

SAFETY DATA SHEET

Section 1: IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND SUPPLIER

Product Name:	SCORE 250 EC
Design Code:	A7402G/A7402Q
Recommended Use:	For the control of Leaf Spots on Carrots, Ring Spot on horticultural Brassicas, Early Blight on Potatoes and Stemphylium Leaf Spot on Asparagus.
Company Details:	Syngenta Crop Protection Limited
Address:	Tower II, Level 7, 110 Symonds Street Private Bag 92618, Symonds Street AUCKLAND NEW ZEALAND
Telephone number:	(weekdays) 09 - 306 1500
Emergency Telephone number:	(24 Hours) 0800 734 607
National Poisons & Hazchem Information Centre :	0800 POISON (0800 764 766)
Date of Preparation:	19 November 2015

Section 2: HAZARDS IDENTIFICATION

Hazard classification:	3.1D, 6.1E, 6.3A, 6.4A, 6.8A, 6.9B, 9.1A
Priority Identifier:	WARNING KEEP OUT OF REACH OF CHILDREN
Secondary Identifiers:	3.1D = Combustible liquid. 6.1E = May be harmful if swallowed , inhaled or absorbed through skin) 6.3A = May cause skin irritation 6.4A = May cause eye irritation 6.8A = May cause reproductive / development damage from repeated oral exposure 6.9B = May cause organ damage from repeated oral exposure at high doses. 9.1A = Very toxic to aquatic organisms

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

<i>Pure Substance:</i>	
Chemical Identity of pure substance:	<i>cis, trans</i> -3-chloro-4-[4-methyl-2-(1 <i>H</i> -1,2,4-triazol-1-ylmethyl)-1,3-dioxolan-2-yl]phenyl 4-chlorophenyl ether
Common Name:	Difenoconazole
Synonyms:	CGA 169374
CAS number:	119446-68-3

<i>Mixture:</i>		
Chemical Identity of ingredients:		
Ingredient	CAS no.	Content (% w/v)
Difenoconazole (technical grade)	119446-68-3	25
2-pyrrolidinone, 1 methyl	872-50-4	10-<30
Calcium alkyl benzene sulphonate	26264-06-2	<10
solvent naphtha (petroleum) highly aromatic	64742-94-5	30-<60
other ingredients determined not to be hazardous	-	to 100%

Section 4: FIRST AID MEASURES

Necessary First Aid measures:	For advice contact the National Poisons Centre on 0800 POISON (0800 764 766) or a doctor immediately. Begin artificial respiration if the victim is not breathing. Use mouth to nose rather than mouth to mouth. Obtain medical attention. Swallowed: If swallowed DO NOT induce vomiting. Eye: If concentrate or spray solution enters the eyes wash it out immediately with water. Remove contact lenses. Skin: If skin contact occurs remove contaminated clothing and wash affected areas thoroughly with running water. Inhaled: If inhaled move the victim to fresh air immediately
Poisoning symptoms:	No case of human poisoning due to this product is on record. The poisoning symptoms observed for laboratory mammals were non-specific.
Workplace facilities:	No specific facilities required. Standard emergency equipment must be available.
Hygiene Practices:	Avoid contact with skin and eyes and inhalation of concentrate or spray mist. When mixing or applying, wear protective clothing, including cotton overalls, gloves and face shield. Wash splashes of concentrate from eyes or skin immediately. DO NOT eat, drink or smoke while using. Wash hands and face before eating, drinking or smoking and after work. Wash protective clothing after use.
Notes for Medical Personnel:	No specific antidote is available. If poisoning is suspected apply symptomatic therapy.

Section 5: FIRE-FIGHTING MEASURES

Type of Hazard:	Combustible product at elevated temperatures.
Fire Hazard Properties:	Combustion products are toxic and/or irritant. Measures have to be taken to prevent the contaminated extinguishing agent from seeping into the ground or from spreading uncontrollably.
Regulatory Requirements:	Stores with quantities of 500 L or more require 2 fire extinguishers Hazardous Substances (Emergency Management) Regulations 2001. Code EM10 (Regs 21-24), Code EM11 (Regs 25-34), Code EM12 (Regs 35-41) and Code EM13 (Reg 42)
Extinguishing Media and methods:	Use dry chemical, foam or CO ₂ extinguishing media.
Hazchem Code:	2X
Recommended Protective Clothing:	When fighting a major fire wear an air-supplied respirator. Wear full protective clothing.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Emergency Procedures: Ensure suitable personal protection during removal of spillages. This means wearing eye protection, chemically resistant gloves, boots and overalls.
Environmental Precautions:	Washings must be prevented from entering surface water drains or waterways.
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) Dam and absorb spill with an absorbent material (e.g. sand or soil).(5) Shovel the absorbed spill into drums.(6) Decontaminate the spill area with detergent and water and rinse with the smallest volume of water practicable.
Procedure for Disposal:	Disposal of the absorbed material will depend upon the extent of the spill. Contaminated material must be disposed of in accordance with all local authority requirements. It is suggested: <ul style="list-style-type: none">• For quantities up to 50 litres of product bury in a secure approved landfill site.• For quantities greater than 50 litres seek advice from the manufacturer (use emergency contact number below) before attempting disposal. Contain in a secure location until disposal method is established.

Section 7: HANDLING AND STORAGE

Precautions for safe handling:	Handling: No special technical protective measures required. No special handling advice required.
Regulatory Requirements:	not required.
Handling practices:	Avoid contact with skin and eyes and inhalation of concentrate or spray mist. When using, do not eat, drink or smoke. Wash face and hands before eating, drinking or smoking.
Approved Handlers:	This product must be under the control of an approved handler if used by a commercial contractor.

Conditions for Safe Storage:	Storage: Keep out of reach of children. Store in original container, tightly closed, away from foodstuffs. Store in a cool, dry, well ventilated place and protect from sunlight. Avoid temperatures below -10°C or above 35°C. Keep away from flames and hot surfaces
Store Site Requirements:	Signage and secondary containment will be required at sites holding more than 100 litres of any product classified as 9.1A (eg SCORE 250 EC).
Packaging:	Store in original container, tightly closed, away from foodstuffs.

Section 8: EXPOSURE CONTROL / PERSONAL PROTECTION

ALWAYS READ AND FOLLOW THE LABEL INSTRUCTIONS AND WARNINGS

Workplace Exposure Guidelines:			
Workplace Exposure Standards:	<i>Component</i>	<i>Exposure Limit</i>	<i>Value Type</i>
	N-methyl pyrrolidone	103 mg/m ³	TWA
		25 ppm	TWA
		309 mg/m ³	STEL
		75 ppm	STEL
	Difenoconazole	8 mg/m ³	TWA

Application in the workplace:	not applicable
Exposure standards outside the workplace:	none set
Engineering controls:	<p>No special requirements. Product is used outdoors. Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated. The extent of these protection measures depends on the actual risks in use. If airborne mists or vapours are generated, use local exhaust ventilation controls. Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit.</p> <p>Follow precaution statements on the label and the use and safety directions in Code of Practice for the Management of Agrichemical NZS8409.</p>
Personal Protection:	Use only protective equipment bearing the mark of the Standards Association with Australia/ New Zealand. In case of heavy exposure, wear dust mask, goggles, chemical resistant gloves and heavy duty cotton overalls.
General Hygiene:	Change work clothes daily. May irritate the eyes and skin. Avoid contact with eyes and skin. Do not inhale concentrate or spray mist. If product gets on skin immediately wash area with soap and water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	yellow to brown liquid
Solidification Point:	≤5°C
Boiling Point / Range	>220°C
Flash-Point:	63°C (101.3 kPa; Pinsky-Martens c.c.)
Oxidising properties:	not oxidising
Explosive Properties:	not explosive
Density:	1.04-1.08 g/cm ³ (20°C)
pH value:	4-8
Surface Tension:	35.8 mN/m (as is; 20°C)
Miscibility with water:	miscible
Dynamic Viscosity:	35-40 mPa.s (24.6-1220 rps; 20°C)

Section 10: STABILITY AND REACTIVITY

Stability of the Substance:	Stable under normal conditions.
Conditions to Avoid:	none known
Material to Avoid:	none known
Hazardous Decomposition Products:	Combustion or thermal decomposition will evolve toxic and irritant vapours.
Hazardous Reactions:	None known. Hazardous polymerisation does not occur.

Section 11: TOXICOLOGICAL INFORMATION

HSNO Classifications:

- 6.1E - May be harmful if swallowed, inhaled or absorbed through skin.
- 6.3A - May cause skin irritation.
- 6.4A - May cause eye irritation.
- 6.8A - May cause reproductive/development damage from repeated oral exposure.
- 6.9B - May cause organ damage from repeated oral exposure at high doses.

Acute Effects

Toxicity - This product is slightly hazardous (WHO Hazard Class III)

Swallowed: LD₅₀ ca 2500 mg/kg

Dermal absorption: LD₅₀ >2000 mg/kg

Inhaled: LC₅₀ (4 h) >5400 mg/m³

Irritation

Eye: IRRITANT (rabbit)

Skin: IRRITANT (rabbit)

Sensitization NOT A SENSITISER (guinea pigs)

Chronic / Long Term Effects (Active Ingredient)

Difenoconazole technical has been extensively tested on laboratory mammals and in test-tube systems. Did not show carcinogenic, teratogenic or mutagenic effects in animal experiments.

Section 12: ECOTOXICITY INFORMATION

HSNO Classifications:	9.1A = Very toxic to aquatic organisms
Environmental Risk and Safety Phrases:	Avoid contamination of any water supply with chemical or empty container

The information presented below is for the active ingredient, difenoconazole. A thorough review of environmental information is not possible in this document.

Ecotoxicity Effects	
Acute toxicity to Birds:	LD ₅₀ (9-11days) = >2150 mg/kg (mallard ducks) LD ₅₀ (9-11days) = >4760 mg/kg (bobwhite quail)
Acute toxicity to fish:	LC ₅₀ (96 h) = 8 mg/l (Salmo trutta (trout)); LC ₅₀ (96 h) = 1.2mg/l (bluegill sunfish) LC ₅₀ (96 h) = 0.82mg/l (sheepshead minnow)
Toxicity to algae:	EbC ₅₀ (72 h) = 1.2 mg/l (Scenedesmus subspicatus (green algae))
Toxicity to aquatic Invertebrates:	LC ₅₀ (48 h) = 0.77mg/l (Daphnia magna (water flea));
Toxicity to soil dwelling organisms:	LC ₅₀ = >610 mg/kg (Earthworms)
Toxicity to honey bees	LD ₅₀ >187 ug/bee (oral) LD ₅₀ >100ug/bee (topical)

Environmental Fate	
Bioaccumulation	Difenoconazole has high potential to bioaccumulate.
Stability in water	Degradation half life: 1 d Difenoconazole is not persistent in water.
Stability in soil	Degradation half life: 149-187 d Difenoconazole is not persistent in soil.
Mobility	Difenoconazole has low mobility in soil.

Section 13: DISPOSAL CONSIDERATIONS

Product Disposal:	Dispose of this product only by using according to the label, or at an approved landfill or other approved facility.
Container Disposal:	Ensure the container is empty. Triple rinse empty container and add rinsate to the spray tank. Recycle empty container through Agrecovery (0800 247 326, www.agrecovery.co.nz). Otherwise crush and bury in a suitable landfill. DO NOT reuse this container for any other purpose.

Section 14: TRANSPORT INFORMATION

Rail / Road (RID/ADR)	UN-No:	3082
	Class:	9
	Packaging Group:	III
	Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SOLVENT NAPHTHA and DIFENOCONAZOLE)
Sea (IMDG-Code)	UN-No:	3082
	Class:	9
	Packaging Group:	III
	Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SOLVENT NAPHTHA and DIFENOCONAZOLE)
Air (ICAO/IATA)	Marine Pollutant:	Marine Pollutant
	UN-No:	3082
	Class:	9
	Packaging Group:	III
	Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SOLVENT NAPHTHA and DIFENOCONAZOLE)

Section 15: REGULATORY INFORMATION

HSNO Approval Number:	HSR000508
HSNO Controls (inc. Tracking and Record Keeping):	See http://www.epa.govt.nz/search-databases/Pages/controls-search.aspx for controls.
ACVM Registration:	P 3900
ACVM Controls:	See www.foodsafety.govt.nz/industry/acvm for registration conditions.

Section 16: OTHER INFORMATION

Note: This product is a registered agricultural chemical and must therefore be used in accordance with the container label directions. 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.

CONTACT POINT: Business Manager - Crop Protection: (09) 306 1503
24 HOURS EMERGENCY CONTACT: 0800 734 607

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 MSDS 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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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.