SAFETY DATA SHEET

Nufarm Digger EW Fungicide

Infosafe No.: 3NV6P
ISSUED Date : 02/09/2021
ISSUED by: NUFARM AUSTRALIA LIMITED.

1. Identification

GHS Product Identifier
Nufarm Digger EW Fungicide

Product Code
0487

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

Emergency phone number
1800 033 498 (24hr Australia)

Emergency Contact Name
www.nufarm.com.au

E-mail Address
SDSANZ@nufarm.com

Recommended use of the chemical and restrictions on use
An Emulsion-in-Water (EW) formulation for use in Grapes, Potatoes and Tomatoes for the control of a range of diseases as specified in the Directions for Use.

Disclaimer
This Safety Data Sheet describes the properties of the intermediate 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
Aspiration hazard: Category 1
Eye damage/irritation: Category 2
Hazardous to the aquatic environment, long-term (Chronic): Category Chronic 1

Signal Word (s)
DANGER

Hazard Statement (s)
H304 May be fatal if swallowed and enters airways.

H319 Causes serious eye irritation.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement–General
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)
Health hazard,Exclamation mark,Environment

Precautionary statement–Prevention
P264 Wash hands and exposed skin thoroughly after handling.
P280 Wear eye and face protection.
P273 Avoid release to the environment.

Precautionary statement–Response
P301+P316 IF SWALLOWED: Get emergency medical help immediately.

P331 Do NOT induce vomiting.

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+P317 If eye irritation persists: Get medical help.

P391 Collect spillage.

Other Information
Poisons Schedule S5

3. Composition/information on ingredients

Ingredients

Name	CAS	Proportion
Difenoconazole	119446-68-3	125 g/L
Liquid Hydrocarbon		180 g/L
Acetophenone	98-86-2	<5%
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
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.

Rinse mouth and then drink plenty of water.

Skin
Wash affected areas thoroughly with soap and water.

Remove contaminated clothing and launder before re-use.

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

Seek medical advice.

First Aid Facilities
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
If involved in a fire, may emit toxic fumes, smoke and hazardous gases including hydrogen chloride, carbon monoxide and dioxide, oxides of carbon, nitrogen and incomplete combustion products.

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.

On-site disposal of concentrate is not acceptable.

Personal Protection
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

Occupational exposure limit values
The manufacturer of the solvent has recommended an occupational exposure limit of 50 mg/m3; 8ppm TWA, as total hydrocarbon.

Appropriate engineering controls
Handle in well ventilated areas, generally natural ventilation is adequate.

Personal Protective Equipment
Re-entry period: Do not enter treated area until spray has dried.

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.
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.

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

Properties	Description	Properties	Description
Form	Liquid	**Appearance**	White to off-white
Odour	Typical solvent odour	**Solubility in Water**	Forms an emulsion in water.
Specific Gravity	1.026 g/mL	**pH**	4.0 - 7.0 (1% dilution)
Vapour Pressure	3.3 x 10-5 mPa (difenoconazole @ 25°C)	**Partition Coefficient: n-octanol/water**	Kow Log P is 4.4 for difenoconazole @ 25°C
Flash Point	>100°C (closed cup)	**Flammability**	Non combustible material.

Other Information
pKa is 1.1 for difenoconazole

10. Stability and reactivity

Chemical Stability
Stable under normal conditions.

Conditions to Avoid
Excessive heat and fire.

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 - Inhalation
LC50 (rat) >3.3 mg/l for difenoconazole

Acute Toxicity - Dermal
LD50 (rabbit) >2010 mg/kg for difenoconazole

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.

Eye
The concentrate may cause serious irritation after short contact with the eyes.

Skin corrosion/irritation
Not a skin irritant.

Mutagenicity
Data indicates no mutagenic effects.

Skin Sensitisation
Product is not a skin sensitiser.

Carcinogenicity
As the mechanism involved is not relevant to humans, and the dose levels were very high, the potential carcinogenic risk to humans in considered negligible.

An incidence of liver tumours was noted in long-term studies with difenoconazole in mice.

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 2021).

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
LC50 (96hr) for rainbow trout is 0.81 mg/l.

The following is data for the active ingredient, difenoconazole.

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.

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 container for collection in the program.

If recycling, replace cap and return clean containers to recycler or designated collection point.

Do not dispose of undiluted chemicals on site.

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.

Triple or preferably pressure rinse inner bladder or containers before disposal. Add rinsings to the spray tank.

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.

U.N. Number
None Allocated

UN proper shipping name
COMBUSTIBLE LIQUID - CLASS C1 Flashpoint >61º-150ºC

Transport hazard class(es)
None Allocated

Storage and Transport
Considered non dangerous in packs not exceeding 500 kg (L) or IBCs not exceeding 3000 kg (L) for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code 7.7 Special Provision AU01). For bulk shipments as Class 9, use UN 3082, HazChem code 3Z.

UN Number (Sea Transport)
3082

IMDG Class/Packing Group
Class 9/PG III

IMDG Marine Pollutant (MP)
Marine Pollutant

IMDG Proper Shipping Name
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(difenoconazole)

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
APVMA product number: 90198.
This product is registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA).

16. Other Information

Date of preparation or last revision of SDS
Revised 2 September 2021

Contact Person/Point
Normal Hours: SDS Coordinator Phone: +61 3 9282 1000
After Hours: Shift Supervisor Phone: 1800 033 498

END OF SDS