

## SAFETY DATA SHEET

### Section 1: Identification: Product identifier and chemical identity

<b>Product Identifier:</b>	<b>MEDALLION Turf Fungicide</b>
<b>Other Means of Identification:</b>	<b>Proper shipping name:</b> Environmentally Hazardous Substance, Liquid, N.O.S. (fludioxonil) <b>Applicable only for marine and air transport</b>
	<b>Product code:</b> Formulation code A17856B
<b>Recommended Use:</b>	For the control of Anthracnose, Brown Patch, Dollar Spot, Helminthosporium Disease and Winter Fusarium in turf
<b>Details of manufacturer or importer</b>	<b>Syngenta Australia Pty Ltd</b> ABN 33 002 933 717
<b>Address:</b>	<b>Level 1, 2-4 Lyonpark Road</b> <b>MACQUARIE PARK NSW 2113</b> <b>AUSTRALIA</b>
<b>Website:</b>	syngenta.com.au
<b>Phone Number:</b>	(02) 8876 8444
<b>Emergency Phone Number:</b>	24 hours - 1800 033 111

### Section 2: Hazards identification

<b>Classification of the Hazardous Chemical:</b>	Not classified as hazardous under GHS criteria.
<b>Signal Word:</b>	-
<b>Hazard Statement(s):</b>	-
<b>Precautionary Statement(s):</b>	-
<b>Hazard Symbols:</b>	-

### Section 3: Composition and information on ingredients

SUBSTANCE	
<b>Chemical Identity of Pure Substance:</b>	Fludioxonil
<b>Synonym:</b>	CGA173506
<b>CAS Number:</b>	131341-86-1

MIXTURE		
Chemical Identity of Ingredients:	CAS No	Proportion (%w/v)
Fludioxonil	131341-86-1	12.5
poly(oxy-1,2-ethanediyl), -[2,4,6-tris(1-phenylethyl)phenyl]-hydroxy	99734-09-5	>= 1 - < 2.5
2-bromo-2-nitropropan-1,3-diol	52-51-7	< 0.1
1,2-benzisothiazol-3(2H)-one	2634-33-5	< 0.05
Non-hazardous ingredients	-	to 100

## Section 4: First aid measures

<b>Description of Necessary First Aid Measures:</b>	<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><b>Ingestion:</b> If swallowed, seek medical advice immediately and show the container or label. DO NOT induce vomiting.</p> <p><b>Eye contact:</b> 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><b>Skin contact:</b> Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a doctor. Wash contaminated clothing before re-use.</p> <p><b>Inhalation:</b> Move the victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a doctor or Poisons Information Centre immediately.</p>
<b>Symptoms Caused by Exposure:</b>	Poisoning symptoms in laboratory animals were non-specific
<b>Medical Attention and Special Treatment:</b>	There is no specific antidote available. Treat symptomatically.

## Section 5: Fire fighting measures

<b>Suitable Extinguishing Equipment:</b>	<p><b>Small fires:</b> Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.</p> <p><b>Large fires:</b> Use alcohol resistant foam or water spray. DO NOT use a solid water stream as it may scatter and spread fire.</p>
<b>Specific Hazards Arising from the Chemical:</b>	<p>As the 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>
<b>Special Protective Equipment and Precautions for Fire Fighters:</b>	Wear full protective clothing and self-contained breathing apparatus.

## Section 6: Accidental release measures

<b>Personal Precautions, Protective Equipment and Emergency Procedures:</b>	<p>In case of spillage it is important to take all steps necessary to</p> <ul style="list-style-type: none"> <li>• Avoid eye and skin contact</li> <li>• Avoid contamination of waterways</li> </ul>
<b>Environmental Precautions:</b>	<p>Prevent further leakage or spillage if safe to do so. DO NOT flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.</p>
<b>Methods and Materials for Containment and Clean Up:</b>	<p><b>Procedure for spill</b></p> <ol style="list-style-type: none"> <li>(1) Keep all bystanders away</li> <li>(2) Wear full length clothing and PVC gloves</li> <li>(3) Reposition any leaking containers so as to minimise further leakage</li> </ol>

- (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
  - 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:** When opening the container, preparing spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing)  
Wash hands after use. After each day's use, wash contaminated clothing.

**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
<b>National Exposure Standards:</b>	DL-propanediol-(1,2)	10 mg/m <sup>3</sup>	TWA
		(particulates)	
		150 ppm 470 g/m <sup>3</sup>	TWA TWA
	(total vapour and particulates)		
<b>Syngenta Exposure Standards:</b>	Fludioxonil	10 mg/m <sup>3</sup>	TWA
<b>Biological Limit Values:</b>	No biological limits allocated		
<b>Engineering Controls:</b>	No special requirements. Product is used outdoors.		
<b>Personal Protective Equipment:</b>	When opening the container, preparing spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) Wash hands after use. After each day's use, wash contaminated clothing.		

## Section 9: Physical and chemical properties

<b>Appearance:</b>	Beige grey to grey green liquid suspension	<b>Boiling Point/Range:</b>	No information available
<b>Odour:</b>	Sweetish	<b>Freezing/Melting Point:</b>	No information available
<b>pH:</b>	5 – 9 at 1% w/v	<b>Solubility:</b>	No information available
<b>Vapour Pressure:</b>	No information available	<b>Specific Gravity or Density:</b>	1.06 g/cm <sup>3</sup> at 20°C
<b>Vapour Density:</b>	No information available		

<b>Flash Point:</b>	>100°C at 99.2 kPa Pensky-Martens cc	<b>Explosive Properties:</b>	Not explosive
<b>Upper and Lower Flammable (Explosive) Limits in Air:</b>	Not flammable	<b>Oxidising Properties:</b>	Not an oxidiser
<b>Ignition Temperature:</b>	-	<b>Combustibility:</b>	Not combustible
		<b>Corrosiveness:</b>	No information available

## Section 10: Stability and reactivity

<b>Reactivity:</b>	No hazardous reactions by normal handling and storage according to provisions.
<b>Chemical Stability:</b>	Stable at normal temperatures and storage conditions
<b>Possibility of Hazardous Reactions:</b>	No hazardous reactions by normal handling and storage according to provisions.
<b>Conditions to Avoid:</b>	No decomposition if used as directed.
<b>Incompatible Materials:</b>	No substances are known which lead to the formation of hazardous substances or thermal reactions.
<b>Hazardous Decomposition Products:</b>	Combustion or thermal decomposition will evolve toxic and irritant vapours.

## Section 11: Toxicological information

<b>Health Effects from Likely Routes of Exposure:</b>		
<b>Acute:</b>	<b>Oral toxicity:</b>	<b>LOW TOXICITY</b> Tests on rats indicate this product has a low toxicity following single doses of undiluted product LD <sub>50</sub> = 5,000 mg/kg
	<b>Dermal toxicity:</b>	<b>LOW TOXICITY</b> Tests on rats indicate this product has a low toxicity following skin contact with undiluted product LD <sub>50</sub> = >5,000 mg/kg
	<b>Inhalation:</b>	<b>LOW TOXICITY</b> Tests on rats indicate this product is not harmful due to inhalation of undiluted product LC <sub>50</sub> (4 hours) = >2.59 mg/L
	<b>Skin irritation:</b>	<b>NON IRRITANT</b>
	<b>Eye irritation:</b>	<b>SLIGHT IRRITANT</b>
	<b>Sensitisation:</b>	<b>NOT A SENSITISER</b>
<b>Chronic:</b>	<b>Fludioxonil technical</b> has been extensively tested on laboratory mammals and in test-tube systems. No evidence of mutagenic, carcinogenic, teratogenic or reproductive effects was obtained. Liver and kidney toxicity occur at high dose levels.	

## Section 12: Ecological information

<b>Ecotoxicity</b>	<b>Toxicity to fish:</b>	<b>Moderately toxic to fish</b> Rainbow trout ( <i>Oncorhynchus mykiss</i> ) LC <sub>50</sub> = 5.4 mg/L 96 h
	<b>Toxicity to daphnia and other aquatic invertebrates:</b>	<b>Slightly toxic to Daphnia</b> <i>Daphnia magna</i> (Water flea): EC <sub>50</sub> = 30 mg/L, 48 h
	<b>Toxicity to algae:</b>	<b>Moderately toxic to algae</b> <i>Pseudokirchneriella subcapitata</i> (green algae): E <sub>r</sub> C <sub>50</sub> = 5.4 mg/L, 72 h
	<b>Toxicity to soil dwelling organisms:</b>	No information available
	<b>Toxicity to terrestrial invertebrates</b>	<b>Non toxic to bees</b> Honey bee ( <i>Apis mellifera</i> ) LC <sub>50</sub> = >1,000 µg/kg 48 h (contact and oral)
<b>Persistence and Degradability:</b>	Fludioxonil is not readily biodegradable	
<b>Mobility in Soil:</b>	Fludioxonil is immobile in soil	
<b>Bioaccumulative Potential:</b>	Fludioxonil does not bioaccumulate	

## Section 13: Disposal considerations

<b>Disposal Methods:</b>	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, triple rinse, break, crush or puncture and deliver empty packaging for appropriate disposal at an approved waste management facility. If an approved waste management facility is not available bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. Empty containers and product must not be burnt.
<b>Special Precautions for Incineration or Landfill:</b>	Not applicable

## Section 14: Transport information

<b>LAND TRANSPORT</b>		<b>Not a dangerous good in Australia</b>	
ADG			
<b>UN Number:</b>	None allocated	<b>Packing Group:</b>	None allocated
<b>UN Proper Shipping Name:</b>	None allocated	<b>Special Precautions for User:</b>	None allocated
<b>Transport Hazard Class:</b>	None allocated	<b>Hazchem or Emergency Action Code:</b>	None allocated
<b>Subsidiary Risk:</b>	None allocated		

<b>SEA TRANSPORT</b> IMDG			
<b>UN Number:</b>	3082	<b>Subsidiary Risk:</b>	None allocated
<b>UN Proper Shipping Name:</b>	Environmentally Hazardous Substance, Liquid, N.O.S. (fludioxonil)	<b>Packing Group:</b>	III
<b>Transport Hazard Class:</b>	9	<b>Environmental hazards for Transport Purposes:</b>	Marine pollutant

<b>AIR TRANSPORT</b> ICAO / IATA			
<b>UN Number:</b>	3082	<b>Subsidiary Risk:</b>	None allocated
<b>UN Proper Shipping Name:</b>	Environmentally Hazardous Substance, Liquid, N.O.S. (fludioxonil)	<b>Packing Group:</b>	III
<b>Transport Hazard Class:</b>	9		

### Section 15: Regulatory information

<b>APVMA Product Number:</b>	69590
<b>Poisons Schedule (SUSMP):</b>	5

### Section 16: Any other relevant information

<b>Date of preparation or last revision:</b> November 2016
<b>Source of Data:</b> 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.
<b>Note:</b> This product is a registered agricultural chemical and must, therefore, be used in accordance with the container label directions
<b>CONTACT POINT:</b> Regulatory Affairs Manager, Syngenta Australia Pty Ltd (02) 8876 8444 <b>24 HOURS EMERGENCY CONTACT: 1800 033 111</b>
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.
<b>DISCLAIMER</b> 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.