₀ >1000 mg/kg
Bees:	Highly toxic to bees <i>Apis mellifera</i> (honey bee) Oral LD ₅₀ = 0.09 µg/bee Contact LD ₅₀ = 1.12 µg/bee
Persistence and Degradability:	Emamectin is not persistent in water and soil
Mobility	Emamectin is immobile in soil
Environmental Fate (Exposure):	Incorporated into C, N, O and H containing organic molecules.
Bioaccumulative Potential:	Emamectin does not bioaccumulate.

Section 13: Disposal considerations

Disposal Methods:	Rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on-site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush, or puncture and bury empty containers in a local authority landfill. If no landfill is 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.
Special Precautions for Incineration or Landfill:	Not applicable

Section 14: Transport information

LAND TRANSPORT ADG	Not a dangerous good in Australia		
UN Number:	None allocated	Packing Group:	None allocated
UN Proper Shipping Name:	None allocated	Special Precautions for User:	None allocated
Transport Hazard Class:	None allocated	Hazchem or Emergency Action Code:	None allocated
Subsidiary Risk:	None allocated		

SEA TRANSPORT IMDG			
UN Number:	3077	Subsidiary Risk:	None allocated
UN Proper Shipping Name:	Environmentally Hazardous Substance, Solid, N.O.S. (emamectin benzoate)	Packing Group:	III
Transport Hazard Class:	9	Environmental hazards for Transport Purposes:	Yes

AIR TRANSPORT IATA - DGR			
UN Number:	3077	Subsidiary Risk:	None allocated
UN Proper Shipping Name:	Environmentally Hazardous Substance, Solid, N.O.S. (emamectin benzoate)	Packing Group:	III
Transport Hazard Class:	9		

Section 15: Regulatory information

APVMA Product Number: 83844

Poisons Schedule (SUSMP): 6

Section 16: Any other relevant information

Date of preparation or last revision: August 2018

Source of Data: The information provided in this SDS is sourced from Syngenta internal studies which have been conducted according to Regulatory requirements including OECD and CIPAC Guidelines and EC Directives. A comprehensive package of toxicological and environmental data for the active ingredients of this product has been submitted to the government health and environment authorities and has been evaluated by expert toxicologists and environmental scientists.

Note: This product is a registered agricultural chemical and must, therefore, be used in accordance with the container label directions

CONTACT POINT: Regulatory Affairs Manager, Syngenta Australia Pty Ltd

(02) 8876 8444

24 HOURS EMERGENCY CONTACT: 1800 033 111

This Safety Data Sheet summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

DISCLAIMER

This product complies with the specifications in its statutory registration. Implied terms and warranties are excluded. Syngenta's liability for breach of the express or any non-excludable implied warranty is limited to product replacement or purchase price refund. The purchaser must determine suitability for intended purpose and take all proper precautions in the handling, storage and use of the product including those on the label and/or safety data sheet failing which Syngenta shall have no liability.