

## SAFETY DATA SHEET

### Section 1: Identification: Product identifier and chemical identity

|  |   |
|--|---|
| <b>Product Identifier:</b>                 | <b>VERTIMEC® Miticide/Insecticide</b>   |
| <b>Other Means of Identification:</b>      | <b>Proper shipping name:</b><br>Pesticide Liquid Toxic, N.O.S. (Abamectin)              |
|  | <b>Product code:</b> A8612A   |
| <b>Recommended Use:</b>                    | Insecticide   |
| <b>Details of manufacturer or importer</b> | <b>Syngenta Australia Pty Ltd</b><br><b>ABN 33 002 933 717</b>                          |
| <b>Address:</b>                            | <b>Level 1, 2-4 Lyonpark Road</b><br><b>MACQUARIE PARK NSW 2113</b><br><b>AUSTRALIA</b> |
| <b>Website:</b>                            | <b>syngenta.com.au</b>  |
| <b>Phone Number:</b>                       | <b>(02) 8876 8444</b>   |
| <b>Emergency Phone Number:</b>             | <b>24 hours - 1800 033 111</b>  |

### Section 2: Hazards identification

|  |  |
|--|--|
| <b>Classification of the Hazardous Chemical:</b> | Acute toxicity – Oral – Category 3<br>Skin sensitisation – Category 1<br>Eye irritation – Category 2<br>Specific target organ toxicity - single exposure – Category 3<br>Reproductive toxicity – Category 1B<br>Specific target organ toxicity - repeated exposure – Category 2  |
| <b>Signal Word:</b>                              | DANGER   |
| <b>Hazard Statement(s):</b>                      | H301 Toxic if swallowed<br>H317 May cause an allergic skin reaction<br>H319 Causes serious eye irritation<br>H335 May cause respiratory irritation<br>H360 May damage the unborn child<br>H373 May cause damage to organs through prolonged or repeated exposure if swallowed  |
| <b>Precautionary Statement(s):</b>               | P102 Keep out of reach of children<br>P103 Read label before use.<br>P201 Obtain special instructions before use.<br>P202 Do not handle until all safety precautions have been read and understood.<br>P264 Wash hands thoroughly after handling.<br>P270 Do not eat, drink or smoke when using this product.<br>P261 Avoid breathing mist/vapours/spray.<br>P272 Contaminated work clothing should not be allowed out of the workplace.<br>P280 Wear protective gloves/eye protection/face protection.<br>P281 Use personal protective equipment as required.<br>P271 Use only outdoors or in a well-ventilated area.<br>P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.<br>P312 Call a POISON CENTRE or doctor/physician if you feel unwell.<br>P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.<br>P330 Rinse mouth.<br>P302 + P352 IF ON SKIN: Wash with plenty of soap and water.<br>P333 + P313 If skin irritation or rash occurs: Get medical advice/attention. |

P363 Wash contaminated clothing before reuse.  
 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.  
 P308 + P313 IF exposed or concerned: Get medical advice/attention.  
 P314 Get medical advice/attention if you feel unwell.  
 P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
 P405 Store locked up.  
 P501 Dispose of contents/container to an approved waste management facility

Hazard Symbols:



### Section 3: Composition and information on ingredients

#### SUBSTANCE

**Chemical Identity of Pure Substance:** Abamectin  
**Synonym:** Avermectin, MK936  
**CAS Number:** 71751-41-2 / 65195-56-4 / 65195-55-3

#### MIXTURE

| Chemical Identity of Ingredients:                | CAS No                                     | Proportion (%w/v) |
|--|--|-------------------|
| Abamectin  | 71751-41-2 /<br>65195-56-4 /<br>65195-55-3 | 1.9               |
| Hexan-1-ol                                       | 111-27-3                                   | 10 - <30          |
| 1-methyl-2-pyrrolidone                           | 872-50-4                                   | 10 - <30          |
| 2,6-di-tert-butylp-cresol                        | 128-37-0                                   | <10               |
| white mineral oil (petroleum)                    | 8042-47-5                                  | <10               |
| other ingredients determined not to be hazardous | —  | to 100            |

### Section 4: First aid measures

#### Description of Necessary First Aid Measures:

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.

**Ingestion:** If swallowed, seek medical advice immediately and show this container or label. DO NOT induce vomiting.

**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.

**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.

**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.

**Symptoms Caused by Exposure:** Constriction of pupils, lack of coordination, tremors

|   |   |
|---|---|
| <b>Medical Attention and Special Treatment:</b> | <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.</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

|  |  |
|--|--|
| <b>Suitable Extinguishing Equipment:</b>                               | <p><b>Small fires:</b><br/>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><b>Large fires:</b><br/>Use alcohol resistant foam or water spray. DO NOT use a solid water stream as it may scatter and spread fire</p> |
| <b>Specific Hazards Arising from the Chemical:</b>                     | <p>Fire will spread by burning with a visible flame.</p> <p>As this product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion. Exposure to decomposition products may be a hazard to health.</p>  |
| <b>Special Protective Equipment and Precautions for Fire Fighters:</b> | <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. Cool closed containers exposed to fire with water spray.</p>  |
| <b>Hazchem Code:</b>   | 2X   |

## Section 6: Accidental release measures

|   |  |
|---|--|
| <b>Personal Precautions, Protective Equipment and Emergency Procedures:</b> | <p>In case of spillage it is important to take all steps necessary to</p> <ul style="list-style-type: none"> <li>• Avoid eye and skin contact</li> <li>• Avoid contamination of waterways</li> </ul>   |
| <b>Environmental precautions:</b>   | Do not flush into surface water or sanitary sewer system   |
| <b>Methods and Materials for Containment and Clean Up:</b>                  | <p><b>Procedure for spill</b></p> <ol style="list-style-type: none"> <li>1) Keep all bystanders away</li> <li>2) Wear full length clothing and PVC gloves</li> <li>3) Reposition any leaking containers so as to minimise further leakage</li> <li>4) Dam and absorb spill with an absorbent material (eg sand or soil)</li> <li>5) Shovel the absorbed spill into drums</li> <li>6) Disposal of the absorbed material will depend upon the extent of the spill             <ul style="list-style-type: none"> <li>• For quantities up to 50 L of product bury in a secure landfill site</li> <li>• 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</li> </ul> </li> <li>7) Decontaminate spill area with detergent and water and rinse with the smallest volume of water practicable</li> </ol> |

## Section 7: Handling and storage

|  |   |
|--|---|
| <b>Precautions for Safe Handling:</b>                                | <p>Poisonous if absorbed by skin contact or swallowed. Will damage eyes. Will irritate the skin. Avoid contact with eyes and skin. Do not inhale spray mist. When opening the container, preparing spray and using the prepared spray, wear :</p> <ul style="list-style-type: none"> <li>• cotton overalls buttoned to the neck and wrist</li> <li>• a washable hat,</li> <li>• elbow length butyl rubber gloves</li> <li>• goggles.</li> </ul> <p>For space applications, wear :</p> <ul style="list-style-type: none"> <li>• cotton overalls buttoned to the neck and wrist</li> <li>• a washable hat,</li> <li>• elbow length butyl rubber gloves,</li> <li>• goggles</li> <li>• half face respirator with dust cartridge or canister.</li> </ul> <p>If product in eyes, wash it out immediately with water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, goggles, respirator (and if rubber with detergent and warm water) and contaminated clothing.</p> |
| <b>Conditions for Safe Storage, Including any Incompatibilities:</b> | <p>Keep out of reach of children. Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in 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>Type</i> |
|-------------------------------------|--|------------------------|-------------|
| <b>National Exposure Standards:</b> | 1-methyl-2-pyrrolidone                             | 82 mg/m <sup>3</sup>   | TWA         |
|                                     |  | 20 ppm                 | TWA         |
|                                     |  | 160 mg/m <sup>3</sup>  | STEL        |
|                                     |  | 40 ppm                 | STEL        |
|                                     | 2,6-di-tert-butylp-cresol                          | 10 mg/m <sup>3</sup>   | TWA         |
|                                     | white mineral oil (petroleum)                      | 5 mg/m <sup>3</sup>    | TWA         |
|                                     | 10 mg/m <sup>3</sup>                               | STEL                   |             |
| <b>Syngenta Exposure Standards:</b> | Abamectin  | 0.02 mg/m <sup>3</sup> | TWA         |
| <b>Biological Limit Values:</b>     | No biological limit allocated                      |                        |             |
| <b>Engineering Controls:</b>        | No special requirements. Product is used outdoors. |                        |             |

|                                       |   |
|---------------------------------------|---|
| <b>Personal Protective Equipment:</b> | <p>Poisonous if absorbed by skin contact or swallowed. Will damage eyes. Will irritate the skin. Avoid contact with eyes and skin. Do not inhale spray mist. When opening the container, preparing spray and using the prepared spray, wear :</p> <ul style="list-style-type: none"> <li>• cotton overalls buttoned to the neck and wrist</li> <li>• a washable hat,</li> <li>• elbow length butyl rubber gloves</li> <li>• goggles.</li> </ul> <p>For space applications, wear :</p> <ul style="list-style-type: none"> <li>• cotton overalls buttoned to the neck and wrist</li> <li>• a washable hat,</li> <li>• elbow length butyl rubber gloves,</li> <li>• goggles</li> <li>• half face respirator with dust cartridge or canister.</li> </ul> <p>If product in eyes, wash it out immediately with water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, goggles, respirator (and if rubber with detergent and warm water) and contaminated clothing.</p> |
|---------------------------------------|---|

### Section 9: Physical and chemical properties

|                              |                            |                                     |  |
|------------------------------|----------------------------|-------------------------------------|--|
| <b>Appearance:</b>           | Yellow to red brown liquid | <b>Boiling Point/Range:</b>         | >150°C                                     |
| <b>Odour:</b>                | Solvent to sweetish        | <b>Freezing/Melting Point:</b>      | Not available                              |
| <b>pH:</b>                   | 2.6 - 3.6 (1 % w/v)        | <b>Solubility:</b>                  | Miscible in water                          |
| <b>Vapour Pressure:</b>      | Not available              | <b>Specific Gravity or Density:</b> | 0.96 g/cm <sup>3</sup> at 25°C             |
| <b>Vapour Density:</b>       | Not available              | <b>Viscosity, dynamic</b>           | 19.0 mPa.s at 20 °C<br>11.4 mPa.s at 40 °C |
| <b>Volatility by weight:</b> | Not available              |                                     |  |

|   |                                       |                              |                |
|---|---------------------------------------|------------------------------|----------------|
| <b>Flash Point:</b>   | 72.5°C at 1,013.25 hPa (DIN EN 22719) | <b>Explosive Properties:</b> | Not explosive  |
| <b>Upper and Lower Flammable (Explosive) Limits in Air:</b> | Not available                         | <b>Oxidising Properties:</b> | Not oxidising  |
| <b>Auto Ignition Temperature:</b>                           | 225°C                                 | <b>Combustibility:</b>       | Combustible C1 |
|   |                                       | <b>Corrosiveness:</b>        | Not corrosive  |

### Section 10: Stability and reactivity

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

## Section 11: Toxicological information

### Health Effects from Likely Routes of Exposure:

|              |                         |   |
|--------------|-------------------------|---|
| <b>Acute</b> | <b>Oral toxicity:</b>   | <b>HARMFUL</b><br>Tests on rats indicate this product is harmful following single doses of undiluted product<br>(LD <sub>50</sub> = 300 mg/kg)                              |
|              | <b>Dermal toxicity:</b> | <b>HARMFUL</b><br>Tests on rabbits indicate this product is harmful following skin contact with undiluted product.<br>(LD <sub>50</sub> = >1800 - 2000 mg/kg (formulation)) |
|              | <b>Inhalation:</b>      | <b>LOW TOXICITY</b><br>Tests on rats indicate this product is not harmful due to inhalation of undiluted product.<br>(LC <sub>50</sub> (4h) = 7.8 mg/L air (formulation))   |
|              | <b>Skin irritation:</b> | <b>MODERATE IRRITANT</b>  |
|              | <b>Eye irritation:</b>  | <b>MODERATE IRRITANT</b>  |
|              | <b>Sensitisation:</b>   | <b>SENSITISER</b>   |

**Chronic** Abamectin technical has been extensively tested in laboratory animals and test tube systems. No evidence of mutagenic or carcinogenic effects have been obtained. 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

## Section 12: Ecological information

|                                       |   |   |
|---------------------------------------|---|---|
| <b>Ecotoxicity</b>                    | <b>Toxicity to aquatic organisms:</b>   | <b>Highly toxic to fish</b><br><i>Lepomis macrochirus</i> (Bluegill sunfish):<br>LC <sub>50</sub> = ~ 0.3 mg/L, 96 h<br><i>Oncorhynchus mykiss</i> (rainbow trout):<br>LC <sub>50</sub> = 0.13 mg/L, 96 h |
|                                       | <b>Toxicity to daphnia and other aquatic invertebrates:</b>                     | <b>Very highly toxic to aquatic invertebrates</b><br><i>Daphnia magna</i> (Water flea):<br>EC <sub>50</sub> = 29 µg/L, 48 h<br>(Based on studies with a similar formulation)                              |
|                                       | <b>Toxicity to algae:</b>   | <b>Slightly toxic to algae</b><br><i>Pseudokirchneriella subcapitata</i> (green algae):<br>ErC <sub>50</sub> > 82 mg/L, 72 h<br>(Based on studies with a similar formulation)                             |
|                                       | <b>Toxicity to soil dwelling organisms:</b>                                     | <b>Moderately toxic to soil dwelling organisms</b>  |
|                                       | <b>Bees:</b>  | <b>Highly toxic to bees</b>   |
| <b>Persistence and Degradability:</b> | Abamectin is not persistent in water and soil. It is not readily biodegradable. |   |
| <b>Mobility</b>                       | Slight mobility in soil.  |   |
| <b>Environmental Fate (Exposure):</b> | Fully degraded and incorporated into organic molecules.                         |   |
| <b>Bioaccumulative Potential:</b>     | Abamectin does not bioaccumulate.   |   |

### Section 13: Disposal considerations

|  |   |
|--|---|
| <b>Disposal Methods:</b>                                 | 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 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. |
| <b>Special Precautions for Incineration or Landfill:</b> | Not applicable  |

### Section 14: Transport information

|                                 |  |  |                |
|---------------------------------|--|--|----------------|
| <b>LAND TRANSPORT</b><br>ADG    |  |  |                |
| <b>UN Number:</b>               | 2902                                       | <b>Packing Group:</b>                    | III            |
| <b>UN Proper Shipping Name:</b> | Pesticide Liquid Toxic, N.O.S. (Abamectin) | <b>Special Precautions for User:</b>     | None allocated |
| <b>Transport Hazard Class:</b>  | 6  | <b>Hazchem or Emergency Action Code:</b> | 2X             |
| <b>Subsidiary Risk:</b>         | None allocated                             |  |                |

|                                 |  |  |                  |
|---------------------------------|--|--|------------------|
| <b>SEA TRANSPORT</b><br>IMDG    |  |  |                  |
| <b>UN Number:</b>               | 2902                                       | <b>Subsidiary Risk:</b>                              | None allocated   |
| <b>UN Proper Shipping Name:</b> | Pesticide Liquid Toxic, N.O.S. (Abamectin) | <b>Packing Group:</b>                                | III              |
| <b>Transport Hazard Class:</b>  | 6.1  | <b>Environmental hazards for Transport Purposes:</b> | Marine pollutant |

|                                    |  |                         |                |
|------------------------------------|--|-------------------------|----------------|
| <b>AIR TRANSPORT</b><br>IATA - DGR |  |                         |                |
| <b>UN Number:</b>                  | 2902                                       | <b>Subsidiary Risk:</b> | None allocated |
| <b>UN Proper Shipping Name:</b>    | Pesticide Liquid Toxic, N.O.S. (Abamectin) | <b>Packing Group:</b>   | III            |
| <b>Transport Hazard Class:</b>     | 6.1  |                         |                |

### Section 15: Regulatory information

|                                  |       |
|----------------------------------|-------|
| <b>APVMA Product Number:</b>     | 50772 |
| <b>Poisons Schedule (SUSMP):</b> | 6     |

## Section 16: Any other relevant information

**Date of preparation or last revision:** December 2016

**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.

® Registered trademark of a Syngenta Group Company