

# WELLFARM OXYFLUORFEN 240 EC HERBICIDE

**APVMA Product No:** 70240**Poison Schedule:** 5**Emergency Telephone Number:**

The Australian Poisons Information Centre: Dial 13 11 26 (from anywhere in Australia)

Specialist Advice In An Emergency Only 1800 033 111 All Hours Australia Wide

In A Transport Emergency Dial 000 Police Or Fire Brigade

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Company:** Wellfarm Pty Ltd  
**Website:** www.wellfarm.com.au  
**Email:** info@wellfarm.com.au  
**Postal Address:** 22 Calypso Crescent, Point Cook, Vic 3030

**Product Name:** WELLFARM OXYFLUORFEN 240 EC HERBICIDE  
**Product Type:** Group G Herbicide  
**Formulation Type:** Emulsifiable Concentrate  
**Product Use:** Agricultural Herbicide

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient (common name)	CAS Number	Proportion
Oxyfluorfen	42874-03-3	24%
N-methyl-2-pyrrolidone	872-50-4	10%
Aromatic hydrocarbons	64742-94-5	53%

## 3. HAZARDS IDENTIFICATION

**HAZARDOUS SUBSTANCE. DANGEROUS GOODS.**

Classified as hazardous according to the criteria of Safe Work Australia.

**Hazards** Xn - Harmful

**Risk Phrases** R36/38 – Irritating to eyes and skin.  
R65 – Harmful: May cause lung damage if swallowed.

**Safety Phrase** S2 - Keep out of reach of children.  
S23 – Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).  
S24 – Avoid contact with skin.  
S41 – In case of fire and/or explosion, do not breathe fumes.  
S62 – If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

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## 4. FIRST AID MEASURES

<b>Inhalation</b>	Move victim to fresh air. If breathing is difficult, give oxygen. Seek medical attention if symptoms persist.
<b>Ingestion</b>	If swallowed, do not induce vomiting. Immediately rinse mouth with water. Seek immediate medical attention.
<b>Skin</b>	Wash affected area thoroughly with soap and water. Remove contaminated clothing and laundry before re-use. Seek medical attention if symptoms persist.
<b>Eyes</b>	If in eyes, hold eyelids apart and flush the eye continuously with large amounts of water for at least 15 minutes. Seek medical attention.

## 5. FIRE-FIGHTING MEASURES

For major fires call the Fire Brigade. Ensure that an escape path is available from any fire.

<b>Suitable Extinguishing Media</b>	Water spray, foam, carbon dioxide or dry chemical.
<b>Hazardous Combustion Products</b>	Oxides of carbon and nitrogen, hydrogen fluoride gas and occasionally hydrogen cyanide gas.
<b>Firefighting Equipment</b>	Recommended use of self contained breathing apparatus and full protective equipment.
<b>Unusual Fire or Explosion Hazards</b>	This product is classified as a C1 combustible product. There is a slight risk of an explosion from this product if commercial quantities are involved in a fire. Violent steam generation or eruption may occur upon application of direct water stream on hot liquids. Vapours from this product are heavier than air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures. They may also flash back considerable distances.
<b>Hazchem Code</b>	3Z

## 6. ACCIDENTAL RELEASE MEASURES

<b>Spills</b>	In the event of a major spill, prevent spillage from entering drains or water courses. Wear full protective clothing and eye/face protection. Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. Recycle containers wherever possible after careful cleaning. Launder protective clothing before storage or re-use.
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## 7. HANDLING AND STORAGE

<b>Handling</b>	Keep exposure to this product to a minimum, and minimize the quantities kept in work areas.
<b>Storage</b>	Store in the closed, original container in a dry, well ventilated area, as cool as possible. Do not store for prolonged periods in direct sunlight. Keep container tightly sealed and do not store with seed, fertilisers or foodstuffs. Make sure that the product does not come into contact with strong acids, strong bases or strong oxidizing agents.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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<b>Exposure Standards</b> (Safe Work Australia)	<b>N-methyl-2-pyrrolidone:</b> TWA: 25ppm /103 mg/m <sup>3</sup> STEL: 75 ppm /309 mg/m <sup>3</sup>
<b>Engineering Controls</b>	No special ventilation requirements are normally necessary for this product.. However make sure that the work environment remains clean and that vapours and mists are minimised.
<b>Respiratory Protection</b>	Usually, no respirator is necessary when using this product. However, if there is a significant chance that vapours or mists are likely to build up in the area where this product is being used, a respirator fitted with a type G cartridge, suitable for agricultural chemicals should be used. See Australian Standards AS/NZS 1715 and 1716 for more information.
<b>Eye Protection</b>	Safely glasses with top and side. See Australian Standards AS 1336 and AS/NZS 1337 for more information.
<b>Skin Protection</b>	Wear protective gloves and protective clothing appropriate for the risk of exposure. See Australian Standards AS 2161 and 2919 and AS/NZS 2210 for more information.
<b>Hygienic Practices</b>	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.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Clear amber liquid
<b>Odour</b>	Characteristic aromatic odour
<b>Solubility in water</b>	Emulsifiable
<b>Boiling Point / Range</b>	202°C (N-methyl-2-pyrrolidone); 230-300°C (hydrocarbon)
<b>Freezing Point / Melting Point</b>	No information available
<b>Vapour Pressure</b>	Negligible at normal ambient temperatures
<b>Vapour Density (Air = 1)</b>	No information available
<b>Specific Gravity</b>	No information available
<b>Volatility (% by weight)</b>	1.08 at 20°C
<b>Flash Point</b>	No information available
<b>Lower Flammability Limit</b>	Approximately 70 °C
<b>Upper Flammability Limit</b>	No information available
<b>Volatile Component</b>	No information available
<b>Ignition Temperature</b>	No information available

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable under normal storage conditions.
<b>Incompatible Materials</b>	Strong acids, strong bases and strong oxidising agents.
<b>Hazardous Decomposition products</b>	Oxides of carbon and nitrogen, hydrogen fluoride gas and occasionally hydrogen cyanide gas.
<b>Hazardous Polymerization</b>	Will not occur.
<b>Conditions to Avoid</b>	Light, moisture and heat.

## 11. TOXICOLOGICAL INFORMATION

<b>Toxicity</b>	<b>Acute toxicity:</b> oxyfluorfen is practically nontoxic by ingestion, with reported oral LD <sub>50</sub> values of 5000 mg/kg in both rats and dogs, and 2700 to 5000 mg/kg in mice. The dermal LD <sub>50</sub> IS GREATER THAN 5000 mg/kg in both rats and rabbits, also indicating slight toxicity by this route. It causes no skin irritation in rabbits, no skin sensitization in guinea pigs, and moderate eye irritation in rabbits. However, some formulated products may show severe skin and eye irritant
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properties, and may be skin sensitizers. The 4-hour inhalation LC50 for the technical product is not available, but that for a formulated product is greater than 22.64 mg/L, indicating practically no toxicity via this route.

**Chronic toxicity:** Effects on the liver have been observed in long-term feeding studies with rats, mice and dogs.

**Reproductive effects:** In a developmental study with rats given doses of 10, 100 or 1000 mg/kg/day, decreased implantation, increased resorption, and lower foetal survival were seen at the 1000 mg/kg level. Toxic effects on the mothers were also seen at this dose. At 5 mg/kg/day, there was decreased survival of fetuses and decreased maternal and foetal weights. It does not appear likely that oxyfluorfen will cause reproductive effects in humans at likely levels of exposure.

**Teratogenic effects:** In a developmental study with rabbits, 30 mg/kg/day, the highest dose tested, produced an increase in fused sterna bones in the fetuses as well as toxic effects on the mothers. These data suggest oxyfluorfen may have teratogenic effects, but only at very high doses.

**Mutagenic effects:** Mutagenicity tests on rats, mice and on bacterial cell cultures have produced mixed results. However, unscheduled DNA synthesis assays have been negative. Due to the conflicting results, it is not possible to determine the mutagenic potential of oxyfluorfen.

**Carcinogenic effects:** In a 20- month study with mice fed 0.3, 3 or 30 mg/kg/day, doses at and above 3 mg/kg/day produced non-significant increases in both benign and malignant liver tumors in male mice. No increased tumor formation was seen in female mice at any dose. No carcinogenic effects were observed in a 23-year study with rats fed doses 2 mg/kg/day and in dogs at doses of 3 mg/kg/day. These data suggest that oxyfluorfen is not carcinogenic.

**Organ toxicity:** The liver appears to be the main target organ, based on long-term feeding studies.

**Fate in humans and animals:** Because oxyfluorfen is highly hydrophobic, it may have the potential to bio-concentrate in animal fatty tissues.

## Routes of Exposure Acute Health Effects

Inhalation, ingestion, eye and skin.

Inhalation: May be mildly irritating.

Ingestion: Significant oral exposure is considered to be unlikely. Because of the low viscosity of this product, it may directly enter the lungs if swallowed, or if subsequently vomited. Once in the lungs, it is very difficult to remove and can cause severe injury or death. However, this product is an oral irritant. Symptoms may include burning sensation and reddening of skin in mouth and throat.

Eye: Can cause irritation. Symptoms may include stinging, reddening and watering of eyes.

Skin: Can cause irritation. Symptoms may include itchiness and reddening of contacted skin.

## Chronic Health Effects

Prolonged exposure or delayed treatment may cause permanent damage.

## Existing Conditions Aggravated by Exposure Carcinogenicity

No information available.

This product does Not contain any IARC listed chemicals.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity and Mobility

**Effects on birds:** Oxyfluorfen is practically nontoxic to birds; the reported oral LD50 values are greater than 2200 mg/kg in bobwhite

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quail, and greater than 4000 mg/kg in mallard duck. The dietary 8-day dietary LC50 values are greater than 5000 ppm in bobwhite quail, and 4000 ppm in mallard ducks. Dietary concentrations as high as 200 ppm has no effect on reproduction in mallards or bobwhite quail.

**Effects on aquatic organisms:** Oxyfluorfen is highly toxic to aquatic, invertebrates, freshwater clams, oysters, aquatic plants and fish. The reported 96-hour LC50 values are 200µg/L in bluegill sunfish, 410 µg/L in rainbow trout, 400 µg/L in channel catfish, 150µg/L in fathead minnow, and 32 µg/L in grass shrimp and oysters. Its 96-hour LC50 in freshwater clams is 10 µg/L. The 96-hour LC50 for the product Goal 2E in *Daphnia magna*, a small freshwater crustacean, is 1500 µg/L. Oxyfluorfen accumulated up to 13 mg/kg (13,000 µg/kg) in bluegill sunfish exposed to 10 µg/L for 40 days. This represents a bio-concentration factor (BCF) of 1300. The BCF in channel catfish was 700 to 5000 in one 30-day study. These results indicate a low to moderate potential for bioaccumulation in aquatic species.

**Effects on other organisms:** Oxyfluorfen is nontoxic to honeybees, with a reported oral LC50 of greater than 10,000 ppm.

**Breakdown in soil and groundwater:** Oxyfluorfen is moderately persistent in most soil environments, with a representative field half-life of about 30 to 40 days.

## 13. DISPOSAL CONSIDERATIONS

<b>Disposal methods and containers</b>	Instructions concerning the disposal of this product and its containers are given on the product label. Dispose according to applicable local and state government regulations.
<b>Special precautions for landfill or incineration</b>	Please consult your state Land Waste Management Authority for more information.

## 14. TRANSPORT INFORMATION

Classified as a dangerous good according to the Australian Code for the Transport of Dangerous goods by road or rail (ADG7).

Not subject to the ADG Code when transported by Road or Rail in containers up to 500L or kg. (ADG 7, Special Provision AU01).

<b>UN Number</b>	3082
<b>Proper Shipping Name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (contains oxyfluorfen)
<b>Subsidiary Risk</b>	Not applicable
<b>Dangerous Goods Class</b>	9
<b>Hazchem Code</b>	3Z
<b>Packing Group</b>	III
<b>Special Provisions</b>	179, 274, 331, 335, AU01
<b>Limited Quantities</b>	5L
<b>Packagings &amp; IBCs – Packing Instruction</b>	P001, IBC03, LP01
<b>Packagings &amp; IBCs – Special Packing Provisions</b>	PP1
<b>Portable Tanks &amp; Bulk Containers – Instructions</b>	T4
<b>Portable Tanks &amp; Bulk Containers – Special Provisions</b>	TP1, TP29

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## 15. REGULATORY INFORMATION

Oxyfluorfen, N-methyl-2-pyrrolidone and aromatic hydrocarbons are listed in the Australian Inventory of Chemical Substances (AICS).

**SUSDP Classification: S5**

## 16. OTHER INFORMATION

All information contained in this document is as accurate as possible based on information submitted by raw material suppliers. Wellfarm Pty Ltd will NOT be responsible for any damages that may result from reliance on the information contained herein.

The Australian Poisons Information Centre: Dial 13 11 26 (from anywhere in Australia).