

SAFETY DATA SHEET

Section 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name:	BOGARD® 100 WG Foliar Fungicide
Other Names:	Proper Shipping Name: Environmentally hazardous substance, Solid, N.O.S. (difenoconazole) Applicable only for marine and air transport
	Product code: A8885C
Recommended Use:	Fungicide for the control of black spot (apple scab and pear scab) of apples and pears and powdery mildew of apples.
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:	R 36 Irritating to eyes
Safety Phrases:	-

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

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

MIXTURE		
Chemical Identity of Ingredients	CAS No	Proportion (% w/w)
difenoconazole	119446-68-3	10
octylphenol polyglycoether	9036-19-5	10 - <30
sodium lauryl sulphate	151-21-3	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.</p> <p><i>Extinguishing media - large fires</i> Alcohol-resistant foam or water spray)</p> <p>Do not use a solid water stream as it may scatter and spread fire.</p>
<p>Hazards from Combustion Products:</p>	<p>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.</p>
<p>Special Protective Precautions and Equipment for Fire Fighters:</p>	<p>Wear full protective clothing and self-contained breathing apparatus.</p>

Section 6: ACCIDENTAL RELEASE MEASURES

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 goggles, half face-piece respirator with combined dust and vapour cartridge, full length clothing and PVC gloves.(3) Reposition any leaking containers so as to minimise further leakage.(4) For a product spill: Sweep granule concentrates into a pile. For a prepared spray spill: Dam and absorb spill with an absorbent material (e.g. 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 kg of product bury in a secure landfill site.• For quantities greater than 50 kg seek advice (use emergency contact number below) from the manufacturer 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 water

Section 7: HANDLING AND STORAGE

Precautions for Safe Handling:	<p>Will damage eyes. Will irritate the skin. Avoid contact with eyes and skin.</p> <p>When opening the container and preparing spray wear:</p> <ul style="list-style-type: none">• cotton overalls buttoned to the neck and wrist,• a washable hat,• elbow-length PVC gloves and• goggles. <p>When using the prepared spray wear:</p> <ul style="list-style-type: none">• cotton overalls buttoned to the neck and wrist,• a washable hat,• elbow-length PVC gloves <p>If product gets in eyes, wash it out immediately with water. Wash hands after use. After each day's use, wash gloves and face shield or goggles and contaminated clothing</p>
Conditions for Safe Storage:	Store in the closed, original container in a dry, well ventilated area, as cool as possible out of direct sunlight.

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:	Difenoconazole	8 mg/m ³	TWA
Biological Limit Values:	No biological limit allocated		
Engineering Controls:	No special requirements. Product is used outdoors		
Personal Protective Equipment:	<p>Will damage eyes. Will irritate the skin. Avoid contact with eyes and skin.</p> <p>When opening the container and preparing spray wear:</p> <ul style="list-style-type: none"> • cotton overalls buttoned to the neck and wrist, • a washable hat, • elbow-length PVC gloves and • goggles. <p>When using the prepared spray wear:</p> <ul style="list-style-type: none"> • cotton overalls buttoned to the neck and wrist, • a washable hat, • elbow-length PVC gloves <p>If product gets in eyes, wash it out immediately with water. Wash hands after use. After each day's use, wash gloves and face shield or goggles and contaminated clothing</p>		

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Brown-beige granule	Boiling Point/Range:	Not applicable
Odour:	Non-specific	Freezing/Melting Point:	Not available
pH:	7 – 11 (1%)	Solubility in water	Miscible
Vapour Pressure:	Not available	Specific Gravity or Density:	0.4 g/cm ³

Flash Point:	Not highly flammable	Explosive properties:	Not explosive
Upper and Lower Flammable (Explosive) Limits in Air:	Not available	Oxidising properties:	Not oxidising
Ignition Temperature:	Not available	Combustibility:	Not applicable
Minimum ignition energy:	0.1 – 0.3 J	Corrosiveness:	Non-corrosive
		Dust explosion class:	Forms flammable dust clouds

Section 10: STABILITY AND REACTIVITY

Chemical Stability:	Stable under standard 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

Health Effects from Likely Routes of Exposure:		
Acute:	Oral toxicity:	LOW TOXICITY Tests on rats indicate this product has a low toxicity following single doses of the undiluted product. (LD ₅₀ >2000 mg/kg)
	Dermal toxicity:	LOW TOXICITY Tests on rats indicate this product has a low toxicity following skin contact with the undiluted product. (LD ₅₀ > 2000 mg/kg)
	Inhalation:	LOW TOXICITY Tests on rats indicate this product is not harmful due to inhalation of a similar formulation. (LC ₅₀ (4 h) > 4.40 mg/L).
	Skin irritation:	NON IRRITANT (rabbits)
	Eye irritation:	SEVERE IRRITANT (rabbits)
	Sensitisation:	NOT A SKIN SENSITISER (guinea pigs)
Chronic:	<p>Difenoconazole technical has been extensively tested on mammals and in test-tube systems. No evidence of mutagenic, teratogenic or reproductive effects was obtained. Chronic 2-year feeding studies revealed no compound-related tumourigenic effects in rats, whereas in mice high doses were associated with an increased incidence of liver tumours.</p> <p>The absence of mutagenic effects and the pronounced restriction of tumour appearance to one organ and one species suggests an underlying promotion process which is frequently seen in mice and which is considered to have no bearing in humans.</p> <p>Repeated high doses of difenoconazole technical were associated with cataracts in dogs and hens. Studies on other species and a subsequent dog study did not confirm this effect. Other effects at high doses included liver toxicity and adverse effects on blood cells and platelets.</p>	

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity:	<p>Highly toxic to fish <i>Oncorhynchus mykiss</i> (rainbow trout): LC₅₀ = 0.81 mg/L, 96h</p> <p>Moderately toxic to aquatic invertebrates <i>Daphnia magna</i> (water flea): LC₅₀ = 5.3 mg/L, 48h, Based on test results obtained with similar product</p> <p>Highly toxic to algae <i>Scenedesmus subspicatus</i> (green algae): E_bC₅₀ = 0.31 mg/L, 72h (Based on test results obtained with similar product.)</p> <p>Slightly toxic to soil dwelling organisms: Earthworm (<i>Eisenia foetida</i>): LC₅₀ = >610 mg/kg</p> <p>Non Toxic to bees Honeybee (<i>Apis mellifera</i>): LD₅₀ = >100 µg/bee</p>
Persistence and Degradability:	Difenoconazole is not persistent in soil and water
Mobility	Difenoconazole has low mobility in soil
Environmental Fate (Exposure):	Incorporated into organic matter
Bioaccumulative Potential:	Difenoconazole has high potential to bioaccumulate

Section 13: DISPOSAL CONSIDERATIONS

Disposal Methods and Containers:	Single rinse liner before disposal. Add rinsings to the spray tank. Do not dispose of undiluted chemicals on site. 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.
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:	3077	Subsidiary Risk:	None allocated
UN Proper Shipping Name:	Environmentally Hazardous Substance, Solid, N.O.S. (Difenoconazole)	Packing Group:	III
Class:	9	Marine Pollutant:	Marine pollutant

AIR TRANSPORT IATA-DGR			
UN Number:	3077	Subsidiary Risk:	None allocated
UN Proper Shipping Name:	Environmentally Hazardous Substance, Solid, N.O.S. (Difenoconazole)	Packing Group:	III
Class:	9		

Section 15: REGULATORY INFORMATION

APVMA Product Number:	48533
Poisons Schedule (SUSDP):	5

Section 16: OTHER INFORMATION

Date of preparation or last revision: May 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.

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