

Infosafe No™ 3NV05	Issue Date : July 2017	ISSUED by NUFARM
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 Product Name **RAMROD Flowable Herbicide**

Classified as hazardous

1. Identification

GHS Product Identifier	RAMROD Flowable Herbicide
Product Code	0899
Product Type	Group K 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 control of annual grasses and certain broadleaf weeds in sorghum and selected vegetable crops 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	OT4 Acute Toxicity - Oral: Category 4 SS-1 Sensitization - Skin: Category 1 ED1 Eye Damage/Irritation: Category 1 SC-2 Skin Corrosion/Irritation: Category 2 AA1 Hazardous to the Aquatic Environment - Acute Hazard: Category 1 AC1 Hazardous to the Aquatic Environment - Long-Term Hazard: Category 1
Signal Word (s)	DANGER
Hazard Statement (s)	H302 Harmful if swallowed. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H315 Causes skin irritation. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.
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, Environment, The below pictograms are GHS Hazard symbols for workplace use only. See SECTION 14 for Dangerous Goods information.



Precautionary statement – Prevention	P264 Wash hands and exposed skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P261 Avoid breathing dusts and sprays. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves, clothing, eye and face protection.
Precautionary statement – Response	P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P330 Rinse mouth. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P362 Take off contaminated clothing and wash before reuse. 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. P391 Collect spillage.

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Other Information Poisons Schedule S6

3. Composition/information on ingredients

Chemical Liquid

Characterization

Ingredients	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Propachlor	1918-16-7	480 g/L
	Propylene glycol	57-55-6	0-10 %
	Other Ingredients		Balance

4. First-aid measures

Inhalation	Over-exposure by inhalation is improbable. Check for other causes of observed symptoms and 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.
Skin	Wash affected areas thoroughly with soap and water. Remove contaminated clothing and laundry before re-use. 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.
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, the dehydrated components may emit oxides of carbon, oxides of nitrogen and hydrogen chloride.
Special Protective Equipment for fire fighters	Breathable air apparatus should be worn when fighting a fire in which this product is involved.
Specific hazards arising from the chemical	Considered low risk due to water content, however upon evaporation of water the product is combustible.
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. If product has dried out and the possibility of dust generation exists, wear a suitable respirator.
Environmental Precautions	Prevent from entering drains, waterways or sewers.

7. Handling and storage

Conditions for safe storage, including any incompatibilities	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	Safe Work Australia has set the following exposure standard for propylene glycol (vapour and particulates) : TLV (TWA) 474 mg/m ³ , STEL -.
Appropriate engineering controls	Handle in well ventilated areas, generally natural ventilation is adequate.
Respiratory Protection	Do not inhale spray mist.
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 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	White suspension.
Odour	Odourless.
Solubility in Water	Disperses in water.
Specific Gravity	1.11
pH	7.5 - 8.0 (1% aqueous)
Vapour Pressure	10 mPa (25°C, propachlor)
Partition Coefficient: n-octanol/water	Kow Log P is 1.4 - 2.3
Flammability	Non combustible material.

10. Stability and reactivity

Incompatible Materials	Not compatible with iron and mild steel. Avoid contact of the concentrate with strong acids and bases.
Hazardous Polymerization	Hazardous polymerisation is not possible.

11. Toxicological Information

Acute Toxicity - Oral	LD50 (rat) 1191 mg/kg for a similar formulation
Acute Toxicity - Dermal	LD50 (rat) >5000 mg/kg for a similar formulation
Acute Toxicity - Inhalation	LC50 concentration not reached.
Ingestion	May cause irritation to mouth, throat and stomach.
Inhalation	May cause irritation to mucous membranes.
Skin	Will irritate the skin. May cause pain, redness and a burning sensation.
Eye	May irritate the eyes. Possible symptoms include redness, swelling, tearing and pain.
Chronic Effects	Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects.
Serious eye damage/irritation	The product is an eye irritant.
Respiratory Irritation	The product may be a mild respiratory irritant.
Skin corrosion/irritation	The product is a skin irritant.

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Other Information The Australian Acceptable Daily Intake (ADI) for propachlor for a human is 0.02 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 2 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 Health, Office of Chemical Safety, 'ADI List', March 2016).

12. Ecological information

Persistence and degradability Half life in soil is typically 4 days.

Known Harmful Effects on the Environment The product is a marine pollutant for sea transport. Harmful to fish and other aquatic organisms. Moderate toxicity to birdlife.

Other Precautions Do not contaminate dams, waterways or sewers with this product or the containers which have held this product. Spray drift should be avoided, read the label for more information.

Environmental Protection

Acute Toxicity - Fish The following is data for a similar product.
 LC50 (96hr) for rainbow trout is 0.42 mg/l.
 LC50 (96hr) for bluegill sunfish is 1.6 mg/l.

Acute Toxicity - Daphnia EC50 (48hr) is 13 mg/l.

Acute Toxicity - Other Organisms LD50 for bobwhite quail is 91 mg/kg

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

14. Transport information

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.

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



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IMO Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(contains Propachlor)

15. Regulatory information

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

Poisons Schedule S6

Packaging & Labelling POISON
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: 57018.

16. Other Information

Date of preparation or last revision of SDS 19/08/2016
This SDS replaces document dated July 2015.

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 and product has been rebranded.
...End Of MSDS...

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