

**FARM-AG INTERNATIONAL (Pty) Ltd**

P.O. Box 1523, Durban 4000 Co Reg. No. 2005/011761/07

Head Office: 61 Marshall Dr., Old Mill Industrial Park, Mount Edgecombe South Africa  
Tel + 27 31 5388700 • Fax + 27 31 502 5825

**SECTION 1 - PRODUCT & COMPANY IDENTIFICATION**

**Product Name:** HAYLEY 108 EC  
**Product Use:** Herbicide  
**UN No.:** 3082  
**Effective Date:** April 2019  
**Revision Date:** September 2021  
**In case of Poisoning:**  
 Griffon Poison Information Centre: 082 446 8946  
 Western Cape Poison telephone service: 0861 555 777

**SECTION 2 - HAZARD IDENTIFICATION**

**Likely routes of exposure:** Skin contact, ingestion and inhalation.

**Classification OSHA Regulatory Status:**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Acute toxicity - Oral	Category 5
Acute toxicity - Dermal	Category 5
Acute toxicity- Inhalation (Dusts/Mists)	Category 5
Skin sensitizer	Not a skin sensitizer
Carcinogenicity	Not classified
Aspiration hazard	Category 1

Label elements**Emergency Overview****WARNING**Hazard statements

H302: Harmful if swallowed  
 H412: Harmful to aquatic life with long lasting effects  
 H315: Causes skin irritation  
 H336: May cause drowsiness or dizziness  
 H411: Toxic to aquatic life with long-lasting effects  
 H226: **Flammable** liquid and vapour



**Appearance:** Light yellow to brown

**Physical state:** Liquid / Emulsifiable concentrate

**Odour:** Faint odour

**Precautionary Statement – Prevention:**

**P101** - If medical advice is needed, have product container or label at hand.

**P102** - Keep out of reach of children.

**P103** - Read label before use.

**P210** - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

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- P260** - Do not breathe dust/fume/gas/mist/vapours/spay.  
**P273** - Avoid release to the environment.  
**P280** - Wear protective gloves, eye protection and face protection.  
**P284** - Wear respiratory system.  
**P264** - Wash your skin thoroughly after handling.  
**P271** - Use only outdoors or in a well-ventilated area.

**Precautionary Statements - Response:**

- P308** - If exposed or concerned: Get medical advice/attention  
**P301** - If swallowed: Call a POISON CENTER or doctor/physician if you feel unwell.  
**P330** - Rinse mouth  
**P304+P340** - if inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
**P312** - Call a POISON CENTER or doctor/physician if you feel unwell  
**P370 + P378** - In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Precautionary Statements - Storage:**

- P403** - Store in a well-ventilated place  
**P233** - Keep the container tightly closed.  
**P405** - Store lock up.

**Precautionary Statements - Disposal:**

- P501** - Dispose of contents/container to an approved waste site or reclaimer in accordance with local and national regulations.

**SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS**

<b>Common Name:</b>	Haloxyfop-P-Methyl
<b>Chemical Name:</b>	(R)-2-[4-(3-chloro-5-(trifluoromethyl)-2-pyridyloxy)phenoxy]propionate (IUPAC)
<b>CAS No.:</b>	[72619-32-0]
<b>Chemical family:</b>	Aryloxyphenoxypropionate
<b>Molecular formula:</b>	C <sub>16</sub> H <sub>13</sub> ClF <sub>3</sub> NO <sub>4</sub>
<b>Use:</b>	Selective herbicide, absorbed by the foliage and roots, and hydrolysed to haloxyfop, which is translocated to meristematic tissues and inhibits their growth.
<b>Formulation:</b>	<b>Haloxyfop-P-Methyl 108 g/l</b> <b>Emusifiable Concentrate</b>

Classification of components according to GHS

Component	Cas No.	Amount (w/w)%	Classification
Haloxy-R-Methyl	77182-82-2	±10.8%	H302 H412
Solvent 150	64742-94-5	± 85%	H302 H315 H336 H411
Other components *	99734-09-5 26264-06-2	Up to 100%	H315 H318 H413

\*The concentration of the components above is the manufactures confidential information.

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The product may be a mild cholinesterase inhibitor. Symptoms may include dry skin, skin cracking, irritation to eyes and skin, drowsiness and dizziness.

**Inhalation:**

Immediately remove source of contamination or move victim to fresh air. If breathing has stopped, perform artificial respiration and administer oxygen. Do not give mouth-to-mouth resuscitation if victim ingested or inhaled the substance. Keep person warm and at rest. Treat symptomatically and supportively as and when required. Call a poison control center or doctor for treatment advice. Have the product container or label with you when calling a poison control center or doctor, or going for treatment. Notes to physicians: There is no specific antidote. All treatment should be based on observed signs and symptoms of distress in the patient.

**Skin contact:**

Remove contaminated clothing, shoes and leather goods immediately. Gently wipe off excess chemical. Wash skin gently and thoroughly with non-abrasive soap or mild detergent and large amounts of water until no evidence of chemical remains (approximately 15 to 20 minutes). Seek medical advice if irritation develops and persists.

**Eye contact:**

Immediately flush the eyes with gently flowing lukewarm water or sodium bicarbonate solution for 20 to 30 minutes, occasionally lifting the upper and lower lids. If irritation persists, seek medical advice immediately.

**Ingestion:**

Do not induce vomiting due to petroleum distillates/aromatic solvent in product. Do not give anything by mouth. Immediately call a physician or Poison Control Center.

**Advice to physician:**

No specific antidote is available if. Treat symptomatically and supportively. Do not induce vomiting. This product contains material that may cause severe pneumonitis if aspirated.

**SECTION 5 - FIRE-FIGHTING MEASURES****Fire hazard****Flammability:** Flammable**Flash point:** 70°C**Hazardous decomposition products:**

Decomposes in fire, and generates dense black smoke containing hazardous products of combustion. Exposure to these decomposition products may be a health hazard.

**Extinguishing agents:**

For small fires extinguish with water spray, carbon dioxide, dry powder, or alcohol-resistant foam. For large fires extinguish with alcohol-resistant foam or water spray. Do not use a solid water stream as it may scatter the material. Contain water used for fire fighting for later disposal. Do not get water inside the containers. Runoff to sewers could create fire or explosion hazard.

**Fire fighting:**

Remove spectators from surrounding area. Remove container from fire area if possible without risk. Eliminate all ignition sources in immediate area. Fight fire from maximum distance. For massive fire, use unmanned hose holder or monitor nozzles. Contain fire control agents for later disposal. Use a recommended extinguishing agent for the type of surrounding fire. Avoid inhaling hazardous vapours. Keep upwind.

**Personal protective equipment:**

Fire-fighters and others that may be exposed should wear full protective impervious clothing, including gloves and eye protection, and self-contained breathing apparatus. Contact with the fumes and vapours should be avoided by staying upwind.

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Clean all clothing before re-use. Severely contaminated clothing cannot be adequately decontaminated, and must be disposed as a hazardous waste. Shower with soap and water after contact with this product.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES (SPILLAGE)****Personal precautions:**

Do not inhale spray or fumes. For personal protection see Section 8.

**Environmental precautions:**

Do not allow entering drains or watercourses. Spillage or uncontrolled discharges into water courses (or public waters) to be reported immediately to the Police and to the Department of Water/Environmental Affairs.

**Occupational spill:**

For small liquid spills, soak up with lime, damp earth or sand, or other non-combustible absorbent material and place into containers for later disposal. For large liquid spills, contain the liquid for later disposal. In situations where product comes in contact with water, contain contaminated water for later disposal. Do not flush spilled material into drains. Keep spectators away.

**SECTION 7 - HANDLING AND STORAGE REQUIREMENTS****Handling:**

Harmful if swallowed. Irritating to eyes and skin. Avoid contact with eyes and skin, and inhalation of dust, spray and vapour. Use with adequate ventilation. Wash hands before eating, drinking, chewing gum, smoking, or using the toilet. Remove clothing immediately if the product gets inside. Then wash skin thoroughly using a non-abrasive soap and put on clean clothing.

Do not apply directly to areas where surface water is present, or to intertidal areas below the mean high water mark. Water used to clean equipment must be disposed of correctly to avoid contamination.

**Storage:**

Keep out of reach of unauthorized persons, children and animals. Store in its original labelled container in shaded, well-ventilated area. Store in dry area. Not to be stored next to foodstuffs and water supplies. Local regulations should be complied with.

**SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION**

Comply with occupational safety, environmental, fire, and other applicable regulations.

**PERSONAL PROTECTIVE EQUIPMENT:****Respirator:**

Where exposure through inhalation may occur when handling and/or when preparing the spray mixture, wear a face mask. If the product is used in dusty or confined conditions or spillage and fire conditions a respirator suitable for protection from dusts and mists of pesticides is adequate.

**Clothing:**

Employee must wear appropriate protective (impervious) clothing, boots, hat and equipment to prevent repeated or prolonged skin contact with this substance. Do not wear leather clothing.

**Gloves:**

Employee must wear appropriate chemical resistant protective gloves to prevent contact with this substance.

**Eye protection:**

The use of safety goggles (full-face shield) is recommended.

**Emergency eye wash:** Where there is any possibility that an employee's eyes may be exposed to this substance, the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.

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**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Light yellow liquid, Aromatic characteristic odor
<b>Flammability:</b>	<b>Flammable</b>
<b>Flash point:</b>	70°C
<b>Vapour pressure:</b>	Not available
<b>Freezing point/range:</b>	<10 °C
<b>pH:</b>	6.2
<b>Density:</b>	1.000 ± 0.05 g/ml
<b>Corrosiveness:</b>	Non-corrosive
<b>Explosiveness:</b>	Non-explosive

**SECTION 10 - STABILITY AND REACTIVITY****Stability:**

Stable for up to 2 years under normal warehouse and field conditions.

**Conditions to avoid:**

None known

**Incompatible materials:**

Not known

**Incompatibility:**

Incompatible with strong basic, acidic or oxidising materials.

**Hazardous decomposition products:**

None under normal conditions of storage and use.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

<b>Acute oral LD<sub>50</sub>:</b>	>1946 mg / kg male & >3058 mg / kg female in rats (calc.)
<b>Acute dermal LD<sub>50</sub>:</b>	> 3058 mg/kg in rats (calc.)
<b>Acute inhalation LC<sub>50</sub>:</b>	>4.7 mg/l/4hours rats
<b>Skin irritation:</b>	Moderately skin irritant (rabbit)
<b>Eye irritation:</b>	Moderately eye irritant (rabbit)
<b>Skin sensitisation:</b>	None skin sensitizer (guinea pig)
<b>Haloxypop-p-methyl ADI:</b>	0.0007 mg/kg b.w [2006]

**SECTION 12 - ECOLOGICAL INFORMATION****Mobility, Degradability & Accumulation:**

**Animals:** In mammals, rapidly converted to haloxypop-P and excreted (see haloxypop). Plants rapidly hydrolysed to haloxypop-P, terminal residue haloxypop and conjugates (see haloxypop). **Soil/Environment:** In environmental matrices, rapidly hydrolysed to haloxypop-P, with nearly quantitative conversion in 1 day or less. Subsequent degradation then follows the pathways and rates for haloxypop-P. In soil, there is minor amount of conversion to a haloxypop phenol metabolite and subsequent conversion to haloxypop pyridinol and other minor degradates.

**ECOTOXICOLOGY: (For technical)**

This product is considered a marine pollutant.

**ECOTOXICITY DATA:**

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**Fish:****Haloxyfop-P-methyl**EC<sub>50</sub> (96h) Rainbow trout > 0.46 mg/l

Bluegill sunfish &gt; 0.0884 mg/l

**Daphnia:****Haloxyfop-P-methyl**EC<sub>50</sub> (48h) >12.3 mg/l**Algae:****Haloxyfop-P-methyl**EC<sub>50</sub> (5d) *Navicula pelliculosa* 1.72 mg/l**Other aquatic organisms:****Haloxyfop-P-methyl**EC<sub>50</sub> (14d) *Lemna minor* 3.1 mg/l**Birds:****Haloxyfop-P-methyl**LD<sub>50</sub>: Bobwhite quail > 414 mg/kg**Bees:****Haloxyfop-P-methyl**LD<sub>50</sub>: (48h) >100 µg/bee**Worms:****Haloxyfop-P-methyl**LC<sub>50</sub>: (14d) > 1343 mg/kg soil**SECTION 13 - DISPOSAL CONSIDERATION****Pesticide and container disposal:**

Open dumping or burning of this pesticide is prohibited. Never pour untreated waste or surplus products into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers.

Emptied containers retain vapour and product residues. Observe all labelled safeguards until container is destroyed.

**TRIPLE RINSE** empty containers in the following manner:

Invert the empty container over the spray or mixing tank and allow draining for at least 30 seconds after the flow has slowed down to a drip. Thereafter rinse the container three times with a volume of water equal to a third of the volume of the container. Add the rinsing to the contents of the spray tank before destroying the container in the prescribed manner.

Do not re-use the empty container for any other purposes but destroy it by perforation, flattening and bury in an approved dumpsite. Prevent contamination of food, feedstuffs, drinking water and eating utensils. Comply with local legislation applying to waste disposal.

**SECTION 14 - TRANSPORT INFORMATION****UN NUMBER:** 3082**ADR/IRD:**

Class: 9

Packaging group: III

Shipping name: Environmentally hazardous substance, Liquid, NOS.

**Haloxyfop-P-Methyl 108 g/l**  
**Emulsifiable Concentrate**

**IMDG/IMO:**

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**SECTION 15 - REGULATORY INFORMATION**

**Symbol:** X<sub>n</sub>, X<sub>i</sub>, N  
**Indication of danger:** Harmful, irritating and environmentally dangerous substance.  
**Risk phrase(s):**  
**R 22** Harmful if swallowed.  
**R 36/37/38** Irritating to eyes, respiratory system and skin.  
**R 43** May cause sensitization by skin contact.  
**R 51/53** Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.

**Safety phrases:**

**S 1/2** Keep out of reach children.  
**S 13** Keep away from food, drink and animal feeding stuffs.  
**S 22** Do not breathe dust.  
**S 24/25** Avoid contact with skin and eyes.  
**S 26** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
**S 36/37/39** Wear suitable protective clothing, gloves and eye/face protection.  
**S 61** Avoid release to the environment. Refer to special instructions/safety data sheets.

**SECTION 16 - OTHER INFORMATION****Packaging:**

Packed in 1, 5, 10, 15, 20, 25 & 50 litres fluorinated plastic containers / bottles / drums and labeled according to South African regulations and guidelines.

**Disclaimer:**

The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions or recommendations are not followed.

All information is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors and omissions or the consequence thereof.

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