

SAFETY DATA SHEET

Section 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

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| Product Name: | AMISTAR® XTRA Fungicide |
| Other Names: | Proper shipping name: Environmentally Hazardous Substance, Liquid, N.O.S. (Azoxystrobin) Applicable only for marine and air transport |
| | Product code: A12910C |
| Recommended Use: | Fungicide for control of certain fungal diseases in barley, wheat and peanuts |
| Company Details: | Syngenta Australia Pty Ltd ABN 33 002 933 717 |
| Address: | Level 1, 2-4 Lyonpark Road MACQUARIE PARK NSW 2113 AUSTRALIA |
| Telephone Number: | (02) 8876 8444 |
| Emergency Telephone Number: | 24 hours - 1800 033 111 |

Section 2: HAZARDS IDENTIFICATION

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| Hazard Classification: | Classified as a hazardous chemical according to the Australian criteria for the classification of chemicals |
| Risk Phrases: | R22 Harmful if swallowed R63 Possible risk of harm to unborn child |
| Safety Phrases: | — |

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

| SUBSTANCE | | |
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| Chemical Identity of Pure Substance: | Azoxystrobin | Cyproconazole |
| Synonym: | ICI5504 | SAN619 |
| CAS Number: | 131860-33-8 | 94361-06-5 |

| MIXTURE | | |
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| Chemical Identity of Ingredients | CAS No | Proportion (% w/v) |
| Azoxystrobin | 131860-33-8 | 20 |
| Cyproconazole | 94361-06-5 | 8 |
| Cetyl/stearyl alcohol, ethoxylated | 68439-49-6 | 20 - 30 |
| Other ingredients determined not to be hazardous | - | to 100 |

Section 4: FIRST AID MEASURES

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| <p>Description of Necessary First Aid Measures:</p> | <p>In case of poisoning by any exposure route contact a doctor or 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> |
| <p>Poisoning Symptoms: Medical Advice:</p> | <p>Poisoning symptoms in laboratory animals were non-specific There is no specific antidote available. Treat symptomatically.</p> |

Section 5: FIRE FIGHTING MEASURES

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| <p>Suitable Extinguishing Media:</p> <p>Hazards from Combustion Products:</p> <p>Special Protective Precautions and Equipment for Fire Fighters:</p> | <p><i>Small fires</i> 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><i>Large fires</i> Use alcohol-resistant foam or water spray. Do not use a solid water stream as it may scatter and spread fire.</p> <p>As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see Section 10). Combustion or thermal decomposition will evolve toxic and irritant vapours. Exposure to decomposition products may be a hazard to health.</p> <p>Wear 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> |
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Section 6: ACCIDENTAL RELEASE MEASURES

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| 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 |
| Methods and Materials for Containment and Clean Up: | Procedure for spill: <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 (e.g. sand or soil). (5) Shovel the absorbed material 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 50L of product bury in a secure landfill site. • For quantities greater than 50L 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 the spill area with detergent and water and rinse with the smallest volume of water practicable. |

Section 7: HANDLING AND STORAGE

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| Precautions for Safe Handling: | Harmful if swallowed. Will irritate the eyes. Avoid contact with eyes. When opening the container and preparing spray, wear: <ul style="list-style-type: none"> • cotton overalls buttoned to the neck and wrist (or equivalent clothing) • a washable hat • elbow length PVC gloves and • goggles Wash hands after use. After each day's use, wash gloves, goggles and contaminated clothing. |
| Conditions for Safe Storage: | Store in closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. |

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

ALWAYS READ AND FOLLOW THE LABEL INSTRUCTIONS AND WARNINGS

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| National Exposure Standards: | No exposure standard allocated | | | |
| Syngenta Exposure Standards: | <i>Component</i> | <i>Exposure limit</i> | | <i>Value type</i> |
| | azoxystrobin | 2.0 | mg/m ³ | 8h TWA |
| | cyproconazole | 0.5 | mg/m ³ | 8h TWA |
| Biological Limit Values: | No biological limit allocated | | | |
| Engineering Controls: | No special requirements. Product is used outdoors | | | |

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| Personal Protective Equipment: | <p>Harmful if swallowed Will irritate the eyes. Avoid contact with eyes. When opening the container and preparing spray, wear:</p> <ul style="list-style-type: none"> • cotton overalls buttoned to the neck and wrist (or equivalent clothing) • a washable hat • elbow length PVC gloves and • goggles <p>Wash hands after use. After each day's use, wash gloves, goggles and contaminated clothing.</p> |
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Section 9: PHYSICAL AND CHEMICAL PROPERTIES

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| Appearance: | Light yellow to yellow suspension | Boiling Point/Range: | ca. 100°C at 1,013 hPa |
| Odour: | Sweetish | Freezing/Melting Point: | Not available |
| pH | 5 – 9 at 1% w/v | Solubility: | Miscible |
| Vapour Pressure: | Not available | Density: | 1.1 g/cm ³ at 20°C |
| Vapour Density: | Not available | Viscosity, dynamic: | 203 - 855 mPa.s at 20°C 124 - 657 mPa.s at 40°C |
| Surface tension: | 29.4 mN/m at 20 °C | | |

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| Flash Point: | >100°C (closed cup) | Explosive Properties: | Not explosive |
| Upper and Lower Flammable (Explosive) Limits in Air: | Non flammable | Oxidising Properties: | Not oxidising |
| Auto Ignition Temperature: | 455 ± 5°C | Combustibility: | Combustible |
| | | Corrosiveness: | Not corrosive to HDPE |

Section 10: STABILITY AND REACTIVITY

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| Chemical Stability: | Stable under normal conditions. |
| Conditions to Avoid: | None known. |
| Incompatible Materials: | None known. |
| Hazardous Decomposition Products: | Combustion or thermal decomposition will evolve toxic and irritant vapours. |
| Hazardous Reactions: | None known. Hazardous polymerization does not occur. |

Section 11: TOXICOLOGICAL INFORMATION

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| Health Effects from Likely Routes of Exposure: | | |
| Acute: | Oral toxicity: | <p>HARMFUL Tests on rats indicate this product is harmful following single doses of undiluted product. LD₅₀ > 2,000 mg/kg (male Rat) LD₅₀ > 500 - < 2,000 mg/kg (female Rat)</p> |
| | Dermal toxicity: | <p>LOW TOXICITY Tests on rats indicate this product has a low toxicity following skin contact with undiluted product. LD₅₀ > 5,000 mg/kg</p> |

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| <p>Inhalation:</p> <p>Skin irritation:</p> <p>Eye irritation:</p> <p>Sensitisation:</p> | <p>LOW TOXICITY Tests on rats indicate this not harmful due to inhalation of undiluted product LC₅₀ > 2.58 mg/l, 4 h</p> <p>SLIGHT IRRITANT</p> <p>SLIGHT IRRITANT</p> <p>NOT A SENSITISER</p> |
| <p>Chronic:</p> | <p>Azoxystrobin technical has been extensively tested on laboratory mammals and in test-tube systems. No evidence was obtained of mutagenic, carcinogenic, teratogenic neurotoxic or reproductive effects.</p> <p>Cyproconazole has been extensively tested on laboratory mammals and in test-tube systems. No evidence was obtained of mutagenic, carcinogenic or neurotoxic effects. Maternal and foetal toxicity were observed at high dose levels in studies on rats. 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.</p> |

Section 12: ECOLOGICAL INFORMATION

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| <p>Moderately toxic to fish:</p> <p>Moderately toxic to aquatic invertebrates:</p> <p>Moderately toxic to algae:</p> <p>Persistence and Degradability:</p> <p>Mobility</p> <p>Environmental Fate (Exposure):</p> <p>Bioaccumulative Potential:</p> | <p><i>Oncorhynchus mykiss</i> (rainbow trout): LC₅₀ = 1.8 mg/L, 96 hr</p> <p><i>Daphnia magna</i> (water flea): EC₅₀ = 1.2 mg/L, 48 hr</p> <p><i>Scenedesmus subspicatus</i> (green algae): E_bC₅₀ = 0.478 mg/L, 72 hr; E_rC₅₀ = 3.87 mg/L, 72 hr</p> <p>Azoxystrobin: <i>Stability in water:</i> Degradation half life: > 12 d at 25°C Azoxystrobin is stable in water. <i>Stability in soil:</i> Degradation half life : 59.5 d Azoxystrobin is not persistent in soil.</p> <p>Cyproconazole: <i>Stability in water:</i> Degradation half life: 5 d at 20°C Cyproconazole is not persistent in water. <i>Stability in soil:</i> Degradation half life : 100 - 124 d Cyproconazole is not persistent in soil.</p> <p>Azoxystrobin has low to very high mobility in soil. Cyproconazole has low to medium mobility in soil.</p> <p>Incorporated into organic molecules</p> <p>Azoxystrobin has medium bioaccumulation potential. Cyproconazole does not bioaccumulate.</p> |
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Section 13: DISPOSAL CONSIDERATIONS

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| <p>Disposal Methods and Containers:</p> | <p>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.</p> |
| <p>Special Precautions for Landfill or Incineration:</p> | <p>Not applicable</p> |

Section 14: TRANSPORT INFORMATION

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| 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 | | |

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

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

Section 15: REGULATORY INFORMATION

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| APVMA Product Number: | 57949 |
| Poisons Schedule (SUSDP): | 5 |

Section 16: OTHER INFORMATION

Date of preparation or last revision: March 2013

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.

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