

Infosafe No™ 3NUM4	Issue Date : October 2018	ISSUED by NUFARM
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 Product Name **DIGGER Fungicide**

Classified as hazardous

1. Identification

GHS Product Identifier	DIGGER Fungicide	
Product Code	1010	NUL2386
Product Type	Group 3 Fungicide	
Company Name	NUFARM AUSTRALIA LIMITED. (ABN 80 004 377 780)	
Address	103-105 Pipe Road Laverton North Victoria 3026 Australia	
Telephone/Fax Number	Tel: +61 3 9282-1000 Fax: +61 3 9282-1001	
Emergency phone number	1800 033 498 (24hr Australia)	
Recommended use of the chemical and restrictions on use	Controls target spot of potatoes and tomatoes, leaf spot diseases of bananas, beetroot, carrots and celery, powdery mildew of grapevines and husk spot on macadamias as per the Directions for Use table on the label.	
Other Information	This Safety Data Sheet describes the properties of the concentrated product. The physical properties and the assessments may not apply to the properties of the product once it has been diluted for application.	

2. Hazard Identification

GHS classification of the substance/mixture	CA2 Carcinogenicity: Category 2 OT4 Acute Toxicity - Oral: Category 4 ED1 Eye Damage/Irritation: Category 1 SC-2 Skin Corrosion/Irritation: Category 2 AH1 Aspiration Hazard: Category 1
Signal Word (s)	DANGER
Hazard Statement (s)	H351 Suspected of causing cancer. H302 Harmful if swallowed. H318 Causes serious eye damage. H315 Causes skin irritation. H304 May be fatal if swallowed and enters airways. AUH066 Repeated exposure may cause skin dryness or cracking.
General Precautionary Statement (s)	P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P103 Read label before use.
Pictogram (s)	Corrosion, Exclamation mark, Health hazard, The below pictograms are GHS Hazard symbols for workplace use only. See SECTION 14 for Dangerous Goods information.



Precautionary statement – Prevention	P202 Do not handle until all safety precautions have been read and understood. P264 Wash hands and exposed thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves, clothing, eye and face protection.
Precautionary statement – Response	P308+P313 IF exposed or concerned: Get medical advice/attention. P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor/physician. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P332+P313 If skin irritation occurs: Get medical advice/attention. P362 Take off contaminated clothing and wash before reuse. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P331 Do NOT induce vomiting. P330 Rinse mouth.

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Other Information Poisons Schedule S5

3. Composition/information on ingredients

Chemical Liquid

Characterization

Ingredients	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Difenoconazole	119446-68-3	250 g/L
	Liquid Hydrocarbon		696 g/L
	PEG alkylamine		0-10 %
	Other ingredients (considered non-hazardous)		0-10 %

4. First-aid measures

Inhalation Remove affected person to fresh air until recovered. If symptoms develop or persist, seek medical advice.

Ingestion Rinse mouth and then drink plenty of water.
If swallowed do NOT induce vomiting; seek medical advice immediately and show this container or label or contact the Poisons Information Centre on 13 11 26 (Aust). Make every effort to prevent vomit from entering the lungs by careful placement of the patient.

Skin Remove contaminated clothing and launder before re-use.

Eye contact Wash affected areas thoroughly with soap and water.
If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes.

First Aid Facilities Seek medical advice.
If poisoning occurs, contact a doctor or the Poisons Information Centre (Australia) on 13 11 26.

Advice to Doctor Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media Water fog, foam, carbon dioxide or dry chemical.

Hazards from Combustion Products May emit toxic fumes of hydrogen chloride or phosgene if involved in fires or exposed to extreme heat.

Special Protective Equipment for fire fighters Breathable air apparatus should be worn when fighting a fire in which this product is involved.

Other Information STOP FIRE WATER FROM ENTERING DRAINS OR WATER BODIES.

6. Accidental release measures

Spills & Disposal Contain spill and absorb with clay, sand, soil or proprietary absorbent (such as vermiculite).
Collect spilled material and waste in sealable open-top type containers for disposal.

Personal Protection On-site disposal of concentrate is not acceptable.
For appropriate personal protective equipment (PPE), refer Section 8.

7. Handling and storage

Precautions for Safe Handling Do NOT contaminate dams, rivers or streams, or any other water bodies with pesticide or used containers.

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.

Other Information Always read the label and any attached leaflet before use.

8. Exposure controls/personal protection

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Occupational exposure limit values	The manufacturer of the solvent has recommended an occupational exposure limit of 50 mg/m ³ ; 8ppm TWA, as total hydrocarbon.
Appropriate engineering controls	Handle in well ventilated areas, generally natural ventilation is adequate.
Personal Protective Equipment	When opening the container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length butyl gloves and faceshield or goggles. Re-entry period: Do not enter treated area until spray has dried.
Hygiene Measures	After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash contaminated clothing and safety equipment.
Requirements Concerning Special Training	Check State or Territory regulations that require people who use pesticides in their job or business to have training in the application of the materials.

9. Physical and chemical properties

Form	Liquid
Appearance	Clear amber liquid
Odour	Typical solvent odour
Solubility in Water	Forms an emulsion in water.
Specific Gravity	1.058
pH	8 - 10 (1% in water)
Vapour Pressure	3.3 x 10 ⁻⁵ mPa (difenoconazole @ 25°C)
Volatile Component	~50%
Partition Coefficient: n-octanol/water	Kow Log P is 4.4 for difenoconazole
Flash Point	104°C
Flammability	Combustible liquid C2. (AS1940 - 2017). A C2 combustible liquid is not a combustible liquid within the meaning of the Australian Code for the Transport of Dangerous Goods by Road & Rail.
Other Information	pKa is 1.1 for difenoconazole

10. Stability and reactivity

Chemical Stability	Stable under normal conditions.
Possibility of hazardous reactions	Keep away from strong oxidising agents.
Hazardous Polymerization	Hazardous polymerisation is not possible.

11. Toxicological Information

Acute Toxicity - Oral	LD50 (rat) 1453 mg/kg for difenoconazole
Acute Toxicity - Dermal	LD50 (rabbit) >2010 mg/kg for difenoconazole
Acute Toxicity - Inhalation	LC50 (rat) >3.3 mg/l
Ingestion	The concentrate is harmful if swallowed. Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury. If aspirated into the lung, e.g. from vomiting, the presence of hydrocarbon solvent may result in chemical pneumonitis or other lung damage. Possible symptoms of exposure include: nausea, vomiting and central nervous system depression due to hydrocarbon solvent.
Inhalation	High vapour concentrations of the solvent while handling the concentrate are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, and may have other central nervous system effects.

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Skin	Prolonged contact with the concentrate can cause defatting of the skin and may result in dermatitis.
Eye	The concentrate may cause irritation after short contact with the eyes, but permanent damage is not anticipated.
Skin Sensitisation	Product is not a skin sensitiser.
Carcinogenicity	An incidence of liver tumours was noted in long-term studies with difenoconazole in mice. As the mechanism involved is not relevant to humans, and the dose levels were very high, the potential carcinogenic risk to humans is considered negligible.
Chronic Effects	Chronic exposure can cause damage to the liver.
Serious eye damage/irritation	This product is a severe eye irritant.
Mutagenicity	Data indicates no mutagenic effects.
Skin corrosion/irritation	Moderate skin irritant.
Other Information	The Australian Acceptable Daily Intake (ADI) for difenoconazole for a human is 0.01 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 1 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Aust Govt Dept. of APVMA, 'ADI List', June 2018).

12. Ecological information

Known Harmful Effects on the Environment	Toxic to fish and aquatic organisms.
Other Precautions	Do not contaminate dams, waterways or sewers with this product.
Environmental Protection	Marine pollutant.
Acute Toxicity - Fish	The following is data for the active ingredient, difenoconazole. LC50 (96hr) for rainbow trout is 0.81 mg/l.
Acute Toxicity - Daphnia	LC50 (48hr) for daphnia is 0.77 mg/l for difenoconazole.
Acute Toxicity - Algae	EC50 (72hr) for Scenedesmus subspicatus 1.2 mg/l.
Acute Toxicity - Other Organisms	Birds: Not toxic to birds. LD50 for mallard ducks is >2150 mg/kg Bees: Not toxic to bees. LD50 >187 µg/bee.

13. Disposal considerations

Product Disposal	On site disposal of the concentrated product is not acceptable. Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, approach local authorities who hold periodic collections of unwanted chemicals (ChemClear®).
Container Disposal	Do not use this container for any other purpose. Triple or preferably pressure rinse inner bladder or containers before disposal. Add rinsings to the 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, 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 500mm 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. drumMUSTER is the national program for the collection and recycling of empty, cleaned, non returnable crop production and on-farm animal health chemical containers. If the label on your container carries the drumMUSTER symbol, triple rinse the container, ring your local Council, and offer the

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container for collection in the program.
DO NOT burn empty containers or product.

14. Transport information

Transport Information	It is good practice not to transport agricultural chemical products with food, food related materials and animal feedstuffs.
Storage and Transport	Considered non dangerous for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail. Exempt from classification as a Dangerous Good in packs less than 3,000 kg or L as per ADG7, SP no. AU01. For bulk shipments as Class 9, use UN 3082, HazChem code 2Z.
UN Number (Sea Transport)	3082
IMO Class/Packing Group	Class 9; Packing Group III
IMO Marine Pollutant	Marine Pollutant
IMO Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains Difenconazole 25%)

15. Regulatory information

Regulatory Information	Australia: WHS regulations (2011) - Schedule 11: classification not listed.
Poisons Schedule	S5
Packaging & Labelling	CAUTION KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
Other Information	This product is registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA). APVMA product number: 65130.

16. Other Information

Date of preparation or last revision of SDS	Reviewed 22/10/2018 This SDS replaces document dated June 2016.
Contact Person/Point	Normal Hours: Mrs Kathleen Marsh Phone: +61 3 9282 1000 After Hours: Shift Supervisor Phone: 1800 033 498
Revisions Highlighted	The SDS was reviewed. Minor changes were made to the information. Combustible liquid classification changed to C2. ...End Of MSDS...

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