

Infosafe No™ 3NUZA	Issue Date : May 2019	ISSUED by NUFARM
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 Product Name **Gladiator OptiMAX Herbicide**

Classified as hazardous

1. Identification

GHS Product Identifier	Gladiator OptiMAX Herbicide
Product Code	0526
Product Type	Group M 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	Non selective herbicide for the control of many annual and perennial weeds 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	Eye Damage/Irritation: Category 2A Skin Corrosion/Irritation: Category 2
Signal Word (s)	WARNING
Hazard Statement (s)	Causes serious eye irritation. Causes skin irritation.
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. Exclamation mark, The below pictograms are GHS Hazard symbols for workplace use only. See SECTION 14 for Dangerous Goods information.
	
Precautionary statement – Prevention	Wash hands and exposed skin thoroughly after handling. Wear protective gloves, clothing, eye and face protection.
Precautionary statement – Response	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
Other Information	Poisons Schedule S5

3. Composition/information on ingredients

Chemical Characterization	Liquid		
Ingredients	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Glyphosate (present as the potassium salt)	1071-83-6	540 g/L
	Surfactant		10-30 %

4. First-aid measures

Infosafe No™ 3NUZA Issue Date : May 2019 ISSUED by NUFARM

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Inhalation	Remove affected person to fresh air until recovered.
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. Do not give anything by mouth to a semi-conscious or unconscious person. Give a glass of water.
Skin	Wash affected areas thoroughly with soap and water. If irritation persists, seek medical advice.
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	If involved in a fire, the product will not burn. Choose extinguishing media to suit the burning material. Water, foam, carbon dioxide or dry chemical.
Hazards from Combustion Products	Keep upwind. This product, or spray solutions of this product, react with galvanised steel or unlined steel (except stainless steel) containers and tanks, to produce hydrogen gas which may form a highly flammable or explosive gas mixture. If involved in a major fire, could evolve oxides of nitrogen or phosphorus.
Special Protective Equipment for fire fighters	Breathable air apparatus may have to be worn if material is involved in fires especially in confined spaces.
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 in sealed open top containers for disposal. Final clean-up with degreasing agent or detergent is advised.
Environmental Precautions	Prevent from entering drains, waterways or sewers.

7. Handling and storage

Precautions for Safe Handling	For personal protective equipment (PPE) and hygiene advice, refer Section 8.
Conditions for safe storage, including any incompatibilities	Store in the closed, original container in a dry, well ventilated area out of direct sunlight. Keep container tightly sealed and do not store with seed, fertilisers or foodstuffs.
Other Information	Always read the label and any attached leaflet before use.

8. Exposure controls/personal protection

Occupational exposure limit values	No exposure standard has been established for this product.
Appropriate engineering controls	No special ventilation required.
Personal Protective Equipment	When opening the container, preparing the spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and a washable hat, nitrile or elbow-length PVC gloves and face shield or goggles.
Hygiene Measures	After each day's use, wash contaminated clothing and safety equipment. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

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--------------------	-----------------------	------------------

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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.
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9. Physical and chemical properties

Form	Liquid
Appearance	Dark blue viscous liquid
Odour	No odour
Melting Point	N/A
Boiling Point	>105°C
Solubility in Water	Soluble in water.
Specific Gravity	1.360 @ 20°C
pH	4.4 - 4.9
Volatile Component	N/A
Flash Point	None
Flammability	Non combustible material.

10. Stability and reactivity

Incompatible Materials	Corrosive to mild steel, galvanised steel and zinc. Non corrosive to stainless steel, polyethylene and plastics. Do not mix, store or apply the product or spray solutions of the product in galvanised steel or unlined steel (except stainless steel) containers or spray tanks.
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.
Acute Toxicity - Oral	LD50 (rat) >5000 mg/kg for a similar formulation
Acute Toxicity - Dermal	LD50 (rabbits) >5000 mg/kg for a similar formulation
Acute Toxicity - Inhalation	LC50 (rat) (4hr) >0.77- <2.21 mg/l
Ingestion	The concentrate is of low toxicity if swallowed. Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury. Possible symptoms of exposure include: nausea, vomiting and gastrointestinal discomfort and diarrhoea. Ingestion of a large quantity of the undiluted product may result in hypotension and pulmonary oedema.
Inhalation	When applying the product as a spray avoid breathing in spray mist. May cause irritation to mucous membranes and respiratory tract.
Skin	The concentrated product may cause irritation on contact. Prolonged contact is likely to result in irritation.
Eye	The concentrate may cause irritation of the eyes. Prolonged contact with the concentrate may cause damage to the eye.
Carcinogenicity	The Australian Pesticide and Veterinary Medicine Authority (APVMA) and other regulatory agencies classify glyphosate as non-carcinogenic based on the weight-of-evidence. In 2015 the International Agency for Research on Cancer (IARC) concluded that glyphosate was probably carcinogenic to humans. This finding was considered by the APVMA in its 2016 review (1).
Chronic Effects	No information available, no chronic effects expected.
Serious eye damage/irritation	Moderate eye irritant.

Infosafe No™ 3NUZA	Issue Date : May 2019	ISSUED by NUFARM
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Skin corrosion/irritation	Moderate skin irritant.
Other Information	The Australian Acceptable Daily Intake (ADI) for glyphosate for a human is 0.3 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 30 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

Persistence and degradability	Adsorption studies indicate that glyphosate has very low mobility. Average field half life of glyphosate is 47 days.
Known Harmful Effects on the Environment	Harmful to fish and other aquatic organisms (mainly due to the surfactant).
Other Precautions	Do not spray in high winds. Do not contaminate dams, waterways or sewers with this product.
Environmental Protection	Glyphosate is a non-selective contact herbicide. Spray drift can cause damage, read the label for more information.
Acute Toxicity - Fish	The following is data for a similar product. LC50 (96hr) for bluegill sunfish is 5.8 - 14 mg/l. LC50 (96hr) for rainbow trout is 8.2 - 26 mg/l. LC50 (96hr) for fathead minnow is 9.4 mg/l. TL50 (96hr) carp is 19.7 ppm
Acute Toxicity - Other Organisms	The following data is for the active ingredient, glyphosate. Birds: Not toxic to birds. LD50 for bobwhite quail is >3850 mg/kg Bees: Not toxic to bees. LD50 >100 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, puncture or shred and bury containers in local authority landfill. If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt. 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. Returnable containers: empty contents fully into application equipment. Replace cap, close all valves and return to the point of supply for refill or storage.

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.

15. Regulatory information

Regulatory Information	Australia: WHS regulations (2011) - Schedule 11: classification not listed.
Poisons Schedule	S5



Safety Data Sheet

infosafe
CS: 1.7.2

Page: 5 of 5

Infosafe No™ 3NUZA Issue Date : May 2019 ISSUED by NUFARM

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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: 62742.

16. Other Information

Date of preparation or last revision of SDS Revised 07/05/2019.
This document replaces SDS dated June 2017.

Literature References (1). APVMA 2016 Regulatory position: consideration of the evidence for a formal reconsideration of glyphosate - (<https://apvma.gov.au/sites/default/files/publication/20701-glyphosate-regulatory-position-report-final.pdf>)

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. Various changes were made to the information.
Section 11 - Carcinogenicity.
Section 16 - Literature reference.
...End Of MSDS...

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