

Infosafe No™ 3NUHV	Issue Date : May 2015	ISSUED by NUFARM
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Product Name **RIFLE 440 Herbicide**

Classified as hazardous

1. Identification

GHS Product Identifier	RIFLE 440 Herbicide
Product Code	0885
Product Type	Group D 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 wireweed, annual grasses (including annual ryegrass) and certain broadleaf weeds in various crops as shown in 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	SS-1 Sensitization - Skin: Category 1 AH1 Aspiration Hazard: Category 1 SE-3NARC STOT Single Exposure Category 3 (narcotic) CA2 Carcinogenicity: Category 2 ED2A Eye Damage/Irritation: Category 2A
Signal Word (s)	DANGER
Hazard Statement (s)	H317 May cause an allergic skin reaction. H304 May be fatal if swallowed and enters airways. AUH066 Repeated exposure may cause skin dryness or cracking H336 May cause drowsiness or dizziness. H351 Suspected of causing cancer. H319 Causes serious eye irritation.
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)	Exclamation mark, Health hazard
 	
Precautionary statement – Prevention	P202 Do not handle until all safety precautions have been read and understood. P261 Avoid breathing spray. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves, clothing, eye and face protection. P264 Wash hands and exposed skin thoroughly after handling.
Precautionary statement – Response	P308+P313 IF exposed or concerned: Get medical advice/attention. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P363 Wash contaminated clothing before reuse. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P331 Do NOT induce vomiting. P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P312 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. P337+P313 If eye irritation persists: Get medical advice/attention.
Other Information	Poisons Schedule S5

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3. Composition/information on ingredients

Chemical Characterization	Liquid		
Ingredients	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Pendimethalin technical	40487-42-1	440 g/L
	Hydrocarbon Liquid	64742-94-5	501 g/L
	Other ingredients (considered non-hazardous)		10-30 %

4. First-aid measures

Inhalation	Remove to fresh air, apply artificial respiration if necessary.
Ingestion	Give water or milk to drink. DO NOT induce vomiting.
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.
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 will emit oxides of carbon, oxides of nitrogen and possibly cyanides.
Special Protective Equipment for fire fighters	Breathable air apparatus may have to be worn 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 spilled material and waste in sealable open-top type containers for disposal.
Personal Protection	For appropriate personal protective equipment (PPE), refer Section 8.

7. Handling and storage

Precautions for Safe Handling	For personal protective equipment (PPE) and hygiene advice, refer Section 8. Pendimethalin is coloured and will strongly stain skin and clothing. If skin has been exposed to the product, thorough washing with soap and water will remove any excess product. The colour on the skin is not deep and will naturally disappear over a few days.
Conditions for safe storage, including any incompatibilities	Store in the closed, original container in a dry, cool well ventilated area out of direct sunlight. Do not store below 5°C. Extended storage below 5°C can result in the formation of crystals on the bottom of the container. If crystallisation does occur, store the container on its side at room temperature and rock occasionally until crystals re-dissolve.
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. The manufacturer of the solvent has recommended an occupational exposure limit of 100 mg/m ³ ; 15ppm TWA, as total hydrocarbon.
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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	Wash concentrate from skin and eyes immediately. 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.

9. Physical and chemical properties

Form	Liquid
Appearance	Black clear liquid with yellow-orange tinge
Odour	Solvent odour
Melting Point	Some crystallisation occurs between 0 and -7°C
Boiling Point	183-210°C (for solvent)
Solubility in Water	Forms an emulsion in water.
Specific Gravity	1.075
pH	6.0 - 6.5 (1% in water)
Vapour Pressure	Pendimethalin 1.94 mPa @ 25°C.
Volatile Component	50%
Partition Coefficient: n-octanol/water	Kow Log P is 5.2 (pH 7.0)
Flash Point	>65°C
Flammability	Combustible liquid C1.

10. Stability and reactivity

Conditions to Avoid	Prolonged reaction with water can cause slow decomposition and the formation of acid which may attack metal drums. If a part open drum is to be stored, ensure that no water has been added to the drum. Technical pendimethalin (before formulation) has exhibited exothermic decomposition at around 200°C. Avoid heating the product to high temperatures.
Possibility of hazardous reactions	Keep away from strong oxidising agents, may react violently.
Hazardous Polymerization	Hazardous polymerisation is not possible.

11. Toxicological Information

Acute Toxicity - Oral	LD50 (rat) >5000 mg/kg for pendimethalin
Acute Toxicity - Dermal	LD50 (rat) >2000 mg/kg for pendimethalin
Acute Toxicity - Inhalation	LC50 (rat) (4hr) >320 mg/l
Ingestion	The concentrate is of low toxicity if swallowed. 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. When applying the product as a spray avoid breathing in spray mist.
Skin	The concentrate is not considered a serious toxic hazard. Prolonged contact with the concentrate can cause defatting of the skin and

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Eye	may result in dermatitis. The concentrate may cause irritation after short contact with the eyes, but permanent damage is not anticipated.
Skin Sensitisation	Prolonged and repeated skin contact may result in skin sensitisation.
Carcinogenicity	A marked depression in body weight and a statistically significant increase in benign thyroid tumors (follicular adenomas) were observed at the highest dose level (5000ppm) in a lifetime (24 month) rat study, not considered to be relevant to humans. (1)
Reproductive Toxicity	Data indicates no reproductive effects. Data indicates no teratogenic effects.
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.
Mutagenicity	Data indicates no mutagenic effects.
Skin corrosion/irritation	Not a skin irritant.
Other Information	The Australian Acceptable Daily Intake (ADI) for pendimethalin for a human is 0.1 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 12 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: Comm. Dept. of Health and Ageing, Office of Chemical Safety, 'ADI List', June 2014).

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. Do not spray in high winds.
Environmental Protection	Spray drift can cause damage, read the label for more information.
Acute Toxicity - Fish	Toxic to fish. LC50 (96hr) for rainbow trout is 0.14 mg/l. LC50 (96hr) for bluegill sunfish is 0.2 mg/l. LC50 (96hr) for channel catfish is 0.42 mg/l.
Acute Toxicity - Other Organisms	Dietary LC50 bobwhite quail is 4187 mg/kg LD50 for mallard duck is 10388 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, 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. 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.

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Replace cap, close all valves and return to the point of supply for refill or storage.

14. Transport information

Transport Information Storage and Transport It is good practice not to transport agricultural chemical products with food, food related materials and animal feedstuffs.
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 Pendimethalin)

15. Regulatory information

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: 54599.

16. Other Information

Date of preparation or last revision of SDS Revised 12/05/2015.
This SDS replaces version dated February 2012.

Literature References (1) European Union review report for the active substance Pendimethalin 7477/V1/98 final, dated 13th January 2003.

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 to include GHS requirements.
...End Of MSDS...

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