

SAFETY DATA SHEET

Section 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name:	AMISTAR TOP[®] Fungicide
Other Names:	Proper shipping name: Environmentally Hazardous Substance, Liquid, N.O.S. (Azoxystrobin and Difenoconazole) Applicable only for marine and air transport
	Product code: 13703G
Recommended Use:	Fungicide for the control of certain diseases in vegetables crops
Company Details:	Syngenta Crop Protection Pty Limited 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

Hazard Classification:	Classified as a hazardous chemical according to the Australian criteria for the classification of chemicals
Risk Phrases:	R20 Harmful by inhalation. R37 Irritating to respiratory system R43 May cause sensitization by skin contact.
Safety Phrases:	—

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE		
Chemical Identity of Pure Substance:	Azoxystrobin	Difenoconazole
Synonym:	-	CGA169374
CAS Number:	131860-33-8	119446-68-3

MIXTURE		
Chemical Identity of Ingredients	CAS No	Proportion (% w/v)
Azoxystrobin	131860-33-8	20
Difenoconazole	119446-68-3	12.5
alcohols, C16-18,ethoxylated	68439-49-6	10 - <30
Other ingredients determined not to be hazardous	-	to 100

Section 4: FIRST AID MEASURES

<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

<p>Suitable Extinguishing Media:</p>	<p><i>Extinguishing media - small fires</i> Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide extinguisher. DO NOT use direct jet of water.</p> <p><i>Extinguishing media - large fires</i> Use alcohol-resistant foam or water spray. DO NOT use direct jet of water.</p>
<p>Hazards from Combustion Products:</p>	<p>This product contains combustible organic components that may burn and decompose during a fire producing dense black smoke containing hazardous products of combustion. Combustion products are toxic and /or irritant. Exposure to decomposition products may be a hazard to health.</p>
<p>Special Protective Precautions and Equipment for Fire Fighters:</p>	<p>When fighting a major fire wear self-contained breathing apparatus and protective equipment.</p>

Section 6: ACCIDENTAL RELEASE MEASURES

<p>Emergency Procedures:</p>	<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
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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
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Section 7: HANDLING AND STORAGE

Precautions for Safe Handling:	<p>Harmful if inhaled. May irritate the eyes, nose and throat. Repeated exposure may cause allergic disorders. Avoid contact with the eyes. DO NOT inhale spray mist. When opening the container and mixing and loading 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 <p>When using the prepared spray by airblast or groundboom 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 facepiece respirator <p>Wash hands after use. After each days use wash gloves, respirator (and if rubber was 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. DO NOT store for prolonged periods in direct sunlight.</p>

Section 8: EXPOSURE CONTROLS / 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:	No exposure standard allocated		
Syngenta Exposure Standards:	Azoxystrobin	2 mg/L	TWA
	Difenoconazole	8 mg/L	TWA
Biological Limit Values:	No biological limit allocated		
Engineering Controls:	No special requirements. Product is used outdoors.		

Personal Protective Equipment:	<p>Harmful if inhaled. May irritate the eyes, nose and throat. Repeated exposure may cause allergic disorders. Avoid contact with the eyes. DO NOT inhale spray mist. When opening the container and mixing and loading 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 <p>When using the prepared spray by airblast or groundboom 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 facepiece respirator <p>Wash hands after use. After each days use wash gloves, respirator (and if rubber was with detergent and warm water) and contaminated clothing.</p>
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Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Beige yellow liquid	Boiling Point/Range:	Not available
Odour:	No particular odour	Freezing/Melting Point:	Not available
pH:	7.5 - 8.5 at 100% w/v	Solubility:	Miscible with water
Vapour Pressure:	Not available	Specific Gravity or Density:	1.11 g/cm ³ at 20 °C
Vapour Density:	Not available		

Flash Point:	>100 °C at 755 mmHg	Explosive Properties:	Not explosive
Upper and Lower Flammable (Explosive) Limits in Air:	Not flammable	Oxidising Properties:	Not oxidising
Ignition Temperature:	505°C +/- 5°C	Combustibility:	Combustible
		Corrosiveness:	Not corrosive

Section 10: STABILITY AND REACTIVITY

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

Section 11: TOXICOLOGICAL INFORMATION

Health Effects from Likely Routes of Exposure:	
Acute:	<p>Oral toxicity: LOW TOXICITY Tests on rats indicate this product has a low toxicity following single doses of undiluted product. (LD₅₀ = >2000 mg/kg)</p> <p>Dermal toxicity: LOW TOXICITY Tests on rabbits indicate this has a low toxicity following skin contact with undiluted product (LD₅₀ = >2000 mg/kg)</p> <p>Inhalation: HARMFUL Tests on rats indicate this product is harmful due to inhalation of undiluted product. LC₅₀ (4h) = 2.06 mg/L air)</p> <p>Skin irritation: SLIGHT IRRITANT</p> <p>Eye irritation: MODERATE IRRITANT</p> <p>Sensitisation: SENSITISER</p>
Chronic:	Azoxystrobin and difenoconazole technical have been extensively tested on laboratory mammals and in test-tube systems. No evidence was obtained of mutagenic, carcinogenic, teratogenic neurotoxic or reproductive effects.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity:	<p>Moderately toxic to fish LC₅₀ <i>Oncorhynchus mykiss</i> (rainbow trout), 1.76 mg/L , 96 h LC₅₀ <i>Cyprinus carpio</i> (Carp), 4.2 mg/L , 96 h</p> <p>Highly toxic to algae E_rC₅₀ <i>Pseudokirchneriella subcapitata</i> (green algae), 0.59 mg/L, 72 h</p> <p>Moderately toxic to certain aquatic invertebrates EC₅₀ <i>Daphnia magna</i> (Water flea), 1.1 mg/L , 48 h</p> <p>Slightly toxic to soil dwelling organisms: LC₅₀ >1500 mg/kg soil in earthworm</p> <p>Non toxic to bees: Oral LD₅₀ > 500 µg/bee, Contact LD₅₀ >1800 µg/bee</p>
Persistence and Degradability:	Azoxystrobin is stable in water and is not persistent in soil. Difenoconazole is persistent in water and is not persistent in soil.
Mobility	Azoxystrobin has low to very high mobility in soil. Difenoconazole has low mobility in soil.
Environmental Fate (Exposure):	Azoxystrobin is incorporated into organic molecules. Difenoconazole is eventually mineralised.
Bioaccumulative Potential:	Azoxystrobin has medium potential for bioaccumulation. Difenoconazole has high potential to bioaccumulate.

Section 13: DISPOSAL CONSIDERATIONS

Disposal Methods and Containers:	Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. 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 to an approved waste management facility. 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:	3082	Subsidiary Risk:	None allocated
UN Proper Shipping Name:	Environmentally Hazardous Substance, Liquid, N.O.S. (Azoxystrobin and Difenoconazole)	Packing Group:	III
Class:	9	Marine Pollutant:	Yes

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

Section 15: REGULATORY INFORMATION

APVMA Product Number: 63898

Poisons Schedule (SUSDP): 5

Section 16: OTHER INFORMATION

Date of preparation or last revision: March 2010

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 Crop Protection Pty Limited
(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.