


## SAFETY DATA SHEET

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

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| <b>Product Identifier:</b>                 | <b>ARILON® insecticide</b>   |
| <b>Other Means of Identification:</b>      | <b>Proper shipping name:</b> Environmentally Hazardous Substance, Solid, N.O.S. (indoxacarb)<br><b>Applicable only for marine and air transport</b><br><br><b>Product code:</b> Formulation code A20382A |
| <b>Recommended Use:</b>                    | For the control of Ants, Cockroaches and House Flies and direct control of Subterranean Termites   |
| <b>Details of manufacturer or importer</b> | <b>Syngenta Australia Pty Ltd</b><br>ABN 33 002 933 717  |
| <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

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| <b>Classification of the Hazardous Chemical:</b> | Acute toxicity, Category 4<br>Acute toxicity, Category 4.<br>Specific target organ toxicity – repeated exposure, Category 1   |
| <b>Signal Word:</b>                              | Danger  |
| <b>Hazard Statement(s):</b>                      | H302 Harmful if swallowed<br>H332 Harmful if inhaled<br>H372: Causes damage to organs through prolonged or repeated exposure.   |
| <b>Precautionary Statement(s):</b>               | P102 Keep out of reach of children.<br>P264 Wash hands thoroughly after handling.<br>P270 Do not eat, drink or smoke when using this product.<br>P273 Avoid release to the environment.<br>P301 + P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.<br>P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.. |
| <b>Hazard Symbols:</b>                           |    |

### Section 3: Composition and information on ingredients

| SUBSTANCE                                   |                           |
|---|---------------------------|
| <b>Chemical Identity of Pure Substance:</b> | Indoxacarb (S-enantiomer) |
| <b>Synonym:</b>                             | NOA445432A                |
| <b>CAS Number:</b>                          | 173584-44-6               |

| MIXTURE                           |             |                    |
|-----------------------------------|-------------|--------------------|
| Chemical Identity of Ingredients: | CAS No      | Proportion (% w/w) |
| Indoxacarb (S-enantiomer)         | 173584-44-6 | 20                 |
| Non-hazardous ingredients         | -           | to 100             |

### Section 4: First aid measures

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| <b>Description of Necessary First Aid Measures:</b> | <p>In case of poisoning by any exposure route contact a doctor or Poisons Information Centre on 131 126.<br/>Have the product label or SDS with you when calling or going for treatment.</p> <p><b>Ingestion:</b> Call the Poisons Information Centre or a doctor for treatment advice. Have person sip a glass of water if able to swallow. DO NOT induce vomiting unless directed to do so by a doctor or the Poisons Information Centre. Never give anything by mouth to an unconscious person.</p> <p><b>Eye contact:</b> Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call the Poisons Information Centre or a doctor for treatment advice.</p> <p><b>Skin contact:</b> Take off all contaminated clothing immediately. Rinse skin immediately with plenty of water for 15-20 minutes. Call the Poisons Information Centre or a doctor for treatment advice.</p> <p><b>Inhalation:</b> Remove person to fresh air. If signs/symptoms persist, seek medical attention. Call the Poisons Information Centre or a doctor for treatment advice.</p> |
| <b>Symptoms Caused by Exposure:</b>                 | Poisoning symptoms in laboratory animals were non-specific  |
| <b>Medical Attention and Special Treatment:</b>     | There is no specific antidote available. Treat symptomatically.   |

### Section 5: Fire fighting measures

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| <b>Suitable Extinguishing Equipment:</b>           | <p><b>Small fires:</b> Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.</p> <p><b>Large fires:</b> Alcohol-resistant foam or Water spray<br/>Do not use a solid water stream as it may scatter and spread fire.</p> |
| <b>Specific Hazards Arising from the Chemical:</b> | As the 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.                                      |

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| <b>Special Protective Equipment and Precautions for Fire Fighters:</b> | Wear full protective clothing and self-contained breathing apparatus.<br>DO NOT allow run-off from fire fighting to enter drains or water courses.<br>Cool closed containers exposed to fire with water spray. |
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## Section 6: Accidental release measures

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| <b>Personal Precautions, Protective Equipment and Emergency Procedures:</b> | In case of spillage it is important to take all steps necessary to <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.<br>If the product contaminates rivers and lakes or drains inform respective authorities.   |
| <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 leakage</li> <li>(4) <b>For a product spill:</b> Sweep spill into a pile.<br/><b>For a prepared spray spill:</b> Dam and absorb spill with an absorbent material (eg sand or soil).</li> <li>(5) Shovel into drums</li> <li>(6) Disposal of the material will depend upon the extent of the spill <ul style="list-style-type: none"> <li>• For quantities up to 50 kg of product bury in a secure landfill site</li> <li>• 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</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

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| <b>Precautions for Safe Handling:</b>                                | Harmful if swallowed. When opening the container, preparing spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing). Wash hands after use. After each day's use, wash contaminated clothing. |
| <b>Conditions for Safe Storage, Including any Incompatibilities:</b> | Store in the closed, original container in a dry, cool, well ventilated area out of direct sunlight.  |

## Section 8: Exposure controls and personal protection

### ALWAYS READ AND FOLLOW THE LABEL INSTRUCTIONS AND WARNINGS

|                                       |   |
|---------------------------------------|---|
| <b>National Exposure Standards:</b>   | No exposure standard allocated  |
| <b>Biological Limit Values:</b>       | No biological limits allocated  |
| <b>Engineering Controls:</b>          | Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated.<br>The extent of these protection measures depends on the actual risks in use.<br>If airborne mists or vapours are generated, use local exhaust ventilation controls.<br>Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit.<br>Where necessary, seek additional occupational hygiene advice. |
| <b>Personal Protective Equipment:</b> | Harmful if swallowed. When opening the container, preparing spray and using the prepared spray, wear cotton overalls buttoned to the neck and   |

wrist (or equivalent clothing). Wash hands after use. After each day's use, wash contaminated clothing.

## Section 9: Physical and chemical properties

|                         |                               |                                     |                   |
|-------------------------|-------------------------------|-------------------------------------|-------------------|
| <b>Appearance:</b>      | Solid, granules, tan to white | <b>Boiling Point/Range:</b>         | No data available |
| <b>Odour:</b>           | Slight                        | <b>Freezing/Melting Point:</b>      | No data available |
| <b>pH:</b>              | 8.1 - 9.1                     | <b>Solubility:</b>                  | No data available |
| <b>Vapour Pressure:</b> | No data available             | <b>Specific Gravity or Density:</b> | No data available |
| <b>Vapour Density:</b>  | No data available             |                                     |                   |

|   |                   |                              |                   |
|---|-------------------|------------------------------|-------------------|
| <b>Flash Point:</b>   | No data available | <b>Explosive Properties:</b> | Not explosive     |
| <b>Upper and Lower Flammable (Explosive) Limits in Air:</b> | No data available | <b>Oxidising Properties:</b> | Not an oxidiser   |
| <b>Ignition Temperature:</b>                                | No data available | <b>Combustibility:</b>       | No data available |
|   |                   | <b>Corrosiveness:</b>        | No data available |

## Section 10: Stability and reactivity

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|--|---|
| <b>Reactivity:</b>                         | No hazardous reactions by normal handling and storage according to provisions.                    |
| <b>Chemical Stability:</b>                 | The product is stable when used in normal conditions  |
| <b>Possibility of Hazardous Reactions:</b> | No hazardous reactions by normal handling and storage according to provisions.                    |
| <b>Conditions to Avoid:</b>                | No decomposition if used as directed.   |
| <b>Incompatible Materials:</b>             | No substances are known which lead to the formation of hazardous substances or thermal reactions. |
| <b>Hazardous Decomposition Products:</b>   | Combustion or thermal decomposition will evolve toxic and irritant vapours.                       |

## Section 11: Toxicological information

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|---|-------------------------|--|
| <b>Health Effects from Likely Routes of Exposure:</b> |                         |  |
| <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> = 1,909 mg/kg                 |
|   | <b>Dermal toxicity:</b> | <b>LOW TOXICITY</b><br>Tests on rats indicate this product has a low toxicity following skin contact with undiluted product<br>LD <sub>50</sub> = >5,000 mg/kg |
|   | <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> (4 hours) = >4.8 mg/L     |

|                         |                         |
|-------------------------|-------------------------|
| <b>Skin irritation:</b> | <b>SLIGHT IRRITANT</b>  |
| <b>Eye irritation:</b>  | <b>SLIGHT IRRITANT</b>  |
| <b>Sensitisation:</b>   | <b>NOT A SENSITISER</b> |

**Chronic:** **Indoxacarb technical** has been extensively tested on laboratory mammals and in test tube systems. No evidence was obtained of mutagenic, carcinogenic or reproductive effects. Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity. A repeated dose inhalation study in rats showed signs of incoordination, increased mortality or reduced survival and respiratory irritation. A repeated dose study in rats showed red blood cell destruction causing abnormal decrease in number of red blood cells (anaemia).

## Section 12: Ecological information

|                                       |   |
|---------------------------------------|---|
| <b>Ecotoxicity</b>                    | <p><b>Toxicity to fish:</b> <b>Highly toxic to fish</b><br/>Rainbow trout (<i>Oncorhynchus mykiss</i>)<br/>LC<sub>50</sub> (96 hours) = 0.65 mg/L</p> <p><b>Toxicity to daphnia and other aquatic invertebrates:</b> <b>Highly toxic to Daphnia</b><br/><i>Daphnia magna</i> (Water flea):<br/>EC<sub>50</sub> = 0.6 mg/L, 48 h</p> <p><b>Toxicity to algae:</b> <b>Practically non toxic to aquatic plants</b><br/>Duckweed (<i>Lemna gibba</i>)<br/>EC<sub>50</sub> (14 days) = &gt;84.3 mg/L</p> <p><b>Toxicity to soil dwelling organisms:</b> <b>No data available</b></p> |
| <b>Persistence and Degradability:</b> | Indoxacarb is not readily biodegradable<br>Indoxacarb is not considered to be persistent (PBT) or very persistent (vPvB)  |
| <b>Mobility in Soil:</b>              | Indoxacarb is slightly mobile in soils  |
| <b>Bioaccumulative Potential:</b>     | Indoxacarb is not considered to be bioaccumulating nor toxic (PBT)<br>Indoxacarb is not considered to be very bioaccumulating (vPvB)  |

## Section 13: Disposal considerations

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| <b>Disposal Methods:</b>                                 | Rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on site. Dispose of at 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. |
| <b>Special Precautions for Incineration or Landfill:</b> | Not applicable  |

### Section 14: Transport information

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

|                                 |   |  |                  |
|---------------------------------|---|--|------------------|
| <b>SEA TRANSPORT</b><br>IMDG    |   |  |                  |
| <b>UN Number:</b>               | 3077  | <b>Subsidiary Risk:</b>                              | None allocated   |
| <b>UN Proper Shipping Name:</b> | Environmentally Hazardous Substance, Solid, N.O.S. (indoxacarb) | <b>Packing Group:</b>                                | III              |
| <b>Transport Hazard Class:</b>  | 9   | <b>Environmental hazards for Transport Purposes:</b> | Marine pollutant |

|                                    |   |                         |                |
|------------------------------------|---|-------------------------|----------------|
| <b>AIR TRANSPORT</b><br>IATA - DGR |   |                         |                |
| <b>UN Number:</b>                  | 3077  | <b>Subsidiary Risk:</b> | None allocated |
| <b>UN Proper Shipping Name:</b>    | Environmentally Hazardous Substance, Solid, N.O.S. (indoxacarb) | <b>Packing Group:</b>   | III            |
| <b>Transport Hazard Class:</b>     | 9   |                         |                |

### Section 15: Regulatory information

|                                  |       |
|----------------------------------|-------|
| <b>APVMA Product Number:</b>     | 64396 |
| <b>Poisons Schedule (SUSMP):</b> | 6     |

## Section 16: Any other relevant information

**Date of preparation or last revision:** November 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 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.