

Infosafe No™ NU0GW	Issue Date : October 2018	ISSUED by NUFARM
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 Product Name **Striker Herbicide**

Classified as hazardous

1. Identification

GHS Product Identifier	Striker Herbicide
Product Code	0632
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 selective weed control of certain broadleaf and grass 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	TR1 Toxic to Reproduction: Category 1 CA2 Carcinogenicity: Category 2 ED1 Eye Damage/Irritation: Category 1 OT4 Acute Toxicity - Oral: Category 4 SC-2 Skin Corrosion/Irritation: Category 2 AH1 Aspiration Hazard: Category 1 SE-3RES STOT Single Exposure Category 3 (respiratory tract irritation) SE-3NARC STOT Single Exposure Category 3 (narcotic) 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)	H360 May damage fertility or the unborn child. H351 Suspected of causing cancer. H318 Causes serious eye damage. H302 Harmful if swallowed. H315 Causes skin irritation. H304 May be fatal if swallowed and enters airways. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. AUH066 Repeated exposure may cause skin dryness or cracking. 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)	Health hazard, 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

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P281 Use personal protective equipment as required.
P280 Wear protective gloves, clothing, eye and face protection.
P264 Wash hands and exposed skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.

Infosafe No™ NU0GW	Issue Date : October 2018	ISSUED by NUFARM
--------------------	---------------------------	------------------

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Precautionary statement – Response

P261 Avoid breathing mists and spray.
 P308+P313 IF exposed or concerned: Get medical advice/attention.
 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.
 P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
 P302+P352 IF ON SKIN: Wash with plenty of soap and water.
 P321 Specific treatment (see information on this SDS).
 P332+P313 If skin irritation occurs: Get medical advice/attention.
 P362 Take off contaminated clothing and wash before reuse.
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 P331 Do NOT induce vomiting.
 P330 Rinse mouth.
 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.

Other Information

Poisons Schedule S5

3. Composition/information on ingredients

Chemical Liquid

Characterization
Ingredients

<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
Oxyfluorfen	42874-03-3	240 g/L
N-methyl pyrrolidone		100 g/L
Liquid Hydrocarbon		626.4 g/L
Other Ingredients		Balance

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.

Skin Remove contaminated clothing and launder 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.

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 carbon monoxide, phosgene, hydrogen chloride and possibly hydrogen fluoride.

Special Protective Equipment for fire fighters Breathable air apparatus must be worn when fighting a fire in which this product is involved.

Decomposition Temp. Not known, stable at 100°C

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

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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 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 100 mg/m³; 15ppm TWA, as total hydrocarbon.

Safe Work Australia has set the following exposure standard for N-methyl pyrrolidone : TLV (TWA) 103 mg/m³, STEL 309 mg/m³. SK

'SK' notice - absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur. Handle in well ventilated areas, generally natural ventilation is adequate.

Appropriate engineering controls
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 butyl gloves and 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 Amber liquid

Odour Aromatic solvent odour

Decomposition Temperature Not known, stable at 100°C

Solubility in Water Forms an emulsion in water.

Specific Gravity 1.08 @ 20°C

pH 9-10 (1% solution)

Vapour Pressure 0.0267 mPa @ 25°C for oxyfluorfen

Partition Coefficient: n-octanol/water Kow Log P is 4.47 for oxyfluorfen

Flash Point 100°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.

Possibility of hazardous reactions Keep away from strong oxidising agents.

Hazardous Polymerization Hazardous polymerisation is not possible.

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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) >5,000 mg/kg for oxyfluorfen
Acute Toxicity - Dermal	LD50 (rabbit) >10,000 mg/kg for oxyfluorfen
Acute Toxicity - Inhalation	LC50 (rat) (4hr) >5.4 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.
Skin	May irritate the skin. Prolonged contact with the concentrate can cause defatting of the skin and may result in dermatitis.
Eye	The concentrate may cause irritation of the eyes.
Skin Sensitisation	Product is not a skin sensitiser.
Carcinogenicity	The weight of the evidence is that oxyfluorfen is not carcinogenic.
Reproductive Toxicity	Evidence from animal studies suggests the potential for developmental toxicity on repeated or prolonged exposure. (N-methyl pyrrolidone).
Chronic Effects	Liver and kidney damage has been noted in laboratory animals that have been fed excessive doses of oxyfluorfen.
Serious eye damage/irritation	Mild eye irritant.
Skin corrosion/irritation	Mild skin irritant.
Other Information	The Australian Acceptable Daily Intake (ADI) for oxyfluorfen for a human is 0.025 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 2.5 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 spray in high winds. 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 the active ingredient, oxyfluorfen. LC50 (96hr) for rainbow trout is 0.25 mg/l.
Acute Toxicity - Daphnia	LC50 (48hr) for daphnia magna is 0.72 mg/l for oxyfluorfen.
Acute Toxicity - Algae	EC50 (72hr) for Pseudokirchneriella subcapitata >2.0 mg/l.
Acute Toxicity - Other Organisms	Birds: Not toxic to birds. LD50 for bobwhite quail is >947 mg/kg Bees: Not toxic to bees. LD50 >25 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®).
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Infosafe No™ NUOGW	Issue Date : October 2018	ISSUED by NUFARM
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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.
 DO NOT burn empty containers or product. 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

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

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

15. Regulatory information

Regulatory Information WHS Schedule 11: not listed.

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: 56994.

16. Other Information

Date of preparation or last revision of SDS Revised 30/10/2018.
 This SDS replaces document dated February 2016.

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.

 ...End Of MSDS...

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