

Section 1 - Identification

CropSure Pty Ltd
18 Raymond Road
Laverton North VIC 3026 AUSTRALIA

Phone: 03 9931 2200
Emergency Contact AU: +61 1800 951 288
Emergency Contact NZ: +64 800 700 112

Chemical nature: Herbicide containing haloxyfop-R-methyl.
Trade Name: **CropSure Hallotop 520EC Herbicide**
Product Use: Agricultural herbicide for use as described on the product label.
Creation Date: **August, 2022**
This version issued: **August, 2022** and is valid for 5 years from this date.
Poisons Information Centre: Phone 13 1126 from anywhere in Australia

Section 2 - Hazards Identification

Statement of Hazardous Nature

SUSMP Classification: S6

ADG Classification: Class 9: Miscellaneous Dangerous Goods.

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



GHS Signal word: WARNING

Flammable liquids Category 4

Acute Toxicity Oral Category 4

Hazardous to aquatic environment Short term/Chronic Category 1

HAZARD STATEMENT:

H227: Combustible liquid.

H302: Harmful if swallowed.

H410: Very toxic to aquatic life with long lasting effects.

PREVENTION

P210: Keep away from heat, sparks, open flames and hot surfaces. - No smoking.

P261: Avoid breathing fumes, mists, vapours or spray.

P262: Do not get in eyes, on skin, or on clothing.

P264: Wash contacted areas thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P273: Avoid release to the environment.

P280: Wear protective gloves, protective clothing and eye or face protection.

RESPONSE

P301+P312: IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water.

P370+P378: In case of fire: Use carbon dioxide, dry chemical, foam, to extinguish.

STORAGE

P405: Store locked up.

P410: Protect from sunlight.

P402+P404: Store in a dry place. Store in a closed container.

P403+P235: Store in a well-ventilated place. Keep cool.

DISPOSAL

P501: Dispose of contents and containers as specified on the registered label.

Emergency Overview

Physical Description & Colour: Brown liquid.

Odour: Characteristic odour.

Section 3 – Composition and Information on Ingredients

| Ingredients | CAS No | Conc, g/L | TWA (mg/m ³) | STEL (mg/m ³) |
|-------------|--------|-----------|--------------------------|---------------------------|
|-------------|--------|-----------|--------------------------|---------------------------|

SAFETY DATA SHEET

Issued by: CropSure Pty Ltd

Phone: 03 9931 2200

Poisons Information Centre: 13 1126 from anywhere in Australia, (0800 764 766 in New Zealand)

| | | | | |
|---------------------------------|------------|---------|---------|---------|
| Haloxypop R-methyl ester | 72619-32-0 | 520 | not set | not set |
| Ethyl di icinol | 111-90-0 | 300-600 | not set | not set |
| Other non hazardous ingredients | secret | to 1 L | not set | not set |

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

The SWA TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

Section 4 - First Aid Measures

General Information:

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this SDS with you when you call.

Inhalation: First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Skin Contact: Irritation is unlikely. However, if irritation does occur, flush with lukewarm, gently flowing water for 5 minutes or until chemical is removed.

Eye Contact: No effects expected. If irritation does occur, flush contaminated eye(s) with lukewarm, gently flowing water for 5 minutes or until the product is removed. Obtain medical advice if irritation becomes painful or lasts more than a few minutes. Take special care if exposed person is wearing contact lenses.

Ingestion: If swallowed, do NOT induce vomiting. Immediately contact a Poisons Information Centre, or call a doctor. Wash mouth with water. If vomiting occurs naturally, lay patient on side, in recovery position as there is a chance that vomitus may enter airways causing harm to lungs.

Section 5 - Fire Fighting Measures

Fire and Explosion Hazards: Combustible liquid. The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. 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.

Fire decomposition products from this product are likely to be toxic and corrosive if inhaled. Take appropriate protective measures.

Extinguishing Media: In case of fire, use carbon dioxide, dry chemical or foam. 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

Accidental release: In the event of a major spill, prevent spillage from entering drains or water courses. As a minimum, wear overalls, goggles and gloves. Suitable materials for protective clothing include rubber, PVC and Nitrile. Eye/face protective equipment should comprise, as a minimum, protective glasses and, preferably, 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. 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 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 SDS 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.

SAFETY DATA SHEET

Section 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 SDS 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.

Section 8 - Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: AS/NZS 4501 set 2008, 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 where there is ventilation that is adequate to keep exposure below the TWA levels. If necessary, use a fan.

Eye Protection: Eye protection such as protective glasses or goggles is recommended when this product is being used.

Skin Protection: You should avoid contact even with mild skin irritants. Therefore you should wear suitable impervious elbow-length gloves and facial protection when handling this product for lengthy periods. See below for suitable material types.

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

Respirator: Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above.

Section 9 - Physical and Chemical Properties:

| | |
|---|--|
| Physical Description & colour: | Brown liquid. |
| Odour: | Characteristic odour. |
| Freezing/Melting Point: | No specific data. Liquid at normal temperatures. |
| Boiling Point: | Solvent Boils At 202°C at 100kPa |
| Flash point: | >70°C |
| Upper Flammability Limit: | No data. |
| Lower Flammability Limit: | No data. |
| Flammability Class: | Flammable Category 4 (GHS), C1 combustible (AS 1940) |
| Volatiles: | No specific data. Expected to be low at 100°C. |
| Vapour Pressure: | 1.84kPa at 20°C |
| Vapour Density: | No data. |
| Specific Gravity: | Approx 1.15 at 20°C |
| Water Solubility: | Emulsifiable. |
| pH: | No data. |
| Volatility: | No data. |
| Odour Threshold: | No data. |
| Evaporation Rate: | No data. |
| Coeff Oil/water Distribution: | No data |
| Particle Characteristics: | Not applicable for liquids. |
| 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: 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.

SAFETY DATA SHEET

Fire Decomposition: Combustion forms carbon dioxide, and if incomplete, carbon monoxide and possibly smoke. Water is also formed. May form hydrogen chloride gas, other compounds of chlorine. May 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.

Section 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 urogenital 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. This product may affect gastrointestinal system.

Major Health Hazards: 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. no significant risk factors have been found for this product.

Classification of Hazardous Ingredients

| Ingredient | Health Hazard Statement Codes |
|--|-------------------------------|
| Haloxyfop R-methyl Ester <ul style="list-style-type: none">Acute toxicity – category 4Hazardous to the aquatic environment (acute) – category 1Hazardous to the aquatic environment (chronic) – category 1 | H302, H410 |

Potential Health Effects

Inhalation:

Short Term Exposure: Available data indicates that this product is not harmful. In addition product is unlikely to cause any discomfort or irritation.

Long Term Exposure: No data for health effects associated with long term inhalation.

Skin Contact:

Short Term Exposure: Available data indicates that this product is not harmful. It should present no hazards in normal use. However product may be irritating, but is unlikely to cause anything more than mild transient discomfort.

Long Term Exposure: No data for health effects associated with long term skin exposure.

Eye Contact:

Short Term Exposure: This product may be irritating to eyes, but is unlikely to cause anything more than mild transient discomfort.

Long Term Exposure: No data for health effects associated with long term eye exposure.

Ingestion:

SAFETY DATA SHEET

Short Term Exposure: Significant oral exposure is considered to be unlikely. Available data shows that this product is harmful, but symptoms are not available. However, this product may be irritating to mucous membranes but is unlikely to cause anything more than transient discomfort.

Long Term Exposure: No data for health effects associated with long term ingestion.

Carcinogen Status:

SWA: No significant ingredient is classified as carcinogenic by SWA.

NTP: No significant ingredient is classified as carcinogenic by NTP.

IARC: No significant ingredient is classified as carcinogenic by IARC.

Section 12 - Ecological Information

This product is very toxic to aquatic life with long lasting effects. This product is not readily biodegradable; it may accumulate in the soil or water and cause long term problems.

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.

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

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.

Section 14 - Transport Information

Not subject to the ADG Code when transported by Road or Rail in Australia, in packages 500kg(L) or less; or IBCs, but classed as Dangerous by IATA and IMDG/IMSBC when carried by Air or Sea transport (see details below).

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

Hazchem Code: •3Z

Special Provisions: 179, 274, 331, 335, 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.

Packing Group: III

Packing Instruction: 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).

Section 15 - Regulatory Information

AICS: All of the significant ingredients in this formulation are compliant with AICIS regulations.

The following ingredient: Haloxyfop R-methyl ester, is mentioned in the SUSMP.

Section 16 - Other Information

This SDS contains only safety-related information. For other data see product literature.

Acronyms:

ADG Code

Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition)

AICS/AIIC

Australian Inventory of Industrial Chemicals

SAFETY DATA SHEET

Issued by: CropSure Pty Ltd

Phone: 03 9931 2200

Poisons Information Centre: 13 1126 from anywhere in Australia, (0800 764 766 in New Zealand)

| | |
|---------------------|---|
| SWA | Safe Work Australia, formerly ASCC and NOHSC |
| CAS number | Chemical Abstracts Service Registry Number |
| Hazchem Code | Emergency action code of numbers and letters that provide information to emergency services especially firefighters |
| IARC | International Agency for Research on Cancer |
| NOS | Not otherwise specified |
| NTP | National Toxicology Program (USA) |
| SUSMP | Standard for the Uniform Scheduling of Medicines & Poisons |
| UN Number | United Nations Number |

THIS SDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS SDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS. OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product.

This SDS is prepared in accord with the SWA document "Preparation of Safety Data Sheets for Hazardous Chemicals - Code of Practice" (July 2020) and GHS Revision 7
Copyright © Kilford & Kilford Pty Ltd, August, 2022.

<http://www.kilford.com.au/> Phone (02)8321 8866

SAFETY DATA SHEET