

## SAFETY DATA SHEET

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

<b>Product Identifier:</b>	<b>MIRAVIS® Fungicide</b>
<b>Other Means of Identification:</b>	<b>Proper Shipping Name:</b> Pesticides, Liquid, Toxic (pydiflumetofen) <b>Applicable only for marine and air transport</b>
	<b>Product code:</b> A19649B
<b>Recommended Use:</b>	Fungicide for control of certain diseases in canola, grapes and potatoes
<b>Details of manufacturer or importer</b>	<b>Syngenta Australia Pty Ltd</b> <b>ABN 33 002 933 717</b>
<b>Address:</b>	<b>Level 1, 2-4 Lyonpark Road</b> <b>MACQUARIE PARK NSW 2113</b> <b>AUSTRALIA</b>
<b>Website:</b>	<b>syngenta.com.au</b>
<b>Phone Number:</b>	<b>(02) 8876 8444</b>
<b>Emergency Phone Number:</b>	<b>24 hours - 1800 033 111</b>

### 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 statements</b>	P102 Keep out of reach of children. P103 Read label before use.
<b>Hazard Symbols:</b>	

### Section 3: Composition and information on ingredients

SUBSTANCE		
<b>Chemical Identity of Pure Substance:</b>	Pydiflumetofen	
<b>Synonym:</b>	SYN545974	
<b>CAS Number:</b>	1228284-64-7	
MIXTURE		
<b>Chemical Identity of Ingredients:</b>	<b>CAS No</b>	<b>Proportion (%w/v)</b>
Pydiflumetofen	1228284-64-7	20%
1,2-benzisothiazol-3(2H)-one	2634-33-5	<0.05%
Other ingredients determined not to be hazardous		to 100

### Section 4: First aid measures

<b>Description of Necessary First Aid Measures:</b>	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.
	<b>Ingestion:</b> If swallowed, seek medical advice immediately and show this container or label. DO NOT induce vomiting.

<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.
<b>Skin contact:</b>	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.
<b>Inhalation:</b>	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.
<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. DO NOT use a solid water stream as it may scatter and spread fire.</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>	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. Flash back possible over considerable distance.
<b>Special Protective Equipment and Precautions for Fire Fighters:</b>	<p>When fighting a major fire wear full protective clothing and self contained breathing apparatus.</p> <p>Do not allow run-off from fire fighting to enter drains or water courses.</p> <p>Cool closed containers exposed to fire with water spray.</p>

## 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.</p> <p>Do not flush into surface water or sanitary sewer system.</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 chemical-resistant gloves</li> <li>(3) Reposition any leaking containers so as to minimise leakage</li> <li>(4) Dam and absorb spill with an absorbent material (eg sand or soil).</li> <li>(5) Shovel into drums</li> <li>(6) Disposal of the material will depend upon the extent of the spill <ul style="list-style-type: none"> <li>• For quantities up to 50 L of product bury in a secure landfill site</li> <li>• 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</li> </ul> </li> <li>(7) Decontaminate spill area with detergent and water and rinse with the smallest volume of water practicable</li> </ol>

## Section 7: Handling and storage

**Precautions for Safe Handling:** Harmful if inhaled. DO NOT inhale spray mist. May irritate the eyes. Avoid contact with the eyes. Wash hands after use.

**Conditions for Safe Storage, Including any Incompatibilities:** Store in closed original container in a cool, well ventilated place cool as possible out of 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>	No exposure standard allocated		
<b>Syngenta Exposure Standards:</b>	Pydiflumetofen	5 mg/m <sup>3</sup>	TWA
<b>Biological Limit Values:</b>	No biological limit allocated		
<b>Engineering Controls:</b>	No special requirements. Product is used outdoors.		
<b>Personal Protective Equipment:</b>	Harmful if inhaled. DO NOT inhale spray mist. May irritate the eyes. Avoid contact with the eyes. Wash hands after use.		

## Section 9: Physical and chemical properties

<b>Appearance:</b>	cream to milky white liquid	<b>Boiling Point/Range:</b>	Not available
<b>Odour:</b>	No particular odour	<b>Freezing/Melting Point:</b>	Not available
<b>pH:</b>	5.9 – 7 at 1% w/v	<b>Solubility:</b>	Forms suspension
<b>Vapour Pressure:</b>	Not available	<b>Density:</b>	1.09 g/cm <sup>3</sup> at 20°C

<b>Flash Point:</b>	>101°C	<b>Explosive Properties:</b>	Not explosive
<b>Upper and Lower Flammable (Explosive) Limits in Air:</b>	Not available	<b>Oxidising Properties:</b>	Not oxidising
<b>Auto Ignition Temperature:</b>	>650°C	<b>Combustibility:</b>	Not combustible
		<b>Corrosiveness:</b>	Not corrosive to galvanised sheet steel and stainless steel. Slight corrosion to tin plate and sheet steel.

## 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 ambient temperature and pressure.
<b>Possibility of Hazardous Reactions:</b>	No hazardous reactions by normal handling and storage according to provisions.
<b>Conditions to Avoid:</b>	None known.
<b>Incompatible Materials:</b>	None known.
<b>Hazardous Decomposition Products:</b>	Combustion or thermal decomposition will evolve toxic and irritant vapours.

## Section 11: Toxicological information

### Health Effects from Likely Routes of Exposure:

<b>Acute</b>	<b>Oral toxicity:</b>	<b>LOW TOXICITY</b> Tests on rats indicate a low toxicity following a single dose of the undiluted product. (LD <sub>50</sub> >2958 mg/kg)
	<b>Dermal toxicity:</b>	<b>LOW TOXICITY</b> Tests on rats indicate a low toxicity due to skin contact with the undiluted product. (LD <sub>50</sub> >5000 mg/kg)
	<b>Inhalation:</b>	<b>LOW TOXICITY</b> Tests on rats using the active ingredient indicate a low toxicity due to inhalation of undiluted product. (LC <sub>50</sub> (4 h) >3.5 mg/L)
	<b>Skin irritation:</b>	<b>NON IRRITANT</b>
	<b>Eye irritation:</b>	<b>NON IRRITANT</b>
	<b>Sensitisation:</b>	<b>NOT A SENSITISER</b>
<b>Chronic</b>	<b>Pydiflumetofen technical</b> has been extensively tested on laboratory mammals and in test-tube systems. Animal testing did not show any mutagenic effects. Liver tumours noted in mice that are not relevant to humans. No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.	

## Section 12: Ecological information

<b>Ecotoxicity</b>	<i>Toxicity to fish:</i>	<b>Highly toxic to fish</b> <i>Oncorhynchus mykiss</i> (rainbow trout): LC <sub>50</sub> = 1.4 mg/L, 96 h
	<i>Toxicity to daphnia and other aquatic invertebrates:</i>	<b>Highly toxic to aquatic invertebrates</b> <i>Daphnia magna</i> (Water flea): EC <sub>50</sub> = 2.1 mg/L, 48 h
	<i>Toxicity to algae:</i>	<b>Practically non-toxic to algae</b> <i>Anabaena flos-aquae</i> (blue green algae): EC <sub>50</sub> = >100 mg/L, 72 h
	<i>Toxicity to soil dwelling organisms:</i>	<b>Practically non-toxic to earthworms</b> <i>Eisenia foetida</i> (earthworm): LC <sub>50</sub> >1000 mg/kg, 14 d
<b>Persistence and Degradability:</b>	Pydiflumetofen is persistent in soils and stable in water.	
<b>Mobility</b>	Pydiflumetofen has low mobility in soil.	
<b>Environmental Fate (Exposure):</b>	Pydiflumetofen is not readily biodegradable.	
<b>Bioaccumulative Potential:</b>	Pydiflumetofen does not bioaccumulate.	

## Section 13: Disposal considerations

<b>Disposal Methods:</b>	Triple or preferably pressure rinse containers before disposal. Add rinsings to treatment 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, break, crush or puncture and deliver empty packaging for appropriate disposal to 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. DO NOT burn empty containers or product.
<b>Special Precautions for Incineration or Landfill:</b>	Not applicable

### Section 14: Transport information

<b>LAND TRANSPORT ADG</b> Not a dangerous good in Australia	
<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 IMDG</b>	
<b>UN Number:</b> 3082	<b>Subsidiary Risk:</b> None allocated
<b>UN Proper Shipping Name:</b> Environmentally Hazardous Substance, Liquid, N.O.S. (Pydiflumetofen)	<b>Packing Group:</b> III
<b>Transport Hazard Class:</b> 9	<b>Environmental hazards for Transport Purposes:</b> Marine pollutant
<b>AIR TRANSPORT IATA - DGR</b>	
<b>UN Number:</b> 3082	<b>Subsidiary Risk:</b> None allocated
<b>UN Proper Shipping Name:</b> Environmentally Hazardous Substance, Liquid, N.O.S. (Pydiflumetofen)	<b>Packing Group:</b> III
<b>Transport Hazard Class:</b> 9	

### Section 15: Regulatory information

<b>APVMA Product Number:</b>	82484
<b>Poisons Schedule (SUSMP):</b>	--

### Section 16: Any other relevant information

<b>Date of preparation or last revision:</b> April 2018
<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 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.