



WARNING
Keep out of reach of children
ECOTOXIC

DIABLO™

HERBICIDE

A broad spectrum herbicide for thistles and certain broadleaf weeds for use on a range of CROPS and PASTURE, TURF and in FOREST areas.

ACTIVE INGREDIENT: Contains 300g/L clopyralid as the triisopropanolamine salt in the form of a soluble concentrate

GSDA743/F01



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DIABLO
NET CONTENTS: 5 Litres

Grosafe®

PEEL HERE

DIABLO



HAZARD CLASSIFICATIONS:

Hazardous to soil organisms, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment chronic Category 2.

ECOTOXIC: Herbicide. Not for use in home gardens.

Do not use for treating turf that will be mown and the clippings used for making compost, or made available for collection for, or deposited at, a municipal green waste recycling depot. Toxic in the aquatic environment with long-lasting effects. Do not contaminate an aquatic environment with chemical or empty container. Do not spray over or allow drift over an aquatic environment. Selective herbicide – very toxic to some plant species. Some plants may be damaged or killed by contact with this product. Do not allow drift outside target area to occur. Decontaminate equipment before use on sensitive plants (see Application Methods section). Harmful to terrestrial vertebrates.

QUALIFIED HANDLER: This product must be used under the personal control of suitably qualified handler during mixing, loading and application.

RECORD KEEPING: Records of use, as described in the relevant HSNO regulations and the New Zealand Standard for the Management of Agrichemicals (NZS8409), must be kept if using more than 3L of DIABLO within 24 hours in a place where the product is likely to enter air or water and leave the application area.

PERSONAL PROTECTION: When mixing or applying, wear waterproof gloves, chemical resistant boots and cotton overalls buttoned to the neck and wrist. Wash hands and exposed skin after handling. Wash personal protection clothing and equipment before re-use.

STORAGE: Store in original container tightly closed away and in a locked, dry, cool well-ventilated area, well away from foodstuffs. Storage must be in accordance with the current version of New Zealand Standard for the Management of Agrichemicals (NZS8409). Stores containing 1000L or more require secondary containment, signage and an emergency response plan.

EQUIPMENT: Apply using accurately calibrated and well maintained equipment in accordance with the New Zealand Standard for the Management of Agrichemicals (NZS8409). Flush equipment thoroughly with clean water after use according to Clean Spray Equipment instructions below. Dispose of cleaning water according to the disposal instructions below.

SPILLS: Wear appropriate protective clothing to clean up spills. Absorb spills with an inert material (such as vermiculite, earth, sand or synthetic absorbent substance) and place in waste labelled containers. Wash area with water and alkaline detergent then absorb any remaining liquid with further inert material. Dispose of the waste safely in an approved landfill. **PRODUCT DISPOSAL:** Dispose of this product by using according to the label or at an approved facility. Do not contaminate any water supply with this product or use container.

CONTAINER DISPOSAL: Triple rinse empty containers with water and add rinsate to spray tank. Recycle container via Agrecovery (www.agrecovery.co.nz) or at an approved landfill. Do not use the container for any other purpose.

SAFETY DATA SHEET: A safety data sheet is available from Grosafe Chemicals Ltd.

FIRST AID: For advice contact the National Poisons Centre (0800 764 765) or call a doctor. If swallowed, do not induce vomiting. Rinse mouth. If splashed in the eyes, rinse cautiously with water for several minutes. Remove contact lenses if present an easy to do. Continue rinsing. If irritation persists, get medical advice. If skin or hair contact, remove contaminated clothing and wash skin and hair with running water. Get medical advice if skin irritation persists.

EMERGENCY RESPONSE 0800 CHEMCALL (0800 243 622)

APPLICATION METHODS

Poisonous plants may become more palatable after spraying. If concerned that stock health may be affected, stock should be kept away from the treated area until plants have died down.

APPLICATION METHODS

DIABLO® can be applied using conventional ground and aircraft spraying equipment.

Flush equipment thoroughly with clean water after use. **Decontaminate before using on plants that are sensitive to DIABLO.** Crops susceptible to **DIABLO®** include, but are not limited to: clovers, fruit trees, legumes, ornamentals, potatoes, tomatoes, vegetables and vines.

Aerial spraying: Use 200–400L/ha water applied as a coarse quality spray as defined by the British Crop Protection Council (BCPC) and American Society of Agricultural Engineers [S572] (ASAE). Apply with a calibrated aircraft using the half overlap opposite pass flying techniques.

Boom spraying: Use 300L/ha water applied as a medium quality spray as defined by BCPC or ASAE.

'Carpet' type Weed Wipers: Follow the rotary weed wiper manufacturer's operating instructions to apply the herbicide mix. Ensure the wiper remains saturated while in use. Two passes in opposite directions are recommended. Drain and wash the wiper with water immediately after use.

High Volume Gum Application: Ensure thorough coverage of all weeds using a No 6 tip or similar at 1000 - 2000 kPa.

Mistblower: Follow the manufacturer's instructions and ensure thorough coverage.

Knapsack Applications: When using a knapsack for broadcast application use at least 400L of spray mix/ha. For spot treatment ensure thorough coverage.

IMPORTANT: In order to select the appropriate nozzles for the required spray quality and to operate the equipment to minimise spray drift, this product must be applied in accordance with the New Zealand Standard for the Management of Agrichemicals (NZS 8409).

Cleaning spray equipment

Rinsing

After using **DIABLO:**

- Empty the spray tank completely and drain the whole system. Thoroughly wash inside the unit using a pressure hose. Drain 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 the water through the pump, lines, hoses and nozzles. Drain and repeat the rinsing procedure twice.
- Discard rinse water on land already sprayed or on wasteland away from desirable plants and water sources.

Decontamination

Before using equipment with other products or on plants sensitive to **DIABLO:**

- Wash the tank and rinse the system as above, then quarter fill the tank and add an alkali detergent (e.g. liquid SURF®, DRIVE®, at 500ml/100L water or the powder equivalent at 500g/100L of water) and circulate through 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.

Registered pursuant to ACVM Act 1997, No. P10166 See www.foodsafety.govt.nz for registration conditions

Approved under the HSNO Act 1996, HSR100933 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 and distributed by:

Grosafe Chemicals Ltd

Batch No:

20 Jean Batten Drive

Mt Maungamui 3116

Date of Manufacture:

POBox 14-450 Taunanga 3141

Tel: 0800 220 002

Email: info@grosafe.co.nz

www.grosafe.co.nz



MIXING

DIABLO mixes easily with water. Pour the measured quantity of **DIABLO** into the partly filled spray tank and add the remainder of the water. Mix well during filling.

Tank mixture - Wettable powder or dry flowable formulations should be added to the spray tank first, followed by suspension concentrates (flowables), aqueous concentrates and then emulsifiable formulations.

Compatibility – **DIABLO** is compatible with most commonly used herbicides and cereal fungicides/insecticides.

RAINFASTNESS

Do NOT spray **DIABLO** if rain is likely within 3 hours.

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

WITHHOLDING PERIODS

Asparagus: Do not apply within 3 days of cutting spears.

Cuttings from turf treated with **DIABLO** must not be composted or recycled.

Do not send any other treated vegetative plant material to a green waste recycling centre within 12 months after treatment.

DIRECTIONS FOR USE

DIABLO is a selective herbicide to a wide range of crops except legumes and compositae (daisy family). It is compatible with most commonly used herbicides. **DIABLO** is damaging to clovers. At 100ml/ha clovers in pasture may be severely suppressed for 2 – 6 months. Above 100ml/ha clovers may be removed from sward.

AMENITY and NON-CROP AREAS

Weeds	Rate			Comments
	Broadcast spray L/ha	Spot spray High volume ml/100L	Spot spray Knapsack ml/10L	
Clover	0.7	70	17	Apply to actively growing plants.
Californian thistle	1	100	25	Apply from rosette to early flower. Retreatment may be required
Bathurst bur, daisy, dandelion, hawkesbeard, hawkbit, medics, Onehunga weed, oxeye daisy, narrow-leaved plantain, thistles (annual and biennial)	1	100	25	Apply to actively growing plants.
Yarrow	1	100	25	Apply to actively growing foliage. Matted mature plants may need more than one application.
Catsear, fireweed	1.5	150	35	Apply to actively growing plants.
Ragwort, sow thistle, lotus	2	200	50	Apply to actively growing plants.
Cape daisy	1 - 2	200	50	Apply to actively growing rosettes. Use low rate on seedlings.
Hemlock, lupin	Not recommended	100 200	25 50	Apply to actively growing plants.
Old Man's beard	12 - 25	500	125	
Broom, gorse	Not recommended	500	125	Apply to actively growing plants October - January

CAUTION: Do not use on amenity areas that are being mown.

Situation	Rate/hectare	Weeds	Comments
Shelter and ornamental trees	1 - 2 litres	Refer to Amenity and Non-crop areas section of table.	Apply as a directed spray. Use rates as for amenity areas. Shelter trees such as conifers, willows, poplars, <i>Casuarina</i> , <i>Cryptomeria</i> and <i>Eucalyptus</i> are tolerant. Many other tree and shrub types are also tolerant. If tolerance is not known, treat only a few plants to gain experience. Do not apply to legumes or Compositae.
Forestry - radiata pine	10 litres	Gorse, broom & wattles	Apply in mixture with triclopyr for tree release from gorse, broom and wattles. For best results apply to gorse up to 1 metre high and wattles up to 2 metres high. Silver wattle (<i>Acacia dealbata</i>) and brush wattle (<i>Aibizia lophantha</i>) are controlled. Green wattle (<i>Acacia decurrens</i>) is not controlled. Temporary light tree damage in the form of distortion may occur particularly where trees are well above competing weeds. Handgun: 500ml/ 100 litres Apply to full coverage through No. 6 – 8 tip at 1000 -2500 kPa. Add an organo-silicone to improve weed control. Mistblower: 40ml/litre water or 200 mL (ULV) For ULV attachment use the No. 3 or 4 hole. Add an organo-silicone to improve weed control.

CROPS and Pastures			
Situation	Rate/hectare	Weeds	Comments
Asparagus - Established beds only	0.5 - 1.0 litres See comments	Californian thistle and other thistles, Clover and Yarrow. Thistles; apply to rosettes only. Re-treatment may be required. Yarrow; apply to actively growing plants only. Re-treatment may be required. For clover control; apply only to large vigorously growing plants	Pre-cutting: Apply 0.5 -1.0 litre/ha up to 3 days before cutting. During cutting: Apply 0.5 litres/ha up to 3 days before the next cut. Post-harvest: Apply 0.5 – 1.0 litres/ha over spears. Use a directed spray when spears are opening or ferns are present. Caution: If treatment is made over open spears or open fronds, some damage may occur.
Beets - Fodder beet and Sugar beet	0.5 - 1.0 litres	Californian thistle and yarrow.	Apply after crop has reached two true leaves and before bulbous root formation. DIABLO may be tank mixed with other beet herbicides.
Cereals	0.3 - 1.0 litres	Californian thistle, yarrow and volunteer potatoes.	Apply 0.3 - 1.0 litre/ha after the crop has reached the two leaf stage and before the formation of the second node. DIABLO may be tank mixed with Agcare® MCPA to improve the spectrum of control. Caution: Do not use treated straw for compost or mulch. For the control of volunteer potatoes, use 1 litre/ha after full emergence and before tuber formation.
Field Brassicas	0.5 - 1.0 litres	Californian thistle, other thistles and Yarrow.	Apply after the crop has reached the two true leaf stage and before it closes over.
Maize and sweetcorn	0.5 - 1.0 litres	Bathhurst bur, Californian thistle and yarrow. Volunteer potatoes.	Apply 0.5 to 1 litre/ha after the maize or sweetcorn has three expanded leaves and before crop closes over. For volunteer potatoes, use 1.0 litre/ha and apply after full potato emergence but before tuber formation.
Orchards - Pip fruit, stone fruit and citrus	Refer to amenity section	Refer to amenity section for weed spectrum	Apply in the pre-flower or early post-flower period. Direct spray to minimise drift with trees.
Pastures	100 -200ml with MCPA or 2,4-D 250 ml/10 litres in a carpet wiper	Difficult to control thistles - see comments. Californian thistle	DIABLO may be added to 2,4 D or Agcare® MCPA at the rate of 100-200ml/ha to enhance efficacy on difficult to kill thistles. A double pass will give best results.

CONSERVATION TILLAGE			
DIABLO controls a range of hard-to-control weeds such as clovers, California and other thistles, plantains and yarrow in conservation tillage programmes (minimum tillage or direct drilling).			
Weeds	Rate/hectare	Comments	
Clovers, narrow leaved plantain, thistles	0.5 - 0.7litre	For best results apply to actively growing weeds.	
Californian thistle	1 litre	Apply from rosette to early flower. Retreatment may be required.	
Yarrow	1 litre	Apply to actively growing yarrow, autumn to spring. For best results surface cultivate no less than one week after treatment.	

For broad spectrum weed control in conservation tillage programmes, **DIABLO** may be mixed with other herbicides such as paraquat or glyphosate. Observe the directions and recommendations stated on the individual labels, when such products are used with **DIABLO** in tank mixtures.

Crop Establishment:

Brassicas, cereal and ryegrass crops may be drilled any time after application of **DIABLO**.

CAUTION: Do not plant susceptible crops (clover, peas, beans, potatoes, tomatoes, carrot, curcubits) within 2 weeks of applying up to 0.5litres/ha of **DIABLO**. Where more than 0.5L/ha is applied, do not plant susceptible crops within 6 – 12 months of treatment without sowing a small area first to check soil residues.

Resistance Management:

GROUP 4 HERBICIDE

DIABLO contains a GROUP 4 HERBICIDE belonging to the pyridine carboxylic acids and continuous use of herbicides in this group may lead to a build-up of weeds resistant to it. To prevent or delay resistance, alternate with a herbicide from another group if possible and adhere to label instructions. To minimise this risk, use strictly in accordance with label instructions and resistance management strategies at www.resistance.nzpsps.org/