



# Material Safety Data Sheet

## SECTION 1: IDENTIFICATION OF THE CHEMICAL PRODUCT

**Product Name:** WELOXY 520 EC HERBICIDE

**Product Type:** Group A Herbicide/ Aryloxyphenoxypropionates derivative.

**Product Use:** 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 as specified in the Directions for Use.

## SECTION 2: HAZARD IDENTIFICATION

### Statement of Hazardous Nature

This product is classified as: Xn, Harmful. Xi, Irritating. Hazardous according to the criteria of SWA.

Not a Dangerous Good according to the Australian Dangerous Goods (ADG) Code.

**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:** None allocated. Not a Dangerous Good.

**UN Number:** None allocated

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS	Proportion
Haloxfop R-methyl ester	72619-32-0	520g/L
Other non-hazardous ingredients	-	to 100%

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## SECTION 4: FIRST AID MEASURES

**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 nonabrasive 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.

**Advice to Doctor:** Treatment is symptomatic.

## SECTION 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.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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 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. Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned below (section 8). 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. 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. Refer to product label for specific

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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 reuse. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

## SECTION 7: HANDLING AND STORAGE

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.

Note that this product is combustible and therefore, for Storage, meets the definition of Dangerous Goods in some states. If you store large quantities (tonnes) of such products, we suggest that you consult your state's Dangerous Goods authority in order to clarify your obligations regarding their storage. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight. Make sure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10. Some liquid preparations settle or separate on standing and may require stirring before use. Check packaging there may be further storage instructions on the label

## SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure limits have not been established by SWA for these ingredients ie. No TWA or STEL limits set. No biological limits applicable.

Ensure adequate ventilation and reduced dust in a shaded dry storage.

The ADI for Haloxyfop is set at 0.0003mg/kg/day. The corresponding NOEL is set at 0.03mg/kg/day. ADI means Acceptable Daily Intake and NOEL means No-observable-effect-level. Values taken from Australian ADI List, Sept 2010.

Personal Protective Equipment:

Australian Standards 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**

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.

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Eyebaths or eyewash stations and safety deluge showers should be provided near to where this product is being used.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**Physical Description & colour:** Clear brown liquid.

**Odour:** Solvent odour.

**Boiling Point:** No data.

**Specific Gravity:** No specific data. Expected to be in the range 1.1-1.2

**Freezing/Melting Point:** No specific data. Liquid at normal temperature.

**Vapour Pressure:** No data.

**Vapour Density:** No data.

**Water Solubility:** Emulsifiable.

**pH:** No data.

**Volatility:** No data.

**Odour Threshold:** No data.

**Evaporation Rate:** No data.

**Coeff Oil/water distribution:** No data.

**Autoignition temp:** No data.

## SECTION 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:** 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:** Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas in reducing atmospheres. Hydrogen chloride gas, other compounds of chlorine. Hydrogen fluoride gas and other compounds of fluorine. Water. 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.

## SECTION 11: TOXICOLOGICAL INFORMATION

**Acute Toxicity:** For Haloxyfop-methyl the oral LD50 is 393 mg/kg for rats. The dermal LD50 is greater than 5,000 mg/kg for rabbits. 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.

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**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, (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. There is no data to hand indicating any particular target organs.

## SECTION 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 nontoxic to birds. The oral LD<sub>50</sub> is greater than 2,150 mg/kg for mallard ducks. The dietary LC<sub>50</sub> (8 day) is greater than 5,620 mg/kg for bobwhite quail.

**Effects on Aquatic Organisms:** Haloxyfop-methyl is practically nontoxic to fish. The LC<sub>50</sub> ranges from 96 to greater than 1000 mg/kg. Haloxyfop-ethoxyethyl is moderately to highly toxic to fish. The LC<sub>50</sub> (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 LC<sub>50</sub> (48 hours) for Daphnia is 4.64 mg/l.

**Effects on Other Animals (Non-target species):** Haloxyfop is not toxic to bees. The contact and oral LD<sub>50</sub> (48 hours) is 100 micrograms Haloxyfop/bee.

### 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

## SECTION 13: DISPOSAL CONSIDERATIONS

Instructions for the disposal of this product and its containers are listed on the product label.

For collection of unwanted rural chemicals, contact ChemClear @1800 008 182 [www.chemclear.com.au](http://www.chemclear.com.au) and for help with the disposal of empty drums, contact DrumMuster® [www.drummuster.com.au](http://www.drummuster.com.au) for local and State contacts.

## SECTION 14: TRANSPORT INFORMATION

**UN Number:** None allocated

**Proper Shipping Name:** None allocated

**SUSDP Classification:** S6.

**ADG Class:** None allocated. Not a dangerous good.

**Hazchem Code:** None allocated

**Packaging Group:** None allocated

## SECTION 15: REGULATORY INFORMATION

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**AICS (Australia):** All of the components in this product are listed on the Australian Inventory of Chemical Substances.

**APVMA Registration Number:** 66570

## SECTION 16: OTHER INFORMATION

**This MSDS contains only safety-related information sourced from the public domain and analytical results on this product:**

**Acronyms:**

**ADG Code** Australian Code for the Transport of Dangerous Goods by Road and Rail, 7th Edition

**AICS** Australian Inventory of Chemical Substances

**CAS number** Chemical Abstracts Service Registry Number

**Hazchem Number** Emergency action code of numbers and letters that provide information firefighters

**IARC** International Agency for Research on Cancer

**ASCC** Office of the Australian Safety and Compensation Council

**NTP** National Toxicology Program (USA)

**R-Phrase** Risk Phrase

**SUSDP** Standard for the Uniform Scheduling of Drugs & Poisons

**UN Number** United Nations Number

**Police and Fire Brigade: Dial 000 **Poisons Information Centre (13 1126)****

**Emergency contact: 04 0214 9346 (24 hours)**

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