

Infosafe No™ 3NV0V	Issue Date : January 2019	ISSUED by NUFARM
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 Product Name **Unity 240 EW Herbicide**

Classified as hazardous

1. Identification

GHS Product Identifier	Unity 240 EW Herbicide		
Product Code	0827	NUL3019	
Product Type	Group G Herbicide		
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	For the control of certain annual broadleaf weeds in winter cereals and pyrethrum 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	Carcinogenicity: Category 2 Aspiration Hazard: Category 1 Eye Damage/Irritation: Category 1 Skin Corrosion/Irritation: Category 2 STOT Single Exposure Category 3 (narcotic) Hazardous to the Aquatic Environment - Long-Term Hazard: Category 2		
Signal Word (s)	DANGER		
Hazard Statement (s)	Suspected of causing cancer. May be fatal if swallowed and enters airways. Repeated exposure may cause skin dryness or cracking Causes serious eye damage. Causes skin irritation. May cause drowsiness or dizziness. Toxic to aquatic life with long lasting effects.		
General Precautionary Statement (s)	If medical advice is needed, have product container or label at hand. Keep out of reach of children.		
Pictogram (s)	Read label before use.		
	Corrosion, Exclamation mark, Health hazard, Environment, The below pictograms are GHS Hazard symbols for workplace use only. See SECTION 14 for Dangerous Goods information.		



Precautionary statement – Prevention	Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves, clothing, eye and face protection. Wash hands and exposed skin thoroughly after handling. Avoid breathing mist and spray. Use only outdoors or in a well-ventilated area.
Precautionary statement – Response	IF exposed or concerned: Get medical advice/attention. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

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Take off contaminated clothing and wash before reuse.
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 Call a POISON CENTER or doctor/physician if you feel unwell.

Other Information Poisons Schedule : Not Scheduled

3. Composition/information on ingredients

Chemical Characterization	Liquid		
Ingredients	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Carfentrazone- ethyl	128639-02-1	240 g/L
	Liquid Hydrocarbon	64742-94-5	250 g/L
	Propylene glycol	57-55-6	0-10 %
	Surfactant		0-10 %
	Other ingredients (considered non-hazardous)		30-60 %

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. Wash affected areas thoroughly with soap and water.
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. If vomiting occurs, solvent present may cause pulmonary pneumonitis.

5. Fire-fighting measures

Suitable extinguishing media	Water fog, foam, carbon dioxide or dry chemical.
Hazards from Combustion Products	If involved in a fire, it may emit hydrogen chloride, phosgene and hydrogen fluoride.
Special Protective Equipment for fire fighters	Breathable air apparatus should be worn when fighting a fire in which this product is involved.

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.
Environmental Precautions	This product is a herbicide and spills can damage crops, pastures and desirable vegetation.

7. Handling and storage

Precautions for Safe Handling	Do NOT spray in high winds. Do NOT contaminate dams, rivers or streams, or any other water bodies with pesticide or used containers.
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Conditions for safe storage, including any incompatibilities	Store in the closed, original container in a dry, well ventilated area, as cool as possible. Do not store for prolonged periods in direct sunlight. Keep container tightly sealed and do not store with seed, fertilisers or foodstuffs.
Tank Cleaning	See label for detailed information on cleaning of spray equipment.
Other Information	Always read the label and any attached leaflet before use. Mix only as much herbicide solution as needed at the time. Do not store the sprayer for any extended period of time, especially overnight, with Unity 240 EW Herbicide spray solution remaining in the tank, spray lines, spray boom plumbing or spray nozzles or strainers.

8. Exposure controls/personal protection

Occupational exposure limit values	The manufacturer of the solvent has recommended an occupational exposure limit of 50 mg/m ³ ; 8 ppm TWA, as total hydrocarbon. Safe Work Australia has set the following exposure standard for propylene glycol : TLV (TWA) 474 mg/m ³ , STEL -.
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 rubber gloves and face shield 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	Milky emulsion.
Boiling Point	220-290°C (for solvent)
Solubility in Water	Forms an emulsion in water.
pH	3 - 5.5
Vapour Pressure	0.016 mPa @ 25°C for carfentrazone ethyl
Vapour Density (Air=1)	>1 (solvent)
Partition Coefficient: n-octanol/water	Kow Log P is 3.36 for carfentrazone-ethyl
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.

10. Stability and reactivity

Chemical Stability	Stable under normal conditions. Hydrolyses at pH >7.
Possibility of hazardous reactions	Keep away from strong oxidising agents.
Hazardous Polymerization	Hazardous polymerisation is not possible.

11. Toxicological Information

Toxicology Information	No harmful effects are expected if the precautions on the label and this MSDS are followed.
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Acute Toxicity - Oral	LD50 (female, rat) >4,000 mg/kg for a similar product
Acute Toxicity - Dermal	LD50 (rabbit) >4,000 mg/kg for a similar product
Acute Toxicity - Inhalation	LC50 (rat) (4hr) >6 mg/l for a similar product
Ingestion	If aspirated into the lung, e.g. from vomiting, the presence of solvent may result in chemical pneumonitis or other lung damage.
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.
Skin	Prolonged contact with the concentrate can cause defatting of the skin and may result in dermatitis.
Eye	The concentrate will cause irritation of the eyes. Possible symptoms include redness, swelling, tearing and pain.
Carcinogenicity	An impurity present in the solvent has been found to cause tumors in laboratory studies. The active ingredient(s), carfentrazone-ethyl is not considered carcinogenic.
Other Information	The Australian Acceptable Daily Intake (ADI) for carfentrazone-ethyl for a human is 0.03 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 3 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	The product is a marine pollutant for sea transport.
Other Precautions	Do not contaminate dams, waterways or sewers with this product or the containers which have held this product.
Environmental Protection	Spray drift can cause damage, read the label for more information.
Acute Toxicity - Fish	The following is data for the active ingredient, carfentrazone-ethyl. Not toxic to fish. LC50 (96 hr) for various species is 1.6 - 43 mg/l.
Acute Toxicity - Daphnia	LC50 (96hr) for daphnia is 9.8 mg/l.
Acute Toxicity - Algae	EC50 for algae is 0.015 mg/l.
Acute Toxicity - Other Organisms	Birds: Not toxic to birds. LD50 for quail is >1000 mg/kg Bees: Not toxic to bees. LD50 >100 (contact) 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 containers before disposal. Add rinsings to the 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 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. Empty containers and product should not be burnt.

14. Transport information

Transport Information	It is good practice not to transport agricultural chemical products with food, food related materials and animal feedstuffs.
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Storage and Transport	Considered non dangerous for road and rail transport (in packaging, including IBCs not greater than 3000 Lt each) by the Australian Code for the Transport of Dangerous Goods by Road and Rail. Ref: ADG7; SP No. AU01.
UN Number (Sea Transport)	For bulk shipments as Class 9, use UN 3082, HazChem code 2Z. 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 Carfentrazone Ethyl)

15. Regulatory information

Regulatory Information	Australia: WHS regulations (2011) - Schedule 11: classification not listed.
Poisons Schedule	Not Scheduled
Packaging & Labelling	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: 69527.

16. Other Information

Date of preparation or last revision of SDS	Revised 10/01/2019 This SDS replaces document dated October 2018.
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. Additional GHS phrases added in section 2 along with Environment pictogram. ...End Of MSDS...

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