


SAFETY DATA SHEET

Section 1: Identification: Product identifier and chemical identity

Product Name:	VOLIAM TARGO Insecticide
Other Names:	Proper shipping name: Environmentally Hazardous Substance, Liquid, N.O.S. (abamectin, chlorantraniliprole) Applicable only for marine and air transport
	Product code: A15893A
Recommended Use:	Insecticide for the control of certain mites and insect pests in pome fruit
Company Details:	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
Telephone Number:	(02) 8876 8444
Emergency Telephone Number:	24 hours - 1800 033 111

Section 2: Hazards identification

Classification of the Hazardous Chemical:	Acute toxicity – Oral – Category 4 Eye irritant – Category 2A
Signal Word:	WARNING
Hazard Statement(s):	H302 Harmful if swallowed H319 Causes serious eye irritation
Precautionary statements	P102 Keep out of reach of children. P103 Read label before use. P264 Wash hands thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P280 Wear eye protection/face protection. P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P330 Rinse mouth. 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. P501 Dispose of contents/container to an approved waste management authority.
Hazard Symbols:	

Section 3: Composition and information on ingredients

SUBSTANCE		
Chemical Identity of Pure Substance:	Abamectin	Chlorantraniliprole
Synonym:	Avermectin, MK 936	SYN 545170
CAS Number:	65195-55-3, 65195-56-4	500008-45-7

MIXTURE		
Chemical Identity of Ingredients	CAS No	Proportion (% w/w)
propane-1,2-diol	57-55-6	10–15
Chlorantraniliprole	500008-45-7	4.29
poly(oxy-1,2-ethanediyl),-[2,4,6-tris(1-phenylethyl)phenyl]-hydroxy-	99734-09-5 70559-25-0	1–5
Abamectin	71751-41-2	1.71
1,2-benzisothiazol-3-one	2634-33-5	<1
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 the 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:	Lack of coordination, tremors, 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 mectins exposure.</p> <p>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.</p> <p>Appropriate supportive parental 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 Media:	<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>
Hazards from Combustion Products:	<p>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.</p>
Special Protective Precautions and Equipment for Fire Fighters:	<p>When fighting a major fire wear full protective clothing and self contained breathing apparatus. Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.</p>

Section 6: Accidental release measures

Emergency Procedures:	<p>In case of spillage it is important to take all steps necessary to</p> <ul style="list-style-type: none"> • Avoid eye and skin contact • Avoid contamination of waterways
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) 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 L of product bury in a secure landfill site • For quantities greater than 50 L 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:	<p>Harmful if swallowed. Harmful if inhaled. May irritate the eyes. Avoid contact with eyes. DO NOT inhale spray mist. When opening the container, preparing the product for use and using the product wear:</p> <ul style="list-style-type: none"> - cotton overalls buttoned to the neck and wrist (or equivalent clothing) - elbow-length chemical resistant gloves - half face piece respirator with organic vapour/gas cartridge or canister. <p>Wash hands after use. After each day's use, wash gloves, respirator (if rubber, wash with detergent and warm water) and contaminated clothing.</p>
Conditions for Safe Storage:	<p>Store in the closed, original container in a cool, well ventilated area out of direct sunlight.</p>

Section 8: Exposure controls and personal protection

ALWAYS READ AND FOLLOW THE LABEL INSTRUCTIONS AND WARNINGS

	<i>Component</i>	<i>Exposure limit</i>	<i>Value type</i>
National Exposure Standards:	propane-1,2-diol	10 mg/m ³ (particulates only) 150 ppm, 470 mg/m ³ (vapour & particulates)	8 h TWA
Syngenta Exposure Standards:	Abamectin	0.02 mg/m ³	8 h TWA
Supplier Exposure Standards	Chlorantraniliprole	10 mg/m ³ (total dust) 5 mg/m ³ (respirable dust)	8 h TWA
Biological Limit Values:	No biological limit allocated		
Engineering Controls:	No special requirements. Product is used outdoors.		

Personal Protective Equipment: Harmful if swallowed. Harmful if inhaled. May irritate the eyes. Avoid contact with eyes. DO NOT inhale spray mist. When opening the container, preparing the product for use and using the product wear:

- cotton overalls buttoned to the neck and wrist (or equivalent clothing)
- elbow-length chemical resistant gloves
- half face piece respirator with organic vapour/gas cartridge or canister.

Wash hands after use. After each day's use, wash gloves, respirator (if rubber, wash with detergent and warm water) and contaminated clothing.

Section 9: Physical and chemical properties

Appearance:	White liquid	Boiling Point/Range:	Not available
Odour:	Like soap, weak	Freezing/Melting Point:	Not available
pH:	6.6 at 1% w/v (25°C)	Solubility:	Not available
Vapour Pressure:	Not available	Specific gravity	1.05 g/mL
Vapour Density:	Not available		

Flash point	Not detected below 102°C	Explosive Properties:	Not explosive
Flammability (solid, gas):	Not available	Oxidising Properties:	Not oxidising
Minimum Ignition Temperature:	553°C	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:	No hazardous reactions by normal handling and storage according to provisions.
Conditions to Avoid:	No decomposition if used as directed.
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:	Oral toxicity:	MODERATE TOXICITY Tests on rats indicate this product has a low toxicity following single doses of undiluted product. (LD ₅₀ 550 mg/kg)
	Dermal toxicity:	LOW TOXICITY Tests on rabbits indicate this has a low toxicity following skin contact with undiluted product (LD ₅₀ >5000 mg/kg)
	Inhalation:	LOW TOXICITY Tests on rats indicate this product is harmful due to inhalation of undiluted product. LC ₅₀ (4h) >3.394 mg/L
	Skin irritation:	NON-IRRITANT
	Eye irritation:	NON-IRRITANT
	Sensitisation:	NON-SENSITISER

Chronic: *Abamectin*: Did not show carcinogenic or mutagenic effects in animal experiments. Abamectin and its delta-8,9 isomer have caused foetal abnormalities including cleft palate, skeletal abnormalities and abdominal wall defects in mice and rabbits at doses toxic to the mother. These effects are considered to be not relevant to normal exposure to this product as the effects on the foetus occurred at doses which were toxic to the mother.
Chlorantraniliprole: Did not show carcinogenic, teratogenic or mutagenic effects in animal experiments.

Section 12: Ecological information

Ecotoxicity:	Toxicity to fish:	Highly toxic to fish <i>Oncorhynchus mykiss</i> (rainbow trout): LC ₅₀ 0.21 mg/L, 96 h
	Toxicity to daphnia and other aquatic invertebrates:	Highly toxic to aquatic invertebrates <i>Daphnia magna</i> (Water flea): EC ₅₀ = 0.006 mg/L, 48 h
	Toxicity to algae:	Slightly toxic to algae <i>Pseudokirchneriella subcapitata</i> (green algae): EbC ₅₀ 36 mg/L, 96 h <i>Pseudokirchneriella subcapitata</i> (green algae): ErC ₅₀ >100 mg/L, 96 h
	Toxicity to soil dwelling organisms	Moderately toxic to soil dwelling organisms
	Bees	Highly toxic to bees
Persistence and Degradability:	Abamectin is not persistent in soil or water. It is not readily biodegradable. Chlorantraniliprole is not readily biodegradable.	
Mobility	Abamectin has slight mobility in soil and chlorantraniliprole has medium mobility in soil.	
Environmental Fate (Exposure):	Abamectin is fully degraded and incorporated into organic molecules. Chlorantraniliprole binds to soil.	
Bioaccumulative Potential:	Abamectin or chlorantraniliprole do not bioaccumulate.	

Section 13: Disposal considerations

Disposal Methods:	Triple or preferably pressure 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 deliver empty packaging for appropriate disposal to an approved waste management facility. If an approved waste management facility is not available bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. DO NOT burn empty containers or product.
Special Precautions for Landfill or Incineration:	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
Class:	None allocated	Hazchem Code:	None allocated
Subsidiary Risk:	None allocated		

SEA TRANSPORT IMDG			
UN Number:	UN 3082	Subsidiary Risk:	None allocated
UN Proper Shipping Name:	Environmentally Hazardous Substance, Liquid, N.O.S. (Abamectin, Chlorantraniliprole)	Packing Group:	III
Class:	9	Marine Pollutant:	Yes

AIR TRANSPORT IATA - DGR			
UN Number:	UN 3082	Subsidiary Risk:	None allocated
UN Proper Shipping Name:	Environmentally Hazardous Substance, Liquid, N.O.S. (Abamectin, Chlorantraniliprole)	Packing Group:	III
Class:	9		

Section 15: Regulatory information

APVMA Product Number:	81921
Poisons Schedule (SUSDP):	6

Section 16: Any other relevant information

Date of preparation or last revision: May 2017

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 Manager, Syngenta Australia Pty Ltd
(02) 8876 8444

24 HOURS EMERGENCY CONTACT: 1800 033 111

This Material 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.