according to WHS Regulations

Printing date 10.03.2020 Revision: 10.03.2020

1 Identification

Product Name: GENFARM OXYFLUORFEN 240 EC HERBICIDE

Other Means of Identification: Mixture

Recommended Use of the Chemical and Restriction on Use: Agricultural herbicide

Details of Manufacturer or Importer:

Nutrien Ag Solutions Limited

Level 5, Building A 26 Talavera Road

Macquarie Park NSW 2113

Phone Number: 02 9889 5400

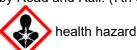
Emergency telephone number: National Poison Information Centre: 13 11 26

2 Hazard(s) Identification

Hazardous Nature:

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)



Toxic To Reproduction 1B H360D May damage the unborn child.

Aspiration Hazard 1 H304 May be fatal if swallowed and enters airways.



Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



Skin Corrosion/Irritation 2 H315 Causes skin irritation.
Serious Eye Damage/Irritation 2A H319 Causes serious eye ir

Serious Eye Damage/Irritation 2A H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

Aquatic Acute 2 H401 Toxic to aquatic life.

Signal Word Danger

Hazard Statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H360D May damage the unborn child. H335 May cause respiratory irritation.

H304 May be fatal if swallowed and enters airways.
H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

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P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P321	Specific treatment (see on this label).
P331	Do NOT induce vomiting.
P302+P352	IF ON SKIN: Wash with plenty of water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P33	8 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if
	present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTER/doctor if you feel unwell.
P362+P364	Take off contaminated clothing and wash it before reuse.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P391	Collect spillage.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national regulations.

3 Composition and Information on Ingredients

Chemical Characterization: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Hazardous Components:		
CAS: 64742-94-5	Solvent naphtha (petroleum), heavy arom.	60.6%
	♦ Aspiration Hazard 1, H304; Flammable Liquids 4, H227	
CAS: 42874-03-3	Oxyfluorfen	24%
	♦ Aquatic Acute 1, H400; Aquatic Chronic 1, H410	
CAS: 872-50-4	N-methyl-2-pyrrolidone	10.8%
	Toxic To Reproduction 1B, H360D; Skin Corrosion/Irritation 2, H315; Serious Eye Damage/Irritation 2A, H319; STOT SE 3, H335; Flammable Liquids 4, H227	

4 First Aid Measures

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

Skin Contact:

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if symptoms occur.

Eye Contact:

In case of eye contact, hold eyelids open and rinse with water for at least 15 minutes. Seek immediate medical attention.

Ingestion:

If swallowed, do not induce vomiting. Immediately rinse mouth with water. Give a glass of water. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Do not give anything by mouth to an unconscious person. Seek immediate medical attention.

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Symptoms Caused by Exposure:

Inhalation: May cause respiratory irritation.

Skin Contact: Causes skin irritation, itchiness and reddening.

Eye Contact: Causes serious eye irritation, stinging, reddening and watering. Prolonged exposure or delayed

treatment may cause permanent eye damage.

Ingestion: May cause irritation, reddening and burning sensation to mouth and throat. May be fatal if

swallowed and enters airways.

5 Fire Fighting Measures

Suitable Extinguishing Media:

Water fog, foam, dry chemical or carbon dioxide. Alcohol resistant foam is preferred, but normal foam can be used.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include oxides of carbon, nitrogen, nitrogen oxides, other nitrogen compounds, hydrogen cyanide, hydrogen chloride, other chlorine compounds, hydrogen fluoride, other fluorine compounds, smoke and water.

Combustible liquid.

Containers close to fire should be removed if safe to do so. Use water spray to cool fire exposed containers.

Special Protective Equipment and Precautions for Fire Fighters:

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear approved respiratory protection, chemical resistant gloves, protective clothing and safety boots. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation. Extinguish all sources of ignition. Avoid sparks and open flames. No smoking.

Environmental Precautions:

In the event of a major spill, prevent spillage from entering drains or water courses.

Methods and Materials for Containment and Cleaning Up:

Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material. Collect the spilled material and place into a suitable container for disposal. Wash spill area, preventing runoff from entering drains.

7 Handling and Storage

Precautions for Safe Handling:

May damage the unborn child. Pregnant women must not handle this product.

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

Conditions for Safe Storage:

Store in a cool, dry and well ventilated area. Keep in original container, tightly closed when not in use. Protect from heat, sparks, open flames, hot surfaces and direct sunlight. Keep away from strong oxidising agents, strong acids and strong bases.

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8 Exposure Controls and Personal Protection

Exposure Standards:

CAS: 872-50-4 N-methyl-2-pyrrolidone

WES STEL: 309 mg/m³, 75 ppm TWA: 103 mg/m³, 25 ppm

Sk

Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapour below occupational exposure standards.

Respiratory Protection:

Use an approved vapour respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

Skin Protection:

Butyl rubber gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information. When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.

Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

Eve and Face Protection:

Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9 Physical and Chemical Properties

Appearance:

Form: Liquid

Colour: Clear, amber coloured

Odour: Characteristic aromatic solvent odour

Odour Threshold:No information availablepH-Value:No information available

Melting point/freezing point: -24 °C (2-pyrrolidone, 1-methyl-)

Initial Boiling Point/Boiling Range: >200 °C | 100 °C (SCC)

Flammability: Combustible liquid Class 2

Auto-ignition Temperature: ~350 °C

Decomposition Temperature:No information available

Explosion Limits:

Lower: 1.3 % Upper: 12 %

Vapour Pressure at 20 °C: 0.04 kPa (2-pyrrolidone, 1-methyl-)

Relative Density: ~1.08
Vapour Density: ~5

Evaporation Rate: No information available Solubility in Water: Emulsifies into water. Partition Coefficient (n-octanol/water): No information available

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10 Stability and Reactivity

Possibility of Hazardous Reactions: Hazardous polymerisation will not occur.

Chemical Stability: Stable at ambient temperature and under normal conditions of use.

Conditions to Avoid: Heat, sparks, open flames, hot surfaces and direct sunlight. **Incompatible Materials:** Strong oxidising agents, strong acids and strong bases.

Hazardous Decomposition Products:

Oxides of carbon, nitrogen, nitrogen oxides, other nitrogen compounds, hydrogen cyanide, hydrogen chloride, other chlorine compounds, hydrogen fluoride, other fluorine compounds, smoke and water.

11 Toxicological Information

Toxicity:

LD ₅₀ /LC	LD ₅₀ /LC ₅₀ Values Relevant for Classification:			
CAS: 87	CAS: 872-50-4 N-methyl-2-pyrrolidone			
Oral	LD ₅₀	3914 mg/kg (rat)		
Dermal	LD ₅₀	8000 mg/kg (rabbit)		
CAS: 42	CAS: 42874-03-3 Oxyfluorfen			
Oral	LD ₅₀	2700- 5000 mg/kg (mice)		
		5000 mg/kg (dog)		
		5000 mg/kg (rat)		
Dermal	LD ₅₀	>5000 mg/kg (rat)		
		>5000 mg/kg (rabbit)		

Acute Health Effects

Inhalation: May cause respiratory irritation.

Skin: Causes skin irritation, itchiness and reddening.

Eye: Causes serious eye irritation, stinging, reddening and watering.

Ingestion:

May cause irritation, reddening and burning sensation to mouth and throat. May be fatal if swallowed and enters airways.

Skin Corrosion / Irritation: Causes skin irritation.

Serious Eye Damage / Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitisation: Based on classification principles, the classification criteria are not met.

Germ Cell Mutagenicity: Based on classification principles, the classification criteria are not met.

Carcinogenicity: This product does NOT contain any IARC listed chemicals.

Reproductive Toxicity: May damage the unborn child.

Specific Target Organ Toxicity (STOT) - Single Exposure: May cause respiratory irritation.

Specific Target Organ Toxicity (STOT) - Repeated Exposure:

Based on classification principles, the classification criteria are not met.

Aspiration Hazard: May be fatal if swallowed and enters airways.

Chronic Health Effects:

Prolonged exposure or delayed treatment may cause permanent eye damage. Prolonged exposure may cause liver damage.

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Existing Conditions Aggravated by Exposure: No information available

Additional toxicological 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 NOAEL 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: Australian Pesticides and Veterinary Medicines Authority, 'Acceptable Daily Intakes for Agricultural and Veterinary Chemicals', 2020).

12 Ecological Information

Ecotoxicity: Oxyfluorfen is non-toxic to bees and birds.

Aquatic toxicity:

Toxic to aquatic life with long lasting effects.

CAS: 647	CAS: 64742-94-5 Solvent naphtha (petroleum), heavy arom.		
EC₅₀/48 h	12 mg/l (daphnia)		
EC₅₀/72 h	2.5 mg/l (skeletonema costatum)		
LC₅₀/96 h	45 mg/l (fathead minnow)		
CAS: 872-	CAS: 872-50-4 N-methyl-2-pyrrolidone		
EC₅₀/24 h	>1,000 mg/l (daphnia)		
EC₅₀/72 h	>500 mg/l (green algae)		
LC₅₀/96 h	1,072 mg/l (fathead minnow)		
	>5,000 mg/l (rainbow trout)		

Persistence and Degradability:

Oxyfluorfen is biodegradable and has a moderate persistence. Half-life in soil is 30- 40 days.

Bioaccumulative Potential:

The product has low to moderate potential for bioaccumulation in aquatic organisms.

Mobility in Soil: No information available
Other adverse effects: No information available

13 Disposal Considerations

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.

Special Precautions for Landfill or Incineration:

Please consult your state Land Waste Management Authority for more information.

14 Transport Information

UN Number

ADG Not subject to the ADG Code when transported in

Australia by Road or Rail in packages 500kg(L) or less;

or IBCs (refer to SP AU01).

IMDG, IATA UN3082

Proper Shipping Name

ADG Not regulated

IMDG, IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

LIQUID, N.O.S. (contains oxyfluorfen), MARINE

POLLUTANT

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Dangerous Goods Class

ADG Class: Not regulated

IMDG Class: 9 Miscellaneous dangerous substances and articles.

Packing Group:

ADG Not regulated

IMDG, IATA Marine pollutant: Yes

Symbol (fish and tree)

EMS Number: F-A,S-F **Hazchem Code:** •3Z

Special Provisions: 274, 331, 335, 375, AU01

Limited Quantities:

Packagings & IBCs - Packing Instruction: P001, IBC03, LP01

Packagings & IBCs - Special Packing Provisions: PP1 Portable Tanks & Bulk Containers - Instructions: T4

Portable Tanks & Bulk Containers - Special

Provisions: TP1, TP29

15 Regulatory Information

Australian Inventory of Chemical Substances:		
CAS: 64742-94-5	Solvent naphtha (petroleum), heavy arom.	
CAS: 42874-03-3	Oxyfluorfen	
CAS: 872-50-4	N-methyl-2-pyrrolidone	

Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:

Poisons Schedule: 5

16 Other Information

Date of Preparation or Last Revision: 10.03.2020

Prepared by: MSDS.COM.AU Pty Ltd www.msds.com.au

Abbreviations and acronyms:

ADG: Australian Dangerous Goods

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC₅₀: Lethal concentration, 50 percent

LD₅o: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Flammable Liquids 4: Flammable liquids – Category 4

Skin Corrosion/Irritation 2: Skin corrosion/irritation - Category 2

Serious Eye Damage/Irritation 2A: Serious eye damage/eye irritation - Category 2A

Toxic To Reproduction 1B: Reproductive toxicity - Category 1B

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3 Aspiration Hazard 1: Aspiration hazard – Category 1

Aquatic Acute 1: Hazardous to the aquatic environment, short-term (Acute). Category 1 Aquatic Acute 2: Hazardous to the aquatic environment, short-term (Acute). Category 2

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Aquatic Chronic 1: Hazardous to the aquatic environment, long-term (Chronic). Category 1 Aquatic Chronic 2: Hazardous to the aquatic environment, long-term (Chronic). Category 2

Data altered compared to the previous version:

Section 1: Details of Manufacturer or Importer.

Section 5: Suitable Extinguishing Media.

Section 5: Specific Hazards Arising from the Chemical.

Section 7: Precautions for Safe Handling.

Section 8: Exposure Standards.

Section 8: Skin Protection.

Section 9: Odour.

Section 9: pH-Value.

Section 9: Initial Boiling Point/Boiling Range.

Section 11: Reproductive Toxicity.

Section 11: Additional Toxicological Information

Section 12: Aquatic Toxicity.

Section 14: UN Number.

Section 14: Special Provisions.

Disclaimer

This SDS is prepared in accord with the Safe Work Australia document "Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - February 2016"

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