

## SAFETY DATA SHEET

### Section 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

|                                    |   |
|------------------------------------|---|
| <b>Product Name:</b>               | <b>ARILON<sup>®</sup> INSECTICIDE</b>   |
| <b>Other Names:</b>                | <b>Proper shipping name:</b> Environmentally Hazardous Substance, Solid, N.O.S. (indoxacarb)<br><b>Applicable only for marine and air transport</b> |
|                                    | <b>Product code:</b> A20382A  |
| <b>Recommended Use:</b>            | For the control of Ants, Cockroaches and House Flies  |
| <b>Company Details:</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>Telephone Number:</b>           | <b>(02) 8876 8444</b>   |
| <b>Emergency Telephone Number:</b> | <b>24 hours - 1800 033 111</b>  |

### Section 2: HAZARDS IDENTIFICATION

|                               |   |
|-------------------------------|---|
| <b>Hazard Classification:</b> | Classified as a hazardous chemical according to the Australian criteria for the classification of chemicals |
| <b>Risk Phrases:</b>          | R22 Harmful if swallowed<br>R43 May cause sensitisation by skin contact                                     |
| <b>Safety Phrases:</b>        | —   |

### Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

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

|  |               |                           |
|--|---------------|---------------------------|
| <b>MIXTURE</b>                                   |               |                           |
| <b>Chemical Identity of Ingredients</b>          | <b>CAS No</b> | <b>Proportion (% w/v)</b> |
| Indoxacarb (S-enantiomer)                        | 173584-44-6   | 20                        |
| Other ingredients determined not to be hazardous | -             | 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 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><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>Poisoning Symptoms:</b>                          | Poisoning symptoms in laboratory animals were non-specific.  |
| <b>Medical Advice:</b>                              | There is no specific antidote available. Treat symptomatically   |

## Section 5: FIRE FIGHTING MEASURES

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| <b>Suitable Extinguishing Media:</b>                                   | Use water spray, foam, dry chemical or carbon dioxide. DO NOT use high volume water jet.   |
| <b>Hazards from Combustion Products:</b>                               | No information available.  |
| <b>Special Protective Precautions and Equipment for Fire Fighters:</b> | In the event of fire, wear self-contained breathing apparatus. Wear full protective equipment.   |
| <b>Further Information:</b>  | <p>Prevent fire extinguishing water from contaminating surface water or the ground water system. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Control runoff.</p> <p>For small fires, if area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the area contaminated.</p> <p>Cool containers / tanks with water spray.</p> |

## Section 6: ACCIDENTAL RELEASE MEASURES

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| <b>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>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

|                                       |   |
|---------------------------------------|---|
| <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:</b>   | Store in the closed, original container in a dry, cool, well ventilated area out of direct sunlight.  |

## Section 8: EXPOSURE CONTROLS / 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 limit allocated.  |
| <b>Engineering Controls:</b>          | Ensure adequate ventilation, especially in confined areas   |
| <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>Form:</b>   | Solid, granules | <b>pH:</b>                   | 8.1-9.1       |
| <b>Colour:</b> | Tan to white    | <b>Explosive properties:</b> | Not explosive |
| <b>Odour:</b>  | slight          | <b>Oxidising properties:</b> | Not oxidising |

## Section 10: STABILITY AND REACTIVITY

|  |  |
|--|--|
| <b>Chemical Stability:</b>               | Stable at normal temperatures and storage conditions |
| <b>Conditions to Avoid:</b>              | None known   |
| <b>Incompatible Materials:</b>           | None known   |
| <b>Hazardous Decomposition Products:</b> | No information available                             |
| <b>Hazardous Reactions:</b>              | No information available                             |

## Section 11: TOXICOLOGICAL INFORMATION

### Health Effects from Likely Routes of Exposure:

|                 |   |
|-----------------|---|
| <b>Acute:</b>   | <p><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</p> <p><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> = &gt;5,000 mg/kg</p> <p><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) = &gt;4.8 mg/L</p> <p><b>Skin irritation:</b>      <b>SLIGHT IRRITANT</b></p> <p><b>Eye irritation:</b>      <b>SLIGHT IRRITANT</b></p> <p><b>Sensitisation:</b>      <b>NOT A SENSITISER</b></p> |
| <b>Chronic:</b> | <p><b>Indoxacarb technical</b> 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.</p> <p>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).</p>  |

## Section 12: ECOLOGICAL INFORMATION

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

## Section 13: DISPOSAL CONSIDERATIONS

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|--|---|
| <b>Disposal Methods and Containers:</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 Landfill or Incineration:</b> | Not applicable  |

## Section 14: TRANSPORT INFORMATION

|                                 |                                   |                                      |                |
|---------------------------------|-----------------------------------|--------------------------------------|----------------|
| <b>LAND TRANSPORT ADG</b>       | 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>Class:</b>                   | None allocated                    | <b>Hazchem 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>Class:</b>                   | 9   | <b>Marine Pollutant:</b> | Marine pollutant |

|                                     |   |                         |                |
|-------------------------------------|---|-------------------------|----------------|
| <b>AIR TRANSPORT</b><br>ICAO / IATA |   |                         |                |
| <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>Class:</b>                       | 9   |                         |                |

### Section 15: REGULATORY INFORMATION

|                                  |       |
|----------------------------------|-------|
| <b>APVMA Product Number:</b>     | 64397 |
| <b>Poisons Schedule (SUSDP):</b> | S6    |

### Section 16: OTHER INFORMATION

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| <b>Date of preparation or last revision:</b> March 2013  |
| <b>Source of Data:</b> 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.  |
| <b>Note: This product is a registered agricultural chemical and must, therefore, be used in accordance with the container label directions</b>   |
| <b>CONTACT POINT:</b> Regulatory Affairs Manager, Syngenta Australia Pty Ltd<br>(02) 8876 8444<br><b>24 HOURS EMERGENCY CONTACT: 1800 033 111</b>  |
| 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.<br>If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.                |
| <b>DISCLAIMER</b><br>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. |