

WELLFARM HALOXYFOP 520 EC HERBICIDE

APVMA Product No: 70164
Poison Schedule: 6

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 SUBSTANCE / PREPARATION AND THE COMPANY

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 HALOXYFOP 520 EC HERBICIDE
Product Use: A herbicide for the post-emergent control of a wide range of annual and perennial grass weeds in grain legume and oilseed crops, lucerne, medic and clover pasture and seed crops, forestry, bananas, citrus, grapes, pineapples, pome and stone fruit, pyrethrum, tropical fruit and nut crops.

2. HAZARDS IDENTIFICATION

This product is classified as: Xn, Harmful. Xi, Irritating. Hazardous according to the criteria of SWA. Not subject to the ADG Code when transported by Road or Rail in containers up to 500L. (ADG 7, Special Provision AU01).

Risk Phrases: R20/22, R36/38, R50/53. Harmful by inhalation and if swallowed. Irritating to eyes and skin. Very toxic to aquatic organisms, may cause long-term adverse effects to the aquatic environment.

Safety Phrases: S2, S13, S23, S26, S28, S61, S24/25, S29/35, S36/37/39. Keep out of reach of children. Keep away from food, drink and animal feeding stuffs. Do not breathe vapours or mists. In case of contact with eyes, rinse immediately with plenty of water and contact a doctor or Poisons Information Centre. After contact with skin, wash immediately with plenty of soap and water. Avoid release to the environment. Refer to special instructions/Safety Data Sheets. Avoid contact with skin and eyes. Do not empty into drains, dispose of this material and its container in a safe way. Wear suitable protective clothing, gloves and eye/face protection.

SUSDP Classification: S6

ADG Classification: Class 9: Miscellaneous Dangerous Goods.

UN Number: 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS No	Conc.
Haloxyfop R-methyl ester	072619-32-0	520 g/L
Ethyl di icinol	111-90-0	300 -600 g/L
Other non-hazardous ingredients	secret	max. 100 g/L

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non-hazardous ingredients are also possible.

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4. FIRST AID MEASURES

Consult the Poisons Information Centre (13 11 26) or a doctor in every case of suspected chemical poisoning. Never give fluids or induce vomiting if a patient is unconscious or convulsing regardless of cause of injury. If breathing difficulties occur seek medical attention immediately.

- Inhalation:** No first aid measures normally required. However, if inhalation has occurred, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists more than about 30 minutes, seek medical advice.
- Skin Contact:** Wash gently and thoroughly with warm water (use non-abrasive soap if necessary) for 10-20 minutes or until product is removed. Under running water, remove contaminated clothing, shoes and leather goods (e.g. watchbands and belts) and completely decontaminate them before reuse or discard. If irritation persists, repeat flushing and seek medical attention.
- Eye Contact:** Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 20 minutes or until the product is removed, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. Obtain medical attention immediately. Take special care if exposed person is wearing contact lenses.
- Ingestion:** If swallowed, do NOT induce vomiting. Wash mouth with water and contact a Poisons Information Centre, or call a doctor.

5. FIRE-FIGHTING MEASURES

Fire and Explosion Hazards:

This product is classified as a C1 combustible liquid. There is little 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. Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

Extinguishing Media: Suitable extinguishing media are carbon dioxide, dry chemical, foam, water fog. Alcohol resistant foam is the preferred firefighting medium but, if it is not available, normal foam can be used. Try to contain spills, minimise spillage entering drains or water courses.

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade. There is little danger of a violent reaction or explosion if significant quantities of this product are involved in a fire. Recommended personal protective equipment is full fire kit and breathing apparatus.

- Flash point:** 92°C
Upper Flammability Limit: 8.5% (solvent)
Lower Flammability Limit: 1.2% (solvent)
Autoignition temperature: No data.
Flammability Class: C1 combustible liquid

6. ACCIDENTAL RELEASE MEASURES

Accidental release: In the event of a major spill, prevent spillage from entering drains or water courses. Wear full protective clothing including eye/face protection. All skin areas should be covered. See below under Personal Protection regarding Australian Standards relating to personal protective equipment. Suitable materials for protective clothing include rubber, PVC. Eye/face protective equipment should comprise as a minimum, protective glasses and, preferably, goggles. Eye/face protective equipment should comprise as a minimum, protective goggles. If there is a significant chance that vapours or mists are likely to build up in the cleanup area, we recommend that you use a respirator. It should be fitted with a type A cartridge, suitable for organic vapours. Otherwise, not normally necessary. 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. Because of the environmentally hazardous nature of this product, special care should be taken to restrict release to waterways or drains. Sweep up and shovel or collect recoverable product into labelled containers for recycling or

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salvage, and dispose of promptly. Recycle containers wherever possible after careful cleaning. Refer to product label for specific instructions. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this MSDS and the label, instructions on the label prevail. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

7. HANDLING AND STORAGE

Handling: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this MSDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

Storage: This product is a Scheduled Poison. Observe all relevant regulations regarding sale, transport and storage of this schedule of poison. Check packaging - there may be further storage instructions on the label.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

The following Australian Standards will provide general advice regarding safety clothing and equipment: Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Industrial Clothing: **AS2919**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210. SWA Exposure Limits TWA (mg/m³) STEL (mg/m³)**

Exposure limits have not been established by SWA for any of the significant ingredients in this product. No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

Ventilation: This product should only be used in a well ventilated area. If natural ventilation is inadequate, use of a fan is suggested.

Eye Protection:

Protective glasses or goggles should be worn when this product is being used. Failure to protect your eyes may cause them harm. Emergency eye wash facilities are also recommended in an area close to where this product is being used.

Skin Protection: Prevent skin contact by wearing impervious gloves, clothes and, preferably, apron. Make sure that all skin areas are covered. See below for suitable material types.

Protective Material Types: We suggest that protective clothing be made from the following materials: rubber, PVC.

Respirator: Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above. Otherwise, not normally necessary. Eyebaths or eyewash stations and safety deluge showers should be provided near to where this product is being used.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Description & Colour:	Brown Coloured Liquid
Odour:	Characteristic solvent odour
pH:	
Vapour Pressure:	1.84 kPa at 20°C
Boiling Point:	Solvent Boils at 202°C at 100kPa
Freezing/Melting Point:	No specific data. Liquid at normal temperatures
Volatiles:	No specific data. Expected to be low at 100°C
Vapour Density:	No data
Specific Gravity:	1.15 approx at 20°C
Water Solubility:	Emulsifiable
% Volatility:	No data

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Evaporation Rate: No data
Viscosity: 12.6 cPs

10. STABILITY AND REACTIVITY

Reactivity: This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

Conditions to Avoid: Protect this product from light. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.

Incompatibilities: strong acids, strong bases, strong oxidising agents.

Fire Decomposition: Combustion forms carbon dioxide, and if incomplete, carbon monoxide and smoke. Water is also formed. May form nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas in reducing atmospheres. May form hydrogen chloride gas, other compounds of chlorine. May also form hydrogen fluoride gas and other compounds of fluorine. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.

Polymerisation: This product will not undergo polymerisation reactions.

11. TOXICOLOGICAL INFORMATION

Toxicity: Acute Toxicity: For haloxyfop-methyl the oral LD50 is 393 mg/kg for rats. The LD50 is greater than 5,000 mg/kg for rabbits whose skin is exposed to haloxyfop-methyl. Haloxyfop-ethoxyethyl has an oral LD50 of 518-531 mg/kg for rats. The dermal LD50 is greater than 2000 mg/kg for rats and greater than 5,000 mg/kg for rabbits. Both haloxyfop forms are non-irritating to skin and do not cause skin sensitization. They are mild eye irritants. The symptoms of toxicity in rats are reduced food intake and reduced food consumption. They may also cause liver and kidney damage.

Chronic Toxicity: No Information Available.

Reproductive Effects: In rats, oral doses of 10 and 50 mg/kg/day of haloxyfop-ethoxyethyl from days 6 to 16 of pregnancy reduced the number of live offspring per litter and caused vaginal bleeding in the mother.

Teratogenic Effects: Oral doses of 50 mg/kg/day of haloxyfop-ethoxyethyl in rats between days 6 and 16 of pregnancy caused developmental abnormalities in the offspring's urinogenital system and death to the foetus. Oral doses of 7.5 mg/kg/day of haloxyfop-methyl given to rats from days 6 to 15 of pregnancy caused delayed bone formation in the offspring.

Mutagenic Effects: No information is currently available.

Carcinogenic Effects: Studies show that 0.1 mg/kg/day of haloxyfop-methyl for two years, the highest dose tested, does not cause cancer in rats. Similarly, 0.6 mg/kg/day for two years, the highest dose tested, is not carcinogenic to mice.

Organ Toxicity: Doses of 100 mg/kg/day of haloxyfop-methyl caused kidney damage in adult rats. Doses of 0.6 mg/kg/day for 2 years in mice caused reduced body weight gains and increased liver weights in mice. In dogs, 5 mg/kg/day causes a significant decrease in serum cholesterol, as well as a decrease in thyroid weight.

Fate in Humans and Animals: In rats, haloxyfop-ethoxyethyl undergoes metabolism to haloxyfop which is excreted in faeces and urine.

12. ECOLOGICAL INFORMATION

Very toxic to aquatic organisms, may cause long-term adverse effects to the aquatic environment.

Effects on Birds: Haloxyfop-methyl and Haloxyfop-ethoxyethyl are practically non-toxic to birds. The oral LD50 is greater than 2,150 mg/kg for mallard ducks. The dietary LC50 (8 day) is greater than 5,620 mg/kg for bobwhite quail.

Effects on Aquatic Organisms: Haloxyfop-methyl is practically non-toxic to fish. The LC50 ranges from 96 to greater than 1000 mg/kg. Haloxyfop-ethoxyethyl is moderately to highly toxic to fish. The LC50 (96 hour) is 0.54 mg/l for fathead minnows, 0.28 mg/l for bluegill sunfish, and 1.8 mg/l for rainbow trout. The LC50 (48 hours) for Daphnia is 4.64 mg/l.

Effects on Other Animals (Nontarget species): Haloxyfop is not toxic to bees. The contact and oral LD50 (48 hours) is 100 micrograms Haloxyfop/bee.

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ENVIRONMENTAL FATE

Breakdown of Chemical in Soil and Groundwater: Haloxyfop-ethoxyethyl is converted to Haloxyfop in soil. The half-life of Haloxyfop-ethoxyethyl is greater than one day on silty clay loam at 20°C. The half-life of Haloxyfop in soil is 55-100 days depending on the soil. Leaching is moderate.

Breakdown of Chemical in Surface Water: The half-life of Haloxyfop in water is 33 days for Haloxyfop at pH 5, 5 days at pH 7, and a few hours at pH 9.

Breakdown of Chemical in Vegetation: No information is currently available.

13. DISPOSAL CONSIDERATIONS

Disposal: Special help is available for the disposal of Agricultural Chemicals. The product label will give general advice regarding disposal of small quantities, and how to cleanse containers. However, for help with the collection of unwanted rural chemicals, contact ChemClear 1800 008 182 <http://www.chemclear.com.au/> and for help with the disposal of empty drums, contact DrumMuster <http://www.drummuster.com.au/> where you will find contact details for your area.

14. TRANSPORT INFORMATION

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

ADG Code: 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Hazchem Code: 3Z

Special Provisions: 179, 274, AU01

Limited quantities: ADG 7 specifies a Limited Quantity value of 5 L for this class of product.

Dangerous Goods Class: Class 9: Miscellaneous Dangerous Goods.

Packaging Group: III

Packaging Method: P001, IBC03, LP01

Class 9 Miscellaneous Dangerous Goods shall not be loaded in the same vehicle or packed in the same freight container with Dangerous Goods of Class 1 (Explosives).

15. REGULATORY INFORMATION

AICS: All of the significant ingredients in this formulation are compliant with NICNAS regulations. The following ingredient: Haloxyfop R-methyl ester, is mentioned in the SUSDP.

Poison Schedule: S6

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).