

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY

PRODUCT NAME: STEED

OTHER NAME: Emulsifiable concentrate containing 520 g/L haloxyfop-p as the methyl ester

USE: Herbicide

SUPPLIER NAME: AGPRO NZ Ltd

SUPPLIER ADDRESS: 10 Polaris Place, East Tamaki, Auckland 2013
PO Box 58-963, Botany, Auckland 2163

SUPPLIER CONTACT: 09 273 3456 or freephone 0508 536 536
www.agpro.co.nz

POISON INFORMATION: National Poison Centre, 0800 POISON (0800 764 766) 24 hours

CHEMICAL EMERGENCY: 0800 CHEMCALL (0800 243 622) 24 hours

2. HAZARDS IDENTIFICATION

NEW ZEALAND: Hazardous according to the Hazardous Substances (Hazard Classification) Notice 2020 of the HSNO Act, 1996

APPROVAL NUMBER: HSR100054

HAZARD CLASSIFICATIONS: Flammable liquid Category 4, Acute oral toxicity Category 4, Aspiration hazard Category 1, Eye irritation Category 2, Specific target organ toxicity, (repeated exposure) Category 2, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1.

PICTOGRAMS:



SIGNAL WORD: DANGER

HAZARD STATEMENTS: Combustible liquid
Harmful if swallowed
May be fatal if swallowed and enters airways.
Causes serious eye irritation.
May cause damage to organs through prolonged or repeated exposure.
Very toxic to aquatic life and with long-lasting effects.
Toxic to terrestrial vertebrates.

PREVENTION: Keep out of reach of children.
Read label before use.
Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Wash hands after handling.
Do not eat, drink or smoke with using this product.
Do not breathe vapours, mist, spray.
Wear protective clothing and eye protection.
Avoid release to the environment.

RESPONSE: If medical advice is needed, have product container or label at hand.
Get medical advice/attention if you feel unwell.
IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.
Do not induce vomiting.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

	Collect spillage.
	In case of fire: Stop leak if safe to do so.
STORAGE:	Store in a well-ventilated place. Keep container tightly closed. Keep cool.
	Store locked up.
DISPOSAL:	Dispose of unwanted product and used packaging in compliance with local regulations.
TRANSPORT:	STEED is classified as Dangerous Goods Class 9 for Transport.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS No.	% w/w
Haloxypop-p methyl ester	72619-32-0	47 - 51*
Solvent naphtha (petroleum), aromatic	64742-94-5	35 - 45
Non-hazardous ingredients	Proprietary	Balance

* equivalent to 520 g/L haloxypop-p

4. FIRST - AID MEASURES

Contact the National Poisons Centre on 0800 POISON (0800 764 766) or a doctor for advice. Have product label or SDS at hand.

Ingestion	If swallowed, do NOT induce vomiting. Contact the National Poisons Centre on 0800 POISON (0800 764 766) or a doctor for advice. If person vomits spontaneously, keep head below hips to avoid aspiration into lungs.
Inhalation	Remove patient to fresh air. Keep in position comfortable for breathing. If breathing is shallow or has stopped ensure airway is clear, apply resuscitation and seek medical assistance immediately.
Skin contact	Remove contaminated clothing and wash with soap and running water. If irritation occurs, get medical advice.
Eye contact	If in eyes flush with plenty of water holding eyelids open if necessary. Remove contact lenses if present, after a few minutes, then continue flushing with water. Get medical advice if irritation persists.
Advice to Doctor	No specific antidote. Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flammability:	Combustible liquid and vapour.
Hazardous Combustion Products:	If involved in a fire, may evolve toxic/harmful compounds.
Extinguishing Media:	Foam, carbon dioxide or dry chemical. Use water fog or fine water spray if no alternatives. Do not use water jet. Contain all run-off.
Protective Equipment:	Full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Spills and Disposal:	Eliminate or isolate sources of ignition. No smoking. Wear personal protective equipment. Exclude non-essential people from the area. Stop leak if safe to do so. Contain spillage. Collect liquid into labelled containers than can be closed, for reuse or disposal. Absorb spills with inert material and place in a sealable labelled waste container. Dispose of waste safely in an approved landfill or hazardous waste facility.
Environmental Precautions:	Prevent from entering drains, waterways or sewers. If spill does enter waterways immediately contact local authority.

7. HANDLING AND STORAGE

- Handling:** Keep out of reach of children. Read label before use. Keep container tightly closed when not in use. Use only according to label. Specific HSNO controls apply if apply into or onto water (aquatic environments).
- Wear personal protective equipment. Avoid contact with skin and eyes and inhalation of vapours or spray mist. Contaminated work clothing should not be allowed out of the workplace. Use outdoors or in well-ventilated area. Take all reasonable steps to ensure the product does not cause any significant adverse effects to the environment beyond the application area.
- Written records of use are required if more than 3 kg (3L) applied within 24 hours in a place where the product is likely to enter air or water and leave the application area. STEED must be under the control of a Qualified Handler during use.
- Storage:** Signage, an emergency response plan and secondary containment are required when 100 L or more is on site. Store in original container tightly closed and in a locked well-ventilated area away from foodstuffs, fertilisers and seeds.
- For guidance refer to the current version of NZS 8409 Management of Agrichemicals and the Health and Safety at Work (Hazardous Substances) Regulations 2017.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits: Worksafe NZ (13th edition, April 2022)

<i>Ingredient</i>	<i>Exposure</i>	<i>Form</i>	<i>Ceiling</i>
No ingredients listed	-	-	-

- Tolerable exposure limit:** Haloxyfop-R-methyl TEL drinking water 0.0021 mg/L
- Protective Equipment:** When opening the container, preparing to measure, load or when applying: wear safety goggles, waterproof gloves, cotton overalls buttoned to the neck and wrist, and boots.
- The following Standards provide general advice regarding safety clothing and equipment:
- Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: **AS/NZS 4501**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.
- Engineering Controls:** Handle outdoors or in a well-ventilated area. Use local exhaust ventilation, or other engineering controls as appropriate to conditions.
- Hygiene Precautions:** Do not eat, drink or smoke while using this product. Remove protective clothing and wash hands and face before meals and after work. Wash protective clothing and equipment daily after work.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance:** Clear amber liquid
- Odour:** Characteristic hydrocarbon
- Odour threshold:** No information available.
- pH** 6.0 – 8.0 (1% aqueous)
- Melting point/freezing point:** Not available
- Initial boiling point/range:** Not available
- Flashpoint:** >61 <93°C
- Flammability (solid, gas):** Not applicable
- Upper/lower flammability limits:** Not available
- Vapour pressure:** Not available
- Vapour density:** Not available
- Relative density:** ca 1.088

Solubilities:	Forms emulsion in water.
Partition coefficient: n-octanol/water:	Not available
Auto-ignition temperature:	No information available
Decomposition temperature:	Not available
Kinematic viscosity:	Not available
Particle characteristics:	Not applicable

10. STABILITY AND REACTIVITY

Stability:	Stable under normal storage conditions in original container for at least two years.
Conditions to avoid:	Ignition sources (heat, spark, open flames).
Incompatible substances or materials:	Strong acids, strong alkalis, oxidizing agents.
Hazardous polymerization:	Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:	Harmful if swallowed.
Aspiration hazard:	Hydrocarbon solvent identified as aspiration hazard.
Respiratory irritation:	Not classified.
Skin corrosion/irritation:	Mildly irritating to skin.
Serious eye damage/irritation:	Serious eye irritant.
Respiratory or skin sensitization:	Not classified.
Germ cell mutagenicity:	Not classified.
Carcinogenicity:	Not classified.
Reproductive toxicity:	Not classified.
Specific organ toxicity:	May cause damage to organs through prolonged or repeated exposure.
Narcotic effects:	No components identified with narcotic effects.
Toxicological information:	<u>Haloxypop-P-methyl (active)</u> Oral, rat LD ₅₀ ≥300 mg/kg bw Dermal, rat LD ₅₀ 2000 mg/kg bw

12. ECOLOGICAL INFORMATION

Ecotoxicity:	STEED is classified as being very toxic to aquatic life and with long-lasting effects. STEED is harmful to terrestrial vertebrates.
Ecotoxicological information:	<u>Haloxypop-P-methyl (active)</u> Fish: <i>Lepomis macrochirus</i> LC ₅₀ (96 h) 0.088 mg/L; Rainbow trout LC ₅₀ (96 h) 0.7 mg/ Crustacean: <i>Daphnia magna</i> EC ₅₀ (48 h) 6.12 mg/L Aquatic plant: <i>Lemna gibba</i> EC ₅₀ (7 d) biomass, 3.1 mg/L Algae: <i>Navicula pelliculosa</i> EC ₅₀ (72 h) growth 1.72 mg/L Bird: Unknown species LD ₅₀ 1159 mg/kg Earthworm: <i>Eisenia foetida</i> LC ₅₀ (14 d) >672 mg/kg Bee: <i>Apis mellifera</i> LD ₅₀ contact or oral >100 µg/bee
Persistence and degradability:	DT ₅₀ (typical) 0.5 days; non-persistent.
Potential to be bioaccumulative:	Not bioaccumulative
Mobility in soil:	Haloxypop-P-methyl solubility in water (7.9 mg/L).
Other adverse effects:	No information available.
Environmental Exposure Limits (EEL):	Haloxypop-R-methyl EEL _{water} 0.84 µg/L

13. DISPOSAL CONSIDERATIONS

- Product Disposal: Dispose of product only by using according to label or dispose of at an approved landfill.
- Container Disposal: Ensure container is completely empty. Triple rinse with water add rinsate to the spray tank. Dispose of empty clean container to recycler for agricultural chemicals, otherwise crush and bury in an approved landfill. Do not use container for any other purpose.

14. TRANSPORT INFORMATION

- UN Number: 3082
- Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (HALOXYFOP-P 52%)
- DG Class: 9
- Packing Group: III
- Marine Pollutant: Yes
- HAZCHEM 3Z

Do not transport STEED on a passenger services vehicle.

15. REGULATORY INFORMATION

- New Zealand Registered pursuant to the ACVM Act 1997, No. P8807
See www.foodsafety.govt.nz for registration conditions
Approved pursuant to the HSNO Act 1996, Approval Code HSR100054; CREST 520
See www.epa.govt.nz for Controls and www.worksafe.govt.nz.
- | | |
|---|----------------------------------|
| Qualifications | Qualified Handler |
| Tracking: | Not required |
| Safety Data Sheet: | Any quantity |
| Restricted to workplace only: | No |
| Quantity that must be secured when unattended: | Not applicable |
| Fire extinguishers | >500 L; 2 extinguishers required |
| Quantity for secondary containment and emergency response plan: | >100 L |
| Quantity for signage: | >100 L |
| Quantity for Location certificate | Not required |
| Records of use (3 kg or more applied to area within 24 hours) | Yes |
| Quantity that requires management in accordance with HSW HS Regulations | 1000L |

Additional controls (refer to HSR100054 approval document for complete wording of requirements)

- Aquatic herbicides – annual reporting requirements.
- Aquatic herbicides – incident reporting requirements
- Aquatic herbicides – irrigation water requirements
- Aquatic herbicides – notification requirements
- Aquatic herbicides – requirements for protection of aquatic farms
- Aquatic herbicides – requirements relating to migration of whitebait and elvers
- Aquatic herbicides – requirements relating to static water bodies
- Aquatic herbicides – restrictions on nonylphenol ethoxylates
- Aquatic herbicides – signage requirements
- Permissions – requirements relating to permissions from the Authority under section 95A of the HSNO Act 1996
- Tolerable Exposure Limits
- Environmental Exposure Limits

16. OTHER INFORMATION

Version: 1.1

Issue Date: 15 June 2023

Reason for Issue: Supplier's contact details updated.

Replaces: Replaces version 1.0 dated August 2022.

References:

Supplier Safety Data Sheets

NZ EPA Approved hazardous substances databases.

Worksafe NZ Workplace Exposure Standards and Biological Exposure Indices

NZS 5433:2020 New Zealand Standard Transport of Dangerous Goods on Land

University of Hertfordshire Pesticides Properties Database (PPDB)

Abbreviations:

ACVM	Agricultural Chemicals and Veterinary Medicines Group
ADI	Acceptable Daily Intakes
BCF	Bioconcentration factor
CAS Number	Chemical Abstracts Service Registry Number
CCID	Chemical Classification Identification Database
EPA	Environmental Protection Authority
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
HSNO	Hazardous Substances and New Organisms
HS	Health and Safety
HSR	Hazardous Substances Register
IARC	International Agency for Research on Cancer
LC ₅₀	Median Lethal Concentration
LD ₅₀	Median Lethal Dose (50% population)
SDS	Safety Data Sheet
NOAEL	No Observable Adverse Effect Level
NOEL	No Observable Effect Level
NOS	Not otherwise specified
STEL	Short Term Exposure Limit
TWA	Time-Weighted Average
UN Number	United Nations Number
WES-STEL	Workplace exposure standards – Short-term exposure limit
WES-TWA	Workplace exposure standards – Time-weighted average

The data given here is based on current knowledge and experience. The purpose of this safety data sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

End of Safety Data Sheet.