

SAFETY DATA SHEET

Section 1: Identification: Product identifier and chemical identity

Product Identifier:	DACONIL® WEATHER STIK® Fungicide
Other Means of Identification:	Proper shipping name: Environmentally Hazardous Substance, Liquid, N.O.S. (Chlorothalonil) Applicable only for marine and air transport
	Product code: A12531M
Recommended Use:	Fungicide for control of diseases in turf
Details of manufacturer or importer	Syngenta Australia Pty Ltd ABN 33 002 933 717
Address:	Level 1, 2-4 Lyonpark Road MACQUARIE PARK NSW 2113 AUSTRALIA
Website:	syngenta.com.au
Phone Number:	(02) 8876 8444
Emergency Phone Number:	24 hours - 1800 033 111

Section 2: Hazards identification

Classification of the Hazardous Chemical:	Acute toxicity – oral – Category 4 Acute toxicity – inhalational – Category 4 Eye irritation – Category 2 Skin sensitisation – Category 1 Carcinogenicity – Category 2 Specific organ toxicity – Category 3 (respiratory)
Signal Word:	WARNING
Hazard Statement(s):	H302 + H332 Harmful if swallowed or if inhaled H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H351 Suspected of causing cancer.
Precautionary Statement(s):	P102 Keep out of reach of children. P103 Read label before using P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P261 Avoid breathing mist/vapours/ spray. P264 Wash hands thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P281 Use personal protective equipment as required. P280 Wear eye protection/ face protection/ protective gloves. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical advice/ attention. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P333 + P313 If skin irritation or rash occurs: Get medical advice/attention. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P312 Call a POISON CENTRE or doctor/physician if you feel unwell.

P363 Wash contaminated clothing before reuse.
 P308 + P313 IF exposed or concerned: Get medical advice/attention.
 P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.
 P501 Dispose of contents/ container to an approved waste management facility.

Hazard Symbols:



Section 3: Composition and information on ingredients

SUBSTANCE		
Chemical Identity of Pure Substance:	Chlorothalonil	
Synonym:	Tetrachloroisophthalonitrile	
CAS Number:	1897-45-6	
MIXTURE		
Chemical Identity of Ingredients:	CAS No	Proportion (%w/w)
Chlorothalonil	1897-45-6	72
propane-1,2-diol	57-55-6	<10
1,2-benzisothiazol-3(2H)-one	2634-33-5	<10
Sulfurous acid, disodium salt	7757-83-7	<10
other ingredients determined not to be hazardous	–	to 100

Section 4: First aid measures

Description of Necessary First Aid Measures:	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.
Ingestion:	If swallowed, seek medical advice immediately and show this container or label. DO NOT induce vomiting.
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.
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.
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.
Symptoms Caused by Exposure:	Poisoning symptoms in laboratory animals were non-specific.
Medical Attention and Special Treatment:	There is no specific antidote available. Treat symptomatically.

Section 5: Fire fighting measures

Suitable Extinguishing Equipment:	<p>Small fires: 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>Large fires: Use alcohol resistant foam or water spray. DO NOT use a solid water stream as it may scatter and spread fire</p>
Specific Hazards Arising from the Chemical:	<p>As this product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion. Combustion or thermal decomposition will evolve toxic and irritant vapours. Exposure to decomposition products may be a hazard to health.</p>
Special Protective Equipment and Precautions for Fire Fighters:	<p>When fighting a major fire wear full 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>

Section 6: Accidental release measures

Personal Precautions, Protective Equipment and Emergency Procedures:	<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
Environmental precautions:	<p>Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.</p>
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 chemical resistant 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

Section 7: Handling and storage

Precautions for Safe Handling:	<p>Attacks eyes and skin. Avoid contact with eyes and skin. DO NOT inhale spray mist. Repeated exposure may cause allergic disorders. Sensitive workers should use protective clothing. When preparing spray and 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; • goggles; and • disposable mist mask. <p>If clothing becomes contaminated with product or wet with spray, remove clothing immediately. If product on skin, immediately wash area with soap and water. If product in eyes, wash it out immediately with water.</p> <p>After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and goggles and contaminated clothing</p>
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Conditions for Safe Storage, Including any Incompatibilities: Store in the closed, original container in a cool, well ventilated area. DO NOT store for prolonged periods in direct sunlight.

Section 8: Exposure controls and personal protection

ALWAYS READ AND FOLLOW THE LABEL INSTRUCTIONS AND WARNINGS

	Component	Exposure limit	Value type
National Exposure Standards:	Propylene glycol	0.474 mg/m ³	TWA
		150 ppm	TWA
Syngenta Exposure Standards:	Chlorothalonil	0.1 mg/m ³	TWA
Biological Limit Values:	No biological limit allocated		
Engineering Controls:	No special requirements. Product is used outdoors.		
Personal Protective Equipment:	<p>Attacks eyes and skin. Avoid contact with eyes and skin. DO NOT inhale spray mist. Repeated exposure may cause allergic disorders. Sensitive workers should use protective clothing. When preparing spray and 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; • goggles; and • disposable mist mask. <p>If clothing becomes contaminated with product or wet with spray, remove clothing immediately. If product on skin, immediately wash area with soap and water. If product in eyes, wash it out immediately with water.</p> <p>After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and goggles and contaminated clothing</p>		

Section 9: Physical and chemical properties

Appearance:	off-white to light brown liquid	Boiling Point/Range:	100 °C
Odour:	Pungent, weak	Freezing/Melting Point:	-5 °C
pH:	6.5 - 9.5 (1% v/v)	Solubility:	Dispersible
Vapour Pressure:	Not available	Specific Gravity or Density:	1.345 g/cm ³
Vapour Density:	Not available	Viscosity, dynamic	3,220 mPa (20°C) 2,680 mPa (40°C)
Flash Point:	>100°C	Explosive Properties:	Not explosive
Upper and Lower Flammable (Explosive) Limits in Air:	Not available	Oxidising Properties:	Not oxidising
Auto Ignition Temperature:	<650°C	Combustibility:	Combustible
		Corrosiveness:	Not corrosive

Section 10: Stability and reactivity

Reactivity:	No information available
Chemical Stability:	Stable at normal ambient temperature and pressure.
Possibility of Hazardous Reactions:	No hazardous reactions by normal handling and storage according to provisions.
Conditions to Avoid:	None known.
Incompatible Materials:	None known.
Hazardous Decomposition Products:	Combustion or thermal decomposition will evolve toxic and irritant vapours.

Section 11: Toxicological information

Health Effects from Likely Routes of Exposure:

Acute	Oral toxicity:	HARMFUL Tests on rats indicate this product is harmful following single doses of undiluted product. LD ₅₀ = 2000 mg/kg
	Dermal toxicity:	LOW TOXICITY Tests on rabbits indicate this has a low toxicity following skin contact with undiluted product LD ₅₀ = >2000 mg/kg
	Inhalation:	HARMFUL Tests on rats indicate this product is harmful due to inhalation of undiluted product. LC ₅₀ (4h) = 0.86–1.5 mg/L
	Skin irritation:	SLIGHT IRRITANT
	Eye irritation:	SEVERE IRRITANT
	Sensitisation:	SENSITISER

Chronic Chlorothalonil has been extensively tested in mammals and in test-tube systems. No evidence of mutagenic, neurotoxic, teratogenic or reproductive effects was obtained. Subchronic toxicity studies in dogs have shown kidney toxicity, and chronic toxicity studies in rats and mice have shown kidney and forestomach tumours at high doses. This is not considered to be a risk to humans when handled and used as directed on the label.

Section 12: Ecological information

Ecotoxicity	Toxicity to fish:	Very highly toxic to fish <i>Oncorhynchus mykiss</i> (rainbow trout): 96 h LC ₅₀ = 61 µg/L (similar formulation)
	Toxicity to daphnia and other aquatic invertebrates:	Highly toxic to aquatic invertebrates <i>Daphnia magna</i> (Water flea): 48 h EC ₅₀ = 180 µg/L (similar formulation)
	Toxicity to algae:	Highly toxic to algae <i>Pseudokirchneriella subcapitata</i> (green algae): 72 h E _r C ₅₀ = 0.24 mg/L (derived from components) 72 h E _b C ₅₀ = 0.13 mg/L (derived from components)
	Toxicity to soil dwelling organisms:	Slightly toxic to earthworms <i>Eisenia foetida</i> (earthworm) 14 d LC ₅₀ = 881 mg/kg
	Bees:	Non toxic to bees Oral LD ₅₀ > 200 µg/bee Contact LD ₅₀ >200 µg/bee

Persistence and Degradability:	Chlorothalonil is not persistent in soil or water.
Mobility:	Chlorothalonil has low to slight mobility in soil
Environmental Fate (Exposure):	Incorporated into organic molecules
Bioaccumulative Potential:	Chlorothalonil has low potential for bioaccumulation.

Section 13: Disposal considerations

Disposal Methods:	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 Incineration or Landfill:	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
Transport Hazard Class:	None allocated	Hazchem or Emergency Action 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. (Chlorothalonil)	Packing Group:	III
Transport Hazard Class:	9	Environmental hazards for Transport Purposes:	Marine pollutant

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

Section 15: Regulatory information

APVMA Product Number: 56777

Poisons Schedule (SUSMP): 6

Section 16: Any other relevant information

Date of preparation or last revision: November 2016

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 Australia Pty Ltd

(02) 8876 8444

24 HOURS EMERGENCY CONTACT: 1800 033 111

This 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.