

Infosafe No™ 3NUK1	Issue Date : May 2015	ISSUED by NUFARMNZ
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 Product Name **CREST®520**

1. Identification

GHS Product Identifier	CREST®520
Product Code	00185
Product Type	Herbicide
Company Name	Nufarm NZ
Address	6 Manu Street, Otahuhu Auckland 2024 New Zealand
Telephone/Fax Number	Tel: 0-9-270 4150 Fax: 0-9-270 4159
Emergency phone number	0800 651 911
Recommended use of the chemical and restrictions on use	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.

2. Hazard Identification

Other Information	3.1D Flammable liquid, 6.1D acute toxicant, 6.3B skin irritant, 6.4A eye irritant, 6.9B target organ toxicant, 9.1A aquatic toxicant, 9.3B terrestrial vertebrate toxicant. FLAMMABLE Warning- combustible liquid. TOXICITY Harmful-may be harmful if swallowed, inhaled or absorbed through the skin. May cause skin or eye irritation. May cause target organ damage from repeated oral exposure at high doses. ECOTOXIC Very toxic to aquatic organisms with long-lasting effects. Selective herbicide-very toxic to some plant species. Toxic to terrestrial vertebrates.
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3. Composition/information on ingredients

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

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 contact	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.

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

Advice to Doctor Treat symptomatically.

5. Fire-fighting 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.

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

Other Information Location Certificate: Not applicable
Hazardous Atmosphere Zone: Not applicable
Number of Fire Extinguishers: 2 for 500L or more

6. Accidental release measures

Spills & 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.

7. Handling and storage

Precautions for Safe Handling Avoid skin and eye contact and inhalation of spray mist.
APPROVED HANDLER: This product must be under the control of an approved handler during use.
TRACKING: Is not required
RECORD KEEPING: Records of use as described in NZS 8409 Management of Agrichemicals must be kept if 3 litres or more of CREST 520 is applied within 24 hours.
BEWARE: Spray drift hazard. Apply this product carefully. Spray drift may cause serious damage to other desirable plants.
Do not apply CREST 520 onto or into water.

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.

Tank Cleaning See label for detailed information on cleaning/decontaminating of spray equipment.

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

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quantity must be considered. For full details refer to the current NZS8409 Management of Agrichemicals and the HSNO Regulations.

8. Exposure controls/personal protection

Occupational exposure limit values	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.

9. Physical and chemical properties

Form	Liquid
Appearance	Amber liquid
Solubility in Water	Forms an emulsion in water.
Specific Gravity	1.086 - 1.108g/mL @ 20°C
pH	4.0 - 8.0
Vapour Pressure	0.055 mPa (25°C) for haloxyfop-P-methyl
Partition Coefficient: n-octanol/water	Kow logP = 4.00 for haloxyfop-P-methyl
Flash Point	69.5°C
Other Information	(EC) Emulsifiable concentrate

10. Stability and reactivity

Chemical Stability	Stable under normal conditions of handling and storage.
Conditions to Avoid	Avoid extremes of temperature.
Incompatible Materials	Strong acids, alkalis or oxidising materials.
Hazardous Polymerization	Hazardous polymerisation will not occur.

11. Toxicological Information

Toxicology Information	No specific toxicological data is available for this product. Data below is for constituents.
Acute Toxicity - Oral	LD50 (male rat) is 300mg/kg for haloxyfop-P- methyl.
Acute Toxicity - Dermal	Acute percutaneous LD50 (rat) >2,000mg/kg for haloxyfop-P-methyl
Eye	May cause slight conjunctival eye irritation with slight discharge (haloxyfop-R, methyl ester)
Subchronic/Chronic Toxicity	Target organ: Hepatotoxicity (liver) for haloxyfop-R, methyl ester NOEL is 0.065mg/kg bw/day for haloxyfop-P-methyl ester

12. Ecological information

Persistence and degradability	DT50 in water is 48 days at pH7 for haloxyfop-R, methyl ester
Bioaccumulative Potential	Haloxyfop-R, methyl ester is not bioaccumulative.
Environmental Protection	Avoid contamination of any water supply with product or empty container.

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Basis for Assessment	Ecotoxicological data have not been determined specifically for this product. Data below is for the active ingredient unless otherwise stated.
Acute Toxicity - Fish	LC50 (96h) rainbow trout is 0.46 mg/L for haloxyfop-P-methyl.
Acute Toxicity - Daphnia	EC50 (48h) daphnia is >12.3 mg/L for haloxyfop-P-methyl.
Acute Toxicity - Algae	EC50 (5d) algae is 1.72mg/L for haloxyfop-P-methyl.
Acute Toxicity - Other Organisms	LD50 bobwhite quail is 1,159mg/kg for haloxyfop-P-methyl LD50 (48h) bees (oral and contact) is >100µg/bee for haloxyfop-P-methyl LC50 (14d) worms is 1,343mg/kg for haloxyfop-P-methyl

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.

14. Transport information

Transport Information	It is good practice not to transport agricultural chemical products with food, food related materials and animal feedstuffs.
U.N. Number	3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. - (haloxyfop-P, 52%)
Transport hazard class(es)	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.

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 & Labelling	WARNING - combustible liquid HARMFUL * ECOTOXIC - keep out of reach of children
Hazard Rating Systems	NFPA/HMIS: 1-2-1

16. Other Information

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 5 yearly review carried out. Various changes and updates made to document.
Revisions Highlighted	
Other Information	Supersedes SDS issued April 2010. ...End Of MSDS...



Safety Data Sheet

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