

Infosafe No™ 3NUK1	Issue Date : October 2024	ISSUED by NUFARMNZ
Product Name CREST@520		

Section 1 - Identification

Product Identifier	CREST@520
Product Code	00185
Product Type	Herbicide
Company Name	Nufarm NZ
Address	Central Park, Building 3, Level 4, 666 Great South Road Ellerslie Auckland 1051 New Zealand
Telephone/Fax Number	Tel: 0-9-270 4150
Emergency Phone Number	0800 651 911
Email	nzinfo@nufarm.com
Recommended uses and any restrictions on use or supply	A selective post emergence herbicide for the control of grass weeds and storksbill in many broadleaf crops, orchards and forestry.
Other Information	This SDS describes, to the best of our knowledge, the properties of the concentrated product. The physical properties and some of the assessments do not apply to the properties of the product once it has been diluted for application. Acute health effects of the diluted product are likely to be much less severe.

Section 2 - Hazard(s) Identification

GHS classification of the substance/mixture	Flammable liquids: 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 the terrestrial environment: Hazardous to terrestrial vertebrates Hazardous to the aquatic environment acute Category 1 Hazardous to the aquatic environment chronic Category 1
Signal Word (s)	DANGER
Hazard Statement (s)	H227 Combustible liquid. H302 Harmful if swallowed. H312 Harmful in contact with skin. H332 Harmful if inhaled. H304 May be fatal if swallowed and enters airways. H319 Causes serious eye irritation. H373 May cause damage to liver from repeated oral exposure. H410 Very toxic to aquatic life with long lasting effects. H432 Toxic to terrestrial vertebrates.
Precautionary Statement – General	P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P103 Read carefully and follow all instructions.
Pictogram (s)	Exclamation mark, Health hazard, Environment



Precautionary Statement – Prevention	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P260 Do not breathe dust/fume/gas/mist/vapours/spray. P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P264 Wash hands and face thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P273 Avoid release to the environment.
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Precautionary Statement – Response

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
 P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
 P302+P352 IF ON SKIN: Wash with plenty of water.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P312 Call a POISON CENTER/doctor if you feel unwell.
 P314 Get medical advice/attention if you feel unwell.
 P330 Rinse mouth.
 P331 Do NOT induce vomiting.
 P337+P313 If eye irritation persists: Get medical advice/attention.
 P363 Wash contaminated clothing before reuse.
 P370+P378 In case of fire: Use to extinguish.
 P391 Collect spillage.

Precautionary Statement – Storage

P403+P235 Store in a well-ventilated place. Keep cool.
 P405 Store locked up.

Precautionary Statement – Disposal

P501 Dispose of contents/container to an approved landfill.

Section 3 - Composition and Information on Ingredients

Chemical Characterization Liquid

Ingredients

<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
Haloxypop-P as the methyl ester	72619-32-0	520 g/L
Aromatic Hydrocarbon	64742-94-5	30-60 %

Section 4 - First Aid Measures

First-aid Measures

For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately. Begin artificial respiration if the victim is not breathing. Use mouth-to-nose rather than mouth-to-mouth. Obtain medical attention.

Inhalation

Remove patient to fresh air. Lay down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance immediately.

Ingestion

Never give anything by mouth to an unconscious person. If swallowed do NOT induce vomiting. For advice, contact the National Poisons Centre (0800 764 766). Seek medical assistance immediately.

Skin

Immediately flush body and clothes with large amounts of water. Remove contaminated clothing and footwear. Wash affected areas with soap and water. If a large area is affected seek medical assistance.

Eye

Flush eyes with plenty of water for 15 minutes holding eyelids open if necessary. Remove contact lenses, if present and easy to do. Seek Medical assistance even if there are no immediate symptoms.

First-aid Facilities

Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.

Advice to Doctor

Treat symptomatically.

Section 5 - Firefighting Measures

Suitable Extinguishing Media

Water fog, foam, carbon dioxide or dry chemical.

Unsuitable Extinguishing Media

Do not use water in a jet.

Hazards from Combustion Products

On burning will emit toxic fumes. During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

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Special protective equipment for fire-fighters	Full protective clothing and self-contained breathing apparatus.
Specific Methods	Keep up wind. Do not allow washings to reach sewage or effluent systems. Keep containers cool with water spray.
Hazchem Code	3Z
Decomposition Temperature	Information is not available.
Other Information	Location Certificate: Not applicable Hazardous Atmosphere Zone: Not applicable Number of Fire Extinguishers: 2 for 500L or more

Section 6 - Accidental Release Measures

Spills and Disposal	Wear protective clothing. Clear area of unprotected personnel. Eliminate all ignition sources and naked lights. Use non-sparking utensils. Contain spill and absorb with sand, soil or absorbent granules. If spill does enter waterways contact the local authority. Collect in an appropriate sealable container for disposal in an approved landfill. Prevent material from entering waterways. Absorb spills with inert material and place in waste containers. Dispose of waste safely in an approved landfill. Prevent material from coming into contact with Class 1,2,3,2,4 or 5 substances. Wash area with water and detergent and absorb with inert material. Dispose of waste safely in an approved landfill.
Personal Protection	For appropriate personal protective equipment (PPE), refer Section 8.
Environmental Precautions	This product is a herbicide and spills can damage crops, pastures and desirable vegetation. Prevent contamination of soil and water.

Section 7 - Handling and Storage

Precautions for Safe Handling	The person mixing or applying CREST 520 must be a 'Qualified Contractor' or a 'Qualified Person'. The spray mixture may also be prepared by a 'Qualified Loader'. It is the duty of the PCBU that a person who uses, handles, manufactures or stores a hazardous substance (including hazardous waste) is provided information, instruction and training in accordance with Regulation 4.5 of the Health and Safety at work (Hazardous Substances) Regulations 2017. Avoid skin and eye contact and inhalation of spray mist. This product must not be applied onto or into water. CERTIFIED HANDLER: Is not required. TRACKING: Is not required. RECORD KEEPING: Records of use as described in NZS 8409 Management of Agrichemicals must be kept if 3kg or more of CREST 520 is applied within 24 hours.
Conditions for safe storage, including any incompatibilities	Keep out of reach of children. Store in original container tightly closed and in a locked dry, cool area away from sources of ignition, seeds, fertilisers and foodstuffs. Storage must be in accordance with NZS 8409 Management of Agrichemicals. Do not store with HSNO Class 1,2,3,2,4 or 5 substances. Stores containing 100L of CREST 520 require secondary containment and are subject to signage, and more than 100L require emergency response plans. Do not store near heat or flame. Stores exceeding 500 litres of this substance must have at least 2 fire extinguishers.
Other Information	Always read the label and any attached leaflet before use. Aggregate Storage Volume Thresholds: When stored with substances of the same hazard classification the aggregate quantity must be considered. For full details refer to the current NZS8409 Management of Agrichemicals and the HSNO Regulations.

Section 8 - Exposure Controls and Personal Protection

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Occupational Exposure Limits (OEL)	No exposure limits (WES, TEL or EEL's) have been specifically assigned for this product. ADE = 0.0003mg/kg bw/day for haloxyfop-P-methyl PDE (food) = 0.00024mg/kg bw/day for haloxyfop-P-methyl PDE (drinking water) = 0.00006mg/kg bw/day for haloxyfop-P-methyl
Appropriate Engineering Controls	Handle in well ventilated areas, generally natural ventilation is adequate.
Personal Protective Equipment	When opening the container, preparing spray and using the prepared spray wear safety goggles, chemically resistant gloves, cotton overalls buttoned to the neck and wrist, and boots.
Hygiene Measures	Do not eat, drink or smoke while using. Remove protective clothing and wash hands and face thoroughly before meals and after work. Wash protective clothing daily after work. Wash splashes of concentrate from skin immediately.

Section 9 - Physical and Chemical Properties

Form	Liquid
Appearance	Amber liquid.
Odour	Information is not available.
Decomposition Temperature	Information is not available.
Melting Point	-12.4°C for active ingredient haloxyfop-P-methyl.
Freezing Point	186°C for active ingredient haloxyfop-P-methyl.
Boiling Point	>280°C for active ingredient haloxyfop-P-methyl.
Solubility in Water	Forms an emulsion in water.
Specific Gravity	1.086 - 1.108g/mL (20°C)
pH	4.0 - 8.0
Vapour Pressure	0.055mPa (25°C) 186°C for active ingredient haloxyfop-P-methyl.
Vapour Density (Air=1)	Information is not available.
Odour Threshold	Information is not available.
Partition Coefficient: n-octanol/water	Kow logP = 4.00 (20°C) for active ingredient haloxyfop-P-methyl.
Flash Point	69.5°C
Flammability	Flammable liquid.
Auto-ignition Temperature	Information is not available.
Flammable Limits - Lower	Information is not available.
Flammable Limits - Upper	Information is not available.
Kinematic Viscosity	Information is not available.
Particle Characteristics	Information is not available.
Other Information	(EC) Emulsifiable concentrate

Section 10 - Stability and Reactivity

Chemical Stability	Stable under normal conditions of handling and storage.
Conditions to Avoid	Avoid extremes of temperature.

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Incompatible Materials Strong acids, alkalis or oxidising materials.

Hazardous Polymerization Hazardous polymerisation will not occur.

Section 11 - Toxicological Information

Acute Toxicity - Oral LD50 (male rat) is 300mg/kg for active ingredient haloxyfop-P-methyl.

Acute Toxicity - Inhalation Information is not available.

Acute Toxicity - Dermal Percutaneous LD50 (rat) >2000mg/kg for active ingredient haloxyfop-P-methyl.

Skin Non-irritating to skin for active ingredient haloxyfop-P-methyl.

Corrosion/Irritation

Serious Eye This product causes serious eye irritation.

Damage/Irritation

Skin Sensitisation Information is not available.

Germ Cell Information is not available.

Mutagenicity

Carcinogenicity Information is not available.

Reproductive

Toxicity Information is not available.

STOT - Single Information is not available.

Exposure

STOT - Repeated May cause target organ damage from repeated oral exposure at high doses.

Exposure

Aspiration Hazard May be fatal if swallowed and enters airways.

Subchronic/Chronic Target organ: Hepatotoxicity (liver) for haloxyfop-R, methyl ester
Toxicity NOEL is 0.065mg/kg bw/day for haloxyfop-P-methyl ester

Section 12 - Ecological Information

Persistence and Degradability In soil, there is a minor amount of conversion to a haloxyfop phenol metabolite and subsequent conversion to haloxyfop pyridinol and other minor degradates for active ingredient haloxyfop-P-methyl.

Mobility Information is not available.

Bioaccumulative Potential Active ingredient haloxyfop-P-methyl. ester is not bioaccumulative.

Environmental Protection Avoid contamination of any water supply with product or empty container.

Acute Toxicity - Fish LC50 (96h) rainbow trout 0.46 mg/L for active ingredient haloxyfop-P-methyl.

Acute Toxicity - Daphnia EC50 (48h) >12.3 mg/L for active ingredient haloxyfop-P-methyl.

Acute Toxicity - Algae EC50 (5d) 1.72mg/L for active ingredient haloxyfop-P-methyl.

Acute Toxicity - Other Organisms Birds: LD50 bobwhite quail 1159mg/kg for active ingredient haloxyfop-P-methyl.
Bees: LD50 (48h, oral and contact) >100µg/bee for active ingredient haloxyfop-P-methyl.

Worms: LC50 (14d) 1343mg/kg for active ingredient haloxyfop-P-methyl.

Section 13 - Disposal Considerations

Product Disposal Dispose of product only by using according to the label, or at an approved landfill.
Do not burn.

Container Disposal Triple rinse empty container and add rinsate to spray tank. Recycle empty container. Otherwise crush and bury in a suitable landfill.

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Section 14 - Transport Information

Transport Information	It is good practice not to transport agricultural chemical products with food, food related materials and animal feedstuffs.
UN Number	3082
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. - (haloxyfop-P)
Hazard Class	9
Hazchem Code	3Z
Packaging Method	-
Packing Group	III
EPG Number	-
IERG Number	47
IMO Marine Pollutant	Yes. Environmentally Hazardous Substance mark required.
IMDG EMS	F-A, S-F
Other Information	Do not carry this product on a passenger service vehicle.

Segregation: Check the latest Land Transport Rule Dangerous Goods Rule 45001 for additional information. Sea transport may require additional segregation. Refer NZS5433 sea segregation for details.

Section 15 - Regulatory Information

National and or International Regulatory Information	Registered pursuant to the ACVM Act 1997, No. P8058 See www.foodsafety.govt.nz for registration conditions Approved pursuant to the HSNO Act 1996, Approval Code HSR100054 See www.epa.govt.nz for approval controls.
Packaging and Labelling	READ SAFETY DIRECTIONS BEFORE OPENING OR USING KEEP OUT OF REACH OF CHILDREN

Section 16 - Any Other Relevant Information

Date of preparation or last revision of SDS	December 2023.
Contact Person/Point	IN AN EMERGENCY, DIAL 111 - FIRE OR POLICE 24Hr Tollfree Emergency No: 0800 651 911 24Hr Emergency No: National Poisons Centre Phone: 0800 764 766
Revisions Highlighted	Various changes and updates made to the document to comply with GHS7. ...End Of MSDS...

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