



DANGER

Keep out of reach of children
READ LABEL BEFORE USE

HERALD™

HERBICIDE

A selective post emergence herbicide for the control of grass weeds and storksbill in many broadleaf crops, orchards and forestry.

ACTIVE INGREDIENT: Contains 520g/L Haloxyfop-p as the methyl ester in the form of an emulsifiable concentrate

GS/HEZ50/F01



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HERALD™
NET CONTENTS: 5 Litres

Grosafe®

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



TOXICITY: Danger – May be fatal if swallowed and enters airways. Harmful if swallowed. Causes serious eye irritation. May cause target organ damage from repeated oral exposure. **ECOTOXICITY:** Very toxic to aquatic organisms and with long lasting effects. Very toxic to some plant species. Certain plants may be killed or damaged from contact with this product. Do not allow spray drift outside the target area. Toxic to terrestrial vertebrates. **QUALIFIED HANDLER:** This product must be under the control of a qualified handler during use.

RECORD KEEPING: Records of use as described in NZS 8409 Management of Agrichemicals must be kept if using 3 kg or more of HERALD within 24 hours.

FLAMMABILITY: Combustible liquid. Keep away from sources of heat and ignition.

APPLICATION INTO OR ONTO WATER: A person must not apply or otherwise use HERALD onto or into water, unless that person first obtains permission from the Environmental Protection Authority (EPA) under Section 95A of the Hazardous Substances and New Organisms (HSNO) Act.

Additional controls including a maximum and single application rates and area restrictions if applied into or onto water; avoidance of treatment during whitebait season; requirements to notify potentially affected parties prior to treatment; site signage requirements; avoidance of harm to aquatic farms or to crops using treated water; TELdrinking water and EELwater have been set; annual written reporting requirements including reports of unintended by-kills also apply. Refer to the EPA approval for full details.

PERSONAL PROTECTION: Avoid contact with skin, eyes or inhalation of spray. Do not eat, drink or smoke while using. Wear protective clothing such as impervious gloves, waterproof hat, coat and trousers when using. Remove protective clothing and wash hands and face thoroughly before meals and after work. Wash protective clothing and equipment daily after use.

EQUIPMENT: Apply with accurately calibrated and well-maintained equipment. Thoroughly decontaminate equipment before using if broadleaf herbicides, such as sulfonyleureas have been used. Follow the decontamination instructions on the relevant herbicide label. After spraying decontaminate equipment as per the cleaning instructions, before spraying crops that are sensitive to **HERALD**. These include but are not limited to, cereals, maize and grasses.

STORAGE: Store in original container tightly closed and in a locked dry, cool, well-ventilated area, away from foodstuffs, seeds and fertilisers. Store in accordance with NZS 8409 Management of Agrichemicals. Do not store with Class 1, 2, 3, 2, 4 or 5 substances. Stores containing 100 litres require secondary containment and signage and more than 100 litres require an emergency response plan. Stores containing more than 500 litres require two fire extinguishers.

Shelf Life: When stored appropriately, this product should show no significant degradation for two years from the date of manufacture. Contact your supplier for further information about the use of any product that is older than this.

SPILLS: When dealing with spills, wear personal protective clothing and equipment as described in the PERSONAL PROTECTION section. Extinguish all ignition sources, exclude all bystanders from the vicinity of the spill, and prevent material from entering waterways or coming into contact with Class 1, 2, 3, 2, 4 or 5 substances. Contain the spill by damming, recover spill product by absorbing with sawdust or an inert absorbent material then transfer the recovered spill material to a properly labelled drum. Deal with all spillages immediately. If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority.

PRODUCT DISPOSAL: If possible, dispose of by using according to the label, otherwise dispose of in an approved landfill. Avoid contamination of any water supply with product or empty container.

CONTAINER DISPOSAL: Triple rinse empty container and add rinseate to the spray tank. Recycle container via Agrecovery (www.agrecovery.co.nz) or at an approved landfill. **SAFETY DATA SHEET:** A safety data sheet is available from Grosafe Chemicals Ltd.

FIRST AID: IF SWALLOWED, DO NOT induce vomiting. Rinse mouth. Immediately contact the National Poisons Centre 0800 POISON (0800 764766) or a doctor for advice. IF ON SKIN OR HAIR, remove contaminated clothing and flush skin and hair with running water. IF IN EYES, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Irritation occurs, get medical advice/attention. IF INHALED, immediately move to fresh air and rest. Maintain half upright position if breathing is difficult.

EMERGENCY RESPONSE 0800 CHEMICAL: (0800 243 622).

GENERAL INFORMATION

HERALD is a selective post emergence herbicide for the control of grass weeds and storksbill in many broadleaf crops, orchards and forestry.

Mixing and Compatibility: Partially fill the spray tank, add the required amount of **HERALD**, agitate, then add spraying oil if recommended. Agitate thoroughly and add the remainder of the water. **HERALD** is compatible with triazine herbicides. Do not apply the product in combination with other herbicides unless experience shows efficacy is not affected. Do not apply within 7 days of phenoxy herbicides **Cleaning the Spray Equipment:** After using **HERALD**, empty the spray unit completely and drain the whole system. Thoroughly wash inside the spray unit using a pressure hose. Drain the spray unit, and clean any filters in the tank, pump lines, hoses and nozzles. After cleaning the spray unit as above, quarter fill with clean water and circulate through the pump, lines, hoses and nozzles. Drain and repeat the rinsing procedure twice.

Decontamination: Wash the tank and rinse the system as above, then quarter fill the tank and add an alkali detergent (e.g. household laundry detergent at 500ml or g/100L water) and circulate throughout the system for at least 15 minutes. Do not use chlorine based cleaners. Drain the whole system. Remove filters and nozzles and clean them separately. Finally flush the system with clean water and allow to drain.

RESISTANCE MANAGEMENT

GROUP 1

HERBICIDE

HERALD contains an aryloxyphenoxy propionate. Some naturally occurring weed biotypes resistant to this product could eventually dominate the weed population if this herbicide is used repeatedly. To maximise the effectiveness of herbicides, products containing alternative modes of action should be used in the spray programme.

SOIL RESIDUES: Do not plant cereals, maize or grass crops within 12 weeks of treatment.

WITHHOLDING PERIODS

It is an offence for users of this product to cause residues exceeding the relevant MRL in the Food Notice: Maximum Residue Levels for Agricultural Compounds.

PEAS, LENTILS: Do not apply later than flowering.

ASPARAGUS: Do not apply during the cutting season.

ONIONS: Do not apply within 5 weeks of harvest.

Registered pursuant to ACVM Act 1997, No. P10163
 See www.foodsafety.govt.nz for registration conditions
 Approved under the HSNO Act 1996, HSNO 100054
 See www.epa.govt.nz for controls

WARRANTY: This formulation is warranted to contain the specified active ingredient within accepted analytical tolerance when packed. The user bears the risk for damage resulting from factors beyond the manufacturer's control. The manufacturer declines all liability for damage resulting from improper storage or use of the product.

Registered to and distributed by:

Grosafe Chemicals Ltd
 20 Jean Batten Drive
 Mt Maungapu 3116
 POBox 14,450 Tauranga 3141
 Tel: 0800 220 002
 Email: info@grosafe.co.nz
www.grosafe.co.nz

Batch No:

Date of Manufacture:



RAINFASTNESS: HERALD is rainfast one hour after application.

APPLICATION:

HERALD may be applied using conventional ground or aerial application equipment.

Boom Spraying: Use 200-400L/ha water. Use nozzles and pressures that produce a medium quality spray. For dense grass infestations increase water rate.

Aerial Application: Use 100-300L/ha water applied as a coarse quality spray.

Spot Gun: Use an extension lance fitted with a solid cone nozzle.

High Volume (including handgun): Apply as a wetting spray to full coverage using either a hand lance fitted with a solid cone or a handgun fitted with a No.4 tip at 500-2000 kPa to deliver 1000-1500L/ha.

Knapsack: Apply as a wetting spray to full coverage using at least 500L/ha water volume.

DIRECTIONS FOR USE:

For best results apply to young actively growing grass weeds. Reduced levels of control may result if applied to plants suffering from cold or moisture stress. Use higher rates for grass weeds at advanced stages of growth. To minimise any possible crop damage avoid spray overlaps. **HERALD** does not control sedges or broadleaf weeds other than storksbill.

USE RATES FOR WEED CONTROL: **HERALD** must not be applied into or onto water unless the required permission is obtained to comply with the HSNO controls.

WEED	Broadcast ml/ha	Knapsack ml/10L	Spotgun ml/L	Handgun ml/100L	COMMENTS
Wild oats	95	2.5	1.2		
Storksbill Musky storksbill	100				
Annual grass weeds Including annual ryegrass, summer grass, banyard grass, bristle grass and volunteer cereals	115	2.5	1.2		Use spraying oil for grass weeds at an advanced growth stage or grass weeds growing under stress or slow growth conditions.
Annual Poa	290	6	3.0	60	
Cocksfoot, prairie grass, Yorkshire fog, sweet vernal, soft brome (goosegrass)	240-480	5	2.5	50	Use the high rate for grass weeds at an advanced growth stage or grass weeds growing under stress or slow growth conditions.
Perennial ryegrass	240-480	5	2.5	50	Use the low rate with addition of spraying oil. Use the high rate without spraying oil. For perennial ryegrass at an advanced growth stage or growing under stress or slow growth conditions, use the high rate plus spraying oil.
Cultivated couch	240-480				Use low rate on young or actively regenerating couch after extensive cultivation to break roots into small pieces. Use the high rate on tillering couch. The low rate may be used for suppression and the high rate for longer term control.
Sod bound couch, mercer grass, browntop, ratstail, Indian doab, kikuyu, paspalum	720-960	12	8	75	Use the high rate for grass weeds at an advanced growth stage or grass weeds under stress or slow growth conditions. Use the high rate on sod bound couch.
Pampas grass	1450	30	12	95	For best results treat plants less than 1m high.
African feather grass	1450	30	12	95	Repeat applications may be required.
N.B. Hair grass and chewings fescue are not controlled at rates listed above.					

CROPS AND SITUATIONS

Forestry tree release: **HERALD** may be applied over forestry species including Radiata pine and Eucalyptus species. To control broadleaf weeds in Radiata pine, simazine may be added.

Tree nurseries: **HERALD** may be applied over seedling Radiata pine, Eucalyptus, Acacia, Casuarina and other seedling plantation and ornamental tree species.

Where there is no previous experience, apply the product over a few plants before treating larger areas. Do not add spraying oil.

Pipfruit, Citrus: **HERALD** in mixture with spraying oil should be applied as a directed spray around the base of trees. Avoid direct contact with the fruit.

Peas, lentils: Apply **HERALD** at no more than 290ml/ha. Do not add spraying oil.

Asparagus: Apply **HERALD**, in mixture with spraying oil, after the final cut.

Onions: Apply **HERALD**, at no more than 290ml/ha, in mixture with spraying oil.

DO NOT USE ON PASTURE, LUCERNE OR CLOVER

HERALD must not be applied into or onto water without prior permission under Section 95A of the HSNO Act 1996.