



**FORESTRY,
BRUSHWEED
AND
TVC
RANGE**

0800 220 002 | info@grosafe.co.nz | www.grosafe.co.nz

NEW RELEASE

For selective weed control
in forestry and
non-selective weed control
in industrial situations.



- Improved WDG formulation - more stable active ingredient and formulation - improved efficacy
- Easier storage and handling. Safer for operators
- Higher active ingredient content, 10 kg/ha – less product to handle
- Packed in 10 kg recyclable LDPE bags which makes for ease of rate calculations











Contact GroSafe on 0800 220 002 or email: info@grosafe.co.nz | www.grosafe.co.nz

Hexagard® is a registered trademark of GroSafe

INDEX

CATEGORY

	Non Selective Herbicides	7
	Brushweed Herbicides	31
	Site Preparation Brushweed Herbicides	41
	Selective Grass and Broadleaf Weed Herbicides	45
	Fungicide for Forestry	63
	Boron Fertilisers	65
	Marker Dye	71
	Adjuvants and Organo Silicone Super Spreaders	73

INTRODUCTION

Grosafe has a range of high quality brushweed and forestry products to give applicators the ability to source an extensive range from one supplier at competitive prices. All products in the range have been carefully developed and tested in the field to ensure high performance levels.

Our forestry, brushweed and TVC package includes the following products:

NON SELECTIVE HERBICIDES

Firstrate® 450 - 20L, 200L, 1000L

A non-selective herbicide for the control of many annual and perennial weeds in a wide range of situations.

Active ingredient: 450g/litre glyphosate as the isopropylamine salt in the form of a soluble concentrate.

Hortcare® Glyphosate 680 WSG - 20kg (4 x 5kg)

A non-residual herbicide for the control of most annual and perennial weeds in Agriculture, Horticulture, Forestry, Drains, Aquatic Areas and a Wide Range of Brush Weeds.

Active ingredient: 680g/kg glyphosate as the mono ammonium salt in the form of a water soluble granule.

Machette® 540 - 20L, 200L, 1000L

A non-selective herbicide for weed control prior to planting crops and pasture, prior to harvesting some crops and for general weed control in horticulture, agriculture and forestry.

Active ingredient: 540g/litre glyphosate as the potassium salt in the form of a soluble concentrate.

Scythe® - 20L

A non-selective contact herbicide for the control of a wide range of broadleaf and grass weeds in orchards, vineyard and non-crop areas.

Active ingredient: 200g/litre glufosinate ammonium in the form of a soluble concentrate.

BRUSHWEED HERBICIDES

Knockdown Plus® - 20L

A grass friendly herbicide for the control of gorse, broom, blackberry and other brush weeds.

Active ingredient: 600g/litre triclopyr as the butoxy ethyl ester in the form of an emulsifiable concentrate.

Piccolo® - 5L, 200L

Controls certain broadleaf weeds in fodder brassicas and radiata pine.

Active Ingredient: 150g/L picloram and 225g/L clopyraid both as the monoethanolamine salt in the form of a soluble concentrate.

Reclaim® Brushkiller - 20L, 200L, 1000L

A herbicide to control a wide range of brushweeds including gorse and broom.

Active Ingredient: 100g/litre picloram as the amine salt and 300 g/litre triclopyr as the butoxyethyl ester in the form of an emulsifiable concentrate.

Zonda® Stump Gel - 5kg, 400g, 200g

A ready to use herbicidal gel for direct application onto stump and cut stems; including wild ginger, agapanthus and woolly nightshade trees.

Active Ingredient: 43g/kg picloram as the potassium salt in the form of a gel.

SITE PREPARATION BRUSHWEED HERBICIDES

Reply® 200 - 20kg (40 x 500g bags)

A herbicide for the control of gorse and other scrub weeds in pasture and waste areas.

Active ingredient: 200g/kg metsulfuron methyl in the form of a water dispersible granule.

Reply® 600 - 20kg (40 x 500g bags)

A herbicide for the control of gorse and other scrub weeds in pasture and waste areas.

Active ingredient: 600g/kg metsulfuron methyl in the form of a water dispersible granule.

SELECTIVE GRASS AND BROADLEAF WEED HERBICIDES

Diablo®

A broad spectrum herbicide for thistles and certain broadleaf weeds for use in forest areas.

Active Ingredient: 300g/litre clopyralid as the triisopropanolamine salt in the form of a soluble concentrate.

GroGard® - 20kg (2 x 10kg bags)

A selective herbicide for the control of broadleaf and grass weeds in forestry.

Active ingredient: 900g/kg terbuthylazine in the form of a water dispersible granule.

Herald®

A selective post emergence herbicide for the control of grass weeds and storksbill in forestry.

Active Ingredient: 520g/litre Haloxyfop-p as the methyl ester in the form of an emulsifiable concentrate.

HexaGard® 750 - 10kg

For selective weed control in forestry and non-selective weed control in industrial situations.

Active Ingredients: 637.5g/kg terbuthylazine plus 112.5g/kg hexazinone in the form of a water dispersible granule.

HexaGard® 750 Extra - 10kg

For selective weed control in forestry and non-selective weed control in industrial situations.

Active Ingredients: 610g/kg terbuthylazine plus 140g/kg hexazinone in the form of a water dispersible granule.

Hexogon Plus® - 10kg (4 x 2.5kg bags)

A selective herbicide for the control of weeds in Radiata Pine forests.

Active ingredient: 900g/kg hexazinone in the form of a water dispersible granule.

Intrepid®

A selective post-emergent herbicide for grass weed control in forestry.

Active Ingredient: 360g/litre clethodim in the form of an emulsifiable concentrate.

FUNGICIDE FOR FORESTRY**Hortcare® Copper Hydroxide 300 - 10kg**

A protectant fungicide for the control of dothistroma pini in Radiata pine forests.

Active Ingredient: 300g/kg copper as copper hydroxide in the form of a water dispersible granule.

BORON FERTILISERS

GreenBor - 25kg

Organic granular fertiliser.

Active Ingredient: 100g/kg boron in the form of magnesium and calcium borate compounds.

FertiBagra 10G - 800kg bulk bag

A fertilizer based on high quality Ulexite (Calcium Sodium Borate).

FertiBagra 15G - 700kg bulk bag

A fertilizer based on high quality Ulexite (Calcium Sodium Borate).

MARKER DYE

GroMark® RedLine - 1L, 5L

Red marker dye additive to provide a temporary indication of spot or boom sprayed areas.

ADJUVANTS AND ORGANO SILICONE SUPER SPREADERS

EnSpray 99® - 5L, 20L, 200L, 1000L

A highly refined narrow distillation range spraying oil which contains emulsifiers to facilitate mixing with water. Also use with herbicides to enhance spreading, sticking and uptake.

Active Ingredient: 821g/litre (980ml/L) mineral oil in the form of an emulsifiable concentrate. Unsulphonated residue not less than 99.0%.

Force® Ultra - 1L, 5L, 20L, 1000L

An organo-silicone penetrant for improved penetration and faster uptake of Reclaim® Brushkiller, Reply® 200, Reply® 600, Hortcare® Glyphosate 360 SC, Firstrate® 45, Hortcare® Glyphosate 680 WSG, Machette® 540, Scythe® and other brushweed herbicides.

Active ingredient: Polyalkyleneoxide Modified Heptamethyltrisiloxane

Hybrid™ SB - 1L, 4L, 18L

A multifunctional non-ionic wetting and buffering adjuvant specially formulated to enhance performance of pesticides, plant growth regulators and foliar fertilisers.

Active ingredient: 560g/litre alkylbenzene ether sulfonate solution, 560g/l hydroxypropanetricarboxylate as a soluble solution.

The listed products have been carefully selected and developed by Grosafe Chemicals to enable applicators to achieve safe effective control of an extremely broad spectrum of weeds, in a range of situations, throughout the year.

We welcome enquiry from applicators and end users on our range of products and look forward to being the one stop solution for your brushweed control and forestry programs, saving you money at the same time.

For further information contact:

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WARNING
ECOTOXIC
KEEP OUT OF REACH OF CHILDREN

FIRSTRATE® 450

A non-selective herbicide for the control of
many annual and perennial weeds in
a wide range of situations.

GSFR109/F3



FIRSTRATE® 450
NET CONTENTS: 20 Litres

ACTIVE INGREDIENT: contains 450g/L glyphosate as the
isopropylamine salt in the form of a soluble concentrate

Grosafe®

FIRSTRATE® 450



HAZARD CLASSIFICATION: Skin irritation Category 2, Eye irritation Category 2, Hazardous to the aquatic environment chronic Category 2

WARNING: Irritating to skin, and causes serious irritation to eyes.

ENVIRONMENT: Toxic to aquatic organisms with long lasting effects.

Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area.

QUALIFIED PERSON: A suitably qualified person is required if this product is applied in a wide dispersive manner, used by a commercial contractor or applied directly into or onto water.

PERSONAL PROTECTION: When mixing wear a face mask or goggles, rubber gloves and overalls. Do not eat, drink or smoke while using. Wash hands and face before meals and after work. Wash protective clothing after use.

STORAGE: Store product in original container, tightly closed, in a cool, dry place. Keep out of reach of children, and away from foodstuffs. Storage must be in accordance with the current version of NZS 8409 Management of Agrichemicals. Stores containing more than 1000 L are subject to requirements for signage, secondary containment and emergency response plans.

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

SPILLS AND DISPOSAL: When dealing with spills wear personal protective clothing and equipment as described in the PERSONAL PROTECTION section. Absorb with sawdust, soil etc. Contain and store in properly labelled, sealed drums for safe disposal. If spray mixture is spilled absorb and collect in drums as above. Deal with all spillages immediately. If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority.

DISPOSAL: Avoid contamination of any water supply with chemical or empty container.

PRODUCT DISPOSAL: If possible dispose of by using according to the label, otherwise dispose of in an approved landfill or bury below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots.

CONTAINER DISPOSAL: Triple rinse empty container and add rinsate 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 drink a glass of water but do not induce vomiting. Get advice if you feel unwell. If on skin wash with plenty of soap and water. If in eyes flush with plenty of water. Remove contact lenses if present after first few minutes and keep rinsing. If irritation persists, get medical attention. If inhaled remove to fresh air and keep at rest in position comfortable for breathing. For advice call a doctor or the National Poisons Centre (0800 764 766).

EMERGENCY RESPONSE 0800 CHEMCALL: (0800 243 622).

READ THE ATTACHED BOOKLET COMPLETELY BEFORE MIXING OR APPLYING

Registered pursuant to the ACVM Act 1997, No P7336. See www.foodsafety.govt.nz for registration conditions.
Approved pursuant to HSNO Act 1996, Approval Code HSR 000769. See www.epa.govt.nz for approval conditions.

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:



GSFR109/Booklet 5

Batch No:

Date of Manufacture:

FIRSTRATE® and FORCE® are trademarks of Grosafe Chemicals Limited

GENERAL INFORMATION

FIRSTRATE® 450 is a foliar absorbed and translocated herbicide for control of emerged weeds only and is not residual.

FIRSTRATE® 450 can be deactivated by soil particles and hard water containing calcium salts. If hard water cannot be avoided, the addition of **Hybrid® SB** is recommended.

Plants should be actively growing, free of stress with clean foliage at time of spraying.

FIRSTRATE® 450 and solutions should only be mixed, contained in or sprayed by equipment made from stainless steel, fibreglass, plastic, aluminium, brass and copper.

WARNING: A highly flammable gas may be formed from the contact of this product with galvanised or unlined steel.

The effects of **FIRSTRATE® 450** may not be apparent for 3 - 7 days depending on the weather conditions, weed species and the herbicide rate used. Some perennial weeds may not show effects for 14 - 21 days.

RESTRICTIONS: Do not spray if rain is likely within 6 hours. Do not allow spray contact with non target plants as severe injury may occur.

DIRECTIONS:

1. Clean spray tank of previous chemical residues, preferably with a chemical residue remover.
2. Half fill spray tank with clean water, add required amount of **FIRSTRATE® 450** then fill with clean water.
3. Add surfactant where required.
4. Agitate well before spraying.
5. When tank mixing with other chemicals, add **FIRSTRATE® 450** after other water soluble products, but before flowables eg. Flowable Simazine.

APPLICATION:

Boom equipment:

FIRSTRATE® 450 can be applied in spray volumes of up to 200 litres per hectare using fan nozzles at pressures in the range of 240 - 280 kPa.

Boom height should be set so a double overlap of nozzle pattern is achieved at the top of the target plant.

Aerial equipment:

Forest and non crop areas only. **FIRSTRATE® 450** can be applied by aircraft in spray volumes of up to 100 litres per hectare. Increase spray volumes in hilly terrain to ensure maximum target contact. **DO NOT** use in intensive horticultural cropping areas.

Handgun and Knapsack:

Ensure a fine spray pattern to give complete coverage.

Mist blower:

Apply to wet foliage surfaces but not to the point of runoff.

Wiper equipment:

Mix only enough for immediate use. Plants must be clean and dry and the wiper fully saturated. Apply up and down slopes for effective applications. High weed density: Reduce speed and apply twice in opposing directions.

CLEANING EQUIPMENT:

All spray equipment including pumps, spray tanks, lines and nozzles, landing gear (aircraft) should be thoroughly washed with water after each day of spraying.

DIRECTIONS FOR USE:

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.

SITUATION	CROP	COMMENTS
Drains and waterways		1. Do not spray until 75% of the weed is above water level. 2. Do not allow submergence for 6 hours post spraying.
Forestry For control of all listed weeds prior to planting of forest or nursery or around established trees.		1. For rates for weeds see Weed Table. 2. Do not allow spray contact with established trees.
Industrial As a knockdown or selective, herbicide for spot spraying		1. Treat weeds as per Weed Table.
Market Gardens As a knock down prior to seeding, transplanting and after harvest clean-up.	All vegetables.	1. For best results do not disturb weeds by grazing or cultivation for 1 day post spraying of annual weeds and 10 days post spraying of perennial weeds. 2. Cultivate within 21 days of spraying to ensure control. 3. Do not sow until a satisfactory seed bed has been prepared. 4. An appropriate residual herbicide can be used as a tank mix with FIRSTRATE® 450
Minimum Tillage For total weed control prior to seeding.	Cereal, Pasture and Leguminous crops.	1. For best results do not disturb weeds by grazing or cultivation for 1 day post spraying of annual weeds and 10 days post spraying of perennial weeds. 2. To ensure control and avoid respraying newly germinated weeds, work sprayed area by full cultivation or the seeding operation within 3 weeks of spraying. 3. Do not sow until a satisfactory seed bed has been prepared. 4. For improved control of White Clover, tank mix with dicamba 20%ai at 1.5 litres/ha. Observe plant back periods of dicamba for respective crop.
Orchards and vineyards As a knockdown prior to establishment or where plants are 3 years old or older.	Apple, Citrus, Grapevines, Kiwifruit, Pear and Stonefruit	1. Use as directed or shielded spray. 2. DO NOT let spray contact any green foliage or new growth. 3. Spray before bloom stage of crop. 4. FIRSTRATE® 450 can be tank-mixed with an appropriate herbicide for residual control.
Pre-Harvest For control of emerged weeds and as a clean-up to enhance harvesting.	Wheat, Barley, Oats and Threshing Peas	1. Spray 7–12 days pre-harvest. 2. Grain moisture should be below 30%. 3. Withholding period: 7 days. 4. Do not spray seed crops. 5. Do not spray undersown crop.
Recreational areas For weed control prior to establishment and as a clean-up around established areas.	Lawns, Ornamentals, Parks and Reserves.	1. Established plants: Use a directed or shielded spray or with a wiper around plants avoiding any spray contact on green or growing points of plant.

WEED RECOMMENDATIONS FOR USE

WEED CONTROLLED	APPLICATION RATES				COMMENTS
	BOOM/ AERIAL L/ha	HANDGUN Vol/100L	KNAPSACK Vol/10L	MIST BLOWER Vol/10L	
Annual weeds Amaranth, Barley Grass, Capeweed, Cleavers, Volunteer Cereals, Spiny Emex, Storksbills, Fumitory, Mintweed, Patersons Curse, Prairie Grass, Ryegrass, Saffron Thistle, Vulpia Hairgrass, Sub. Clover, Wild mustard, Wild Turnip	0.8 -1.6 L	160 ml	16ml	50ml	Wiper: 25% solution Use the high rate on weeds greater than 14 cm across or 14 cm high
Australian Sedge	4.8 L	800 ml	80ml	240 ml	Best results when sprayed in Summer. Do not disturb for 4 weeks post treatment. Wiper: 25% solution.
Barberry	–	800 ml	80ml	240 ml	Best results when sprayed in mid to late summer after flowering to full fruit.
Blackberry	7.2 - 16.0 L	0.8 - 1.2 L	80ml	240 ml	Best results when sprayed mid to late summer after flowering to full fruit. Best results when plants have a full canopy and total leaf coverage achieved. Use higher rate on heavy infestations where total coverage may not be achieved. Regrowth can occur after 1-2 years. Do not disturb treated plants until 8 weeks post treatment.
Boxthorn	–	1 L	80ml	–	Apply to actively growing plants (Nov-Apr). Ensure complete coverage of dense thickets. Do not use extra surfactant or treat salt damaged bushes.
Bracken	7.2 L	800 ml	80ml	240 ml	Spray mid Summer to mid Winter when fronds are open. Burning after treatment will help pasture establishment. The addition of Force® Penetrant at 250 ml/100 litres is recommended.
Broom	7.2 L	800 ml	80ml	240 ml	Spray late Spring to early Summer when plants are in full leaf. The addition of Force® Penetrant at 250 ml/100 litres is recommended.
Browntop	2.4 L	400 ml	40ml	120 ml	If plants are greater than 10 cm high, graze or burn then treat regrowth. The addition of Force® Penetrant is recommended at 200ml /100 litres.

WEED CONTROLLED	APPLICATION RATES				COMMENTS
	BOOM/ AERIAL L/ha	HANDGUN Vol/100L	KNAPSACK Vol/10L	MIST BLOWER Vol/10L	
Buddleja	7.2 L	800 ml	80 ml	–	Spray late Spring to early Summer when plants are in full leaf. The addition of Force® Penetrant at 250ml/100 litres is recommended.
California Thistle	3.2 L	800 ml	80 ml	240ml	Spray plants after flower bud stage. Improved results obtained when thistles are mowed 10 days post spraying.
Couch	2.4 - 4.8 L	800 ml	80 ml	240ml	Spray at early seedhead stage when plants are actively growing. Use the low rate for suppression only. Pre-harvest: Use 3.2 litres/ha. FIRSTRATE® 450 will not control unemerged growth.
Dock	7.2 L	800 ml	80 ml	–	Best results when sprayed Spring/ Summer before seed-heads have formed.
Floating Sweet Grass, Reed Sweet Grass	4.8 L	800 ml	80 ml	240ml	Best results when sprayed in Summer. Do not disturb for 4 weeks post treatment.
Gorse	–	800 ml	–	–	Use Force® Penetrant at 200ml/100 litres. Spray when plants are at early seedhead. Ensure complete coverage. Regrowth may occur after a year. Re-treat if required.
Indian Doab, Mercer Grass (Aquatic)	7.2 L	800 ml	80 ml	–	Best when plants are in the early seedhead stage.
Johnson Grass, Kikuyu, Mercer Grass (Non Aquatic).	4.8 L	800 ml	80 ml	240ml	Best results when plants are in the early seedhead stage.
Nodding Thistle	–	800 ml	80 ml	–	Wiper: 25% solution. A double pass may be required for good coverage. When applying by water ensure plants are actively growing (Oct - Apr) when at least 10 cm of the plant can be wiped. A double pass is recommended and follow-up with spot treatments if necessary.
Old Mans Beard	–	0.8 - 1.6 L	160 ml	–	Apply before the first leaf browns off. Use the higher rate on plants with stems greater than 1cm in diameter. If complete coverage is not possible, cut plants in the winter and treat at the high rate when regrowth is at 0.5 - 1.0 min length.
Pampas Grass, Toetoe	–	0.8 - 1.6 L	160 ml	–	Spray Spring to Autumn. Do not spray flowering plants.
Paspalum	3.2 L	800 ml	80 ml	240ml	Spray when plants are at early seedhead.

WEED CONTROLLED	APPLICATION RATES				COMMENTS
	BOOM/ AERIAL L/ha	HANDGUN Vol/100L	KNAPSACK Vol/10L	MIST BLOWER Vol/10L	
Potato (self-set)	2.4 L	400 ml	40ml	120ml	
Ragwort	4.8 L	800 ml	80ml	–	Ensure adequate leaf area for spray uptake. Plants should be above pasture to avoid non-target contact. Use a double pass for best results. Plants become more palatable to stock after treatment so remove until browning occurs.
Ratstail	4.8 L	800 ml	80ml	–	Use high water volumes (200 litres/ha) in Autumn when foliage is green. Do not disturb treated plants for 21 days post spraying.
Rautahi (Cutty Grass), Rushes, Tall Fescue	4.8 L	800 ml	80ml	240ml	Spray Jan-March. Do not burn or slash for 4 weeks post spraying.
Ring Fern	0.8 - 2.4 L	240 ml	25ml	–	Use the high rate for control. Use 1.0-2.0 litres/ha for Pasture Manipulation.
Ryegrass (Perennial)	1.2 - 2.4 L	–	–	–	Use the low rate only when cultivation is to follow treatment. Use Force® Penetrant at 200ml/100 litres.
Sweet Briar	9.6 L	800 ml	80ml	–	Add Force® Penetrant at 250ml/100 litres. Spray to ensure full coverage: any time from late flowering to early leaf yellowing.
Willow	7.2 L	800 ml	40ml	–	Spray from mid to late Summer. Ensure good coverage.
Yarrow	2.4 - 4.8 L	–	–	–	For best results cultivation should follow treatment. Only use the low rate when a competitive crop is planted after treatment.



DANGER

KEEP OUT OF REACH OF CHILDREN

HORTCARE®

GLYPHOSATE 680 WSG HERBICIDE

A non-residual herbicide for the control of most annual and perennial weeds in agriculture, horticulture, forestry, drains, aquatic areas and a wide range of brush weeds.

ACTIVE INGREDIENT: Contains 680g/kg glyphosate as the mono ammonium salt in the form of a water soluble granule. Also contains ~4 % tallow alkyl amine ethoxylate.

GSHG079/F03



Grosafe®

HORTCARE® GLYPHOSATE 680 WSG



HAZARD CLASSIFICATION:

Serious eye damage 1; Hazardous to the aquatic environment chronic Category 2

TOXICITY

DANGER: May cause serious eye damage.

ECOTOXICITY: Toxic to aquatic organisms with long-lasting effects. Avoid contamination of any water supply with product or empty container. Handle and apply with care, spray drift may cause severe damage to other desirable plants.

QUALIFIED HANDLER: Where Hortcare® Glyphosate 680 WSG is applied onto or into water and the water has the potential to leave the place containing the application area, clauses 62, 63 and 64 of the Hazardous Property Controls Notice apply as if the substance has a hazard classification of hazardous to the aquatic environment acute Category 1.

PERSONAL PROTECTION: When mixing or loading wear overalls, impervious gloves and eye/face protection. Wash hands and exposed skin after work.

STORAGE: Store in original container tightly closed and in a locked, dry, well ventilated area, away from foodstuffs, seeds and fertiliser. Storage must be in accordance with the current version of the New Zealand Standard for the Management of Agrichemicals (NZS8409). Stores containing more than 1000 L require signage, secondary containment and an emergency response plan. When stored appropriately this product should show no significant degradation for two years from the date of manufacture. Contact the supplier for further information about the use of this product if it is older than this.

SPILLS: Wear personal protective clothing and equipment as described in the PERSONAL PROTECTION section. Contain spilled material and store in properly labelled, sealed drums for safe disposal. If spray mixture is spilled, absorb and collect in drums as above. Deal with all spillages immediately. If contamination of drains, streams, watercourses, etc is unavoidable, contact the local water authority.

PRODUCT DISPOSAL: If possible, dispose of by using according to the label, otherwise dispose of in an approved landfill or bury below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots.

CONTAINER DISPOSAL: Crush empty packaging and dispose of at a suitable landfill.

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

FIRST AID: For advice call the National Poisons Centre 0800 POISON (0800 764 766). Have product label or Safety Data Sheet at hand.

IF SWALLOWED: Rinse mouth with water. Call the NATIONAL POISONS CENTRE or doctor for advice if person feels unwell.

IF ON SKIN: Remove contaminated clothing and wash skin with plenty of soap and water. Get medical advice if irritation persists.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE or doctor.

IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing. Call the NATIONAL POISONS CENTRE or doctor for advice if person feels unwell.

EMERGENCY RESPONSE: 0800 CHEMCALL (0800 243 622)

READ THE ATTACHED BOOKLET COMPLETELY BEFORE MIXING OR APPLYING

Registered pursuant to the ACVM Act 1997, No P008533. See www.foodsafety.govt.nz for registration conditions.
Approved pursuant to HSNO Act 1996, HSR 000219. See www.epa.govt.nz for approval conditions.

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
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POBox 14-450 Tauranga 3141
Tel: 0800 220 002
Email: info@grosafe.co.nz
www.grosafe.co.nz



Batch No:

Date of Manufacture:

Hortcare® and Force® are the registered trademarks of Grosafe Chemicals Limited.

GSHG079/B05

GENERAL INSTRUCTIONS:

1. **Hortcare® Glyphosate 680 WSG** is a foliar absorbed and translocated herbicide for control of emerged weeds only and is not residual.
2. **Hortcare® Glyphosate 680 WSG** can be deactivated by soil particles and hard water containing calcium salts. If hard water cannot be avoided, the addition of Hybrid® SB is recommended.
3. Plants should be actively growing, free of stress with clean foliage at time of spraying. **Hortcare® Glyphosate 680 WSG** and solutions should only be mixed, contained in or sprayed by equipment made from stainless steel, fibreglass, plastic, aluminium, brass and copper. **WARNING:** A highly flammable gas may be formed from the contact of this product with galvanised or unlined steel.
4. The effects of **Hortcare® Glyphosate 680 WSG** may not be apparent for 3–7 days depending on the weather conditions, weed species and the herbicide rate used. Some perennial weeds may not show effects for 14–21 days.
5. Animal Safety Post treatment: A withholding period for grazing stock is not required (except where Ragwort or other poisonous weeds are present). Stock should be withheld from the treated area until these plants brown out. In other situations it is recommended that grazing or cultivation be delayed for three days to allow for absorption/translocation of the herbicide.

RESTRICTIONS:

Do not spray if rain is likely within 6 hours. Do not allow spray contact with non target plants as severe injury may occur.

1. Clean spray tank of previous chemical residues, preferably with a chemical residue remover.
2. Half fill spray tank with clean water, add required amount of **Hortcare® Glyphosate 680 WSG** then fill with clean water.
3. Add surfactant where required.
4. Agitate well before spraying.
5. When tank mixing with other chemicals, add **Hortcare® Glyphosate 680 WSG** after other water soluble products, but before flowables.

APPLICATION:

Boom equipment: **Hortcare® Glyphosate 680 WSG** can be applied in spray volumes of up to 200 litres per hectare using fan nozzles at pressures in the range of 240–280 kPa.

Boom height should be set so a double overlap of nozzle pattern is achieved at the top of the target plant.

Aerial equipment: (Forest and non-crop areas only) **Hortcare® Glyphosate 680 WSG** can be applied by aircraft in spray volumes of up to 100 litres per hectare. Increase spray volumes in hilly terrain to ensure maximum target contact. DO NOT use in intensive horticultural cropping areas.

Handgun and Knapsack: Ensure a fine spray pattern to give complete coverage. Spray to the point of run-off.

Wiper equipment: Mix at the rate of 1 part (1kg) product with 4 parts (4 litres) of water. Mix only enough for immediate use. Plants must be clean and dry and the wiper fully saturated. Apply up and down slopes for effective applications. In cases of high weed density reduce speed and apply twice in opposing directions.

CLEANING EQUIPMENT:

All spray equipment including pumps, spray tanks, lines and nozzles, landing gear (aircraft) should be thoroughly washed with water after each day of spraying.

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.

Withholding Period:

Wheat, barley, oat grain: 7 days

RESISTANT WEEDS MANAGEMENT

GROUP	9	HERBICIDE
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Hortcare® Glyphosate 680 WSG contains glyphosate as the ammonium salt. Glyphosate is a glycine herbicide which inhibits EPSP synthase. Naturally occurring resistant biotypes are known to exist and can become more prevalent after many years of continuous or excessive use of this product. To prevent or delay resistance use **Hortcare® Glyphosate 680 WSG** in tank mixes as appropriate, and/or in rotation with herbicides that have a different mode of action. Refer to www.resistance.nzpps.org for further resistance management advice.

Page 2

SITUATION	CROP	COMMENTS
Drains and waterways		1. Do not spray until 75% of the weed is above water level. 2. Do not allow submergence for 6 hours post spraying.
Forestry For control of all listed weeds prior to planting off-forest or nursery or around established trees.		1. For rates for weeds see Weed Table. 2. Do not allow spray contact with established trees.
Industrial As a knockdown or selective, ie, spot spraying.		1. Treat weeds as per Weed Table.
Market Gardens As a knockdown prior to seeding, transplanting and after harvest clean-up.	All vegetables	1. For best results do not disturb weeds by grazing or cultivation for 1 day post spraying of annual weeds and 10 days post spraying of perennial weeds. 2. Cultivate within 21 days of spraying to ensure control. 3. Do not sow until a satisfactory seed bed has been prepared. 4. An appropriate residual herbicide can be used as a tank mix with Hortcare Glyphosate 680 WSG.
Minimum Tillage For total weed control prior to seeding.	Cereal, pasture and leguminous crops	1. For best results do not disturb weeds by grazing or cultivation for 1 day post spraying of annual weeds and 10 days post spraying of perennial weeds. 2. To ensure control and avoid respraying newly germinated weeds, work sprayed area by full cultivation or the seeding operation within 3 weeks of spraying. 3. Do not sow until a satisfactory seed bed has been prepared. 4. For improved control of White Clover, tank mix with dicamba 20%ai at 1.5 litres/ha. Observe plant back periods of dicamba for respective crop.

SITUATION	CROP	COMMENTS
Orchards and vineyards As a knockdown prior to establishment or where plants are 3 years old or over.	Apple, citrus, grapevines, kiwifruit, pear and stonefruit	1. Use a directed or shielded spray. 2. DO NOT let spray contact any green foliage or new growth. 3. Spray before bloom stage of crop. 4. Hortcare Glyphosate 680 WSG can be tank mixed with an appropriate herbicide for residual control.
Pre-harvest weed control For control of emerged weeds and as a clean-up to enhance harvesting.	Wheat, barley, oats	1. Spray 7–12 days pre-harvest. 2. Grain moisture should be below 30%. 3. Withholding period: 7 days. 4. Do not spray seed crops. 5. Do not spray undersown crop. 6. Do not apply more than 2.1 kg/ha. 7. Do not use as a pre-harvest desiccant.
Recreational areas For weed control prior to establishment and as a clean-up around established areas.	Lawns, ornamentals, parks and reserves.	1. Established plants: Use a directed or shielded spray or with a wiper around plants avoiding any spray contact on green or growing points of plant.

RECOMMENDATIONS FOR USE

WEED CONTROLLED	RATE PER HECTARE	COMMENTS
Annual weeds (Seedlings)	Boom/aerial: 0.5 – 1.0 kg. Handgun: 100 g/100 litres. Knapsack: 10 g/10 litres Mistblower: 30 g/10 litres	1. Use the high rate on weeds greater than 14cm across or 14cm high.
Australian Sedge	Boom: 3.0 kg. Aerial: 4.5 kg. Handgun: 0.5 kg/100 litres Knapsack: 50 g/10 litres Mistblower: 150 g/10 litres	1. Best for 4 weeks post treatment. 2. Wiper: 33% solution.
Barberry	Handgun: 0.5 kg /100 litres Knapsack: 50 g/10 litres Mistblower: 150 g/10 litres	1. Best results when sprayed mid to late Summer after flowering to full fruit.
Barley grass	Boom/aerial: 0.5 kg. Handgun: 100 g/100 litres. Knapsack: 10 g/10 litres Mistblower: 30 g/10 litres	1. Apply September to December
Blackberry	Boom/aerial: 4.5 - 10.0 kg Handgun: 0.5 - 0.75 kg/100 litres Knapsack: 50 g/10 litres Mistblower: 150 g/10 litres	1. Best results when sprayed mid to late summer after flowering to full fruit. 2. Best results when plants have a full canopy and total leaf coverage achieved. 3. Use higher rate on heavy infestations where total coverage may not be achieved. 4. Regrowth can occur after 1-2 years. 5. Do not disturb treated plants until 8 weeks post treatment.
Bracken	Boom or aerial: 4.5 kg Handgun: 0.5 kg/100 litres Knapsack: 50 g/10 litres	1. Spray mid summer to mid winter when fronds are open 2. Burning after treatment will help pasture establishment. 3. The addition of Force® Penetrant at 250ml /100 litres is recommended.
Broom	Boom or aerial, handgun, knapsack as above Mistblower: 150 g/10 litres	1. Spray late spring to early summer when plants are in full leaf. 2. The addition of Force® Penetrant at 250ml /100 litres is recommended.
Browntop	Boom or aerial: 1.5 kg Handgun: 0.25 kg/100 litres Knapsack: 25 g/10 litres Mistblower: 75 g/10 litres	1. If plants are greater than 10 cm high, graze or burn then treat regrowth. 2. The addition of Force® Penetrant at 250ml / 100 litres is recommended.
Buddleja	Boom or aerial: 4.5kg Handgun: 0.5 kg/100 litres Knapsack: 50 g/10 litres	1. If actively growing treat at any time of year. 2. Aerial: treat Feb. to April.

WEED CONTROLLED	RATE PER HECTARE	COMMENTS
Californian Thistle	Boom or aerial: 2.0kg Handgun: 0.5 kg/100 litres Knapsack: 50 g/10 litres Mistblower: 150 g/10 litres	1. Spray plants after flower bud stage. 2. Improved results obtained when thistles are mowed 10 days post spraying.
Couch	Boom or aerial: 1.5 - 3.0 kg. Handgun: 0.5 kg/100 litres Knapsack: 50 g/10 litres	1. Spray at early seedhead stage when plants are actively growing. 2. Use the low rate for suppression only. 3. Pre-harvest: Use 4.0 litres/ha. Hortcare® Glyphosate 680 WSG will not control unemerged growth.
Docks	Boom or aerial: 2 - 4.5 kg Handgun: 0.5 kg/100 litres Knapsack: 50g/10 litres	1. Best results when sprayed Spring Summer before seed-heads have formed. 2. Use high rate on established plants.
Floating Sweet Grass, Reed Sweet Grass	Boom or aerial: 3.0kg Handgun: 0.5 kg/100 litres Knapsack: 50 g/10 litres Mistblower: 150 g/10 litres	Apply to actively growing plants.
Gorse	Handgun Only: 0.5 kg/100 litres	1. Use Force® Penetrant at 200ml/100 litres. 2. Spray at any time of year. 3. Ensure complete coverage. 4. Regrowth may occur after 1 year. Re-treat if required.
Indian Doab	Boom or aerial: 4.5kg Handgun: 0.5 kg/100 litres Knapsack: 50 g/10 litres	1. Best results when plants are at early seedhead stage.
Kikuyu	Boom or aerial: 3.0kg Handgun: 0.5 kg/100 litres Knapsack: 50g/10 litres Mistblower: 150 g/10 litres	1. Best results when plants are in the early seedhead stage.
Mercer Grass - Aquatic (A) - Non Aquatic (NA)	Boom or aerial: (A) 4.5kg, (NA) 3.0kg Handgun: (A) (NA) 0.5 kg/100 litres Knapsack: (A) (NA) 50g/10 litres Mistblower: (NA) 150g /10 litres	1. Best results when plants are in the early seedhead stage.
Nodding Thistle	Handgun: 0.5 kg/100 litres Wiper : 15 g/100 ml.	1. Wiper: A double pass may be required for good coverage. 2. Treat Spring to Autumn on actively growing plants with at least 10cm of growth exposed to wiper.
Old Mans Beard	Handgun: 0.5 - 1.0 kg/100 litres Knapsack: 100 g/10 litres	1. Apply before the first leaf browns off. 2. Use the higher rate on plants with stems greater than 1cm in diameter. 3. If complete coverage is not possible, cut plants in the winter and treat at the high rate when regrowth is at 0.5-1.0 cm in length.
Pampas Grass, Toetoe	Handgun: 0.5 -1.0 kg/100 litres Knapsack: 50g/10 litres	1. Spray Spring to Autumn. 2. Do not spray flowering plants.

WEED CONTROLLED	RATE PER HECTARE	COMMENTS
Paspalum	Boom or aerial: 2 - 3.0 kg Handgun: 0.5 - 1.0 kg/100 litres Knapsack: 50 g/10 litres Mistblower: 150 g/10 litres	1. Spray when plants are at early seedhead (Jan-Apr.)
Potato (self set)	Boom or aerial: 1.5 kg Handgun: 0.25 kg/100 litres Knapsack: 25 g/10 litres Mistblower: 75 g/10 litres	
Ragwort	Boom or aerial: 3.0 kg Handgun: 0.5 kg/100 litres Knapsack: 50 g/10 litres Mistblower: 15 g/100 ml	1. Ensure adequate leaf area for spray uptake. 2. Wiper: Plants should be above pasture to avoid non-target contact. Use a double pass for best results. 3. Plants become more palatable to stock after treatment so remove until brownout occurs.
Ratstail	Boom or aerial: 2.5 kg	1. Use high water volumes (200 litres/ha) in Autumn when foliage is green. 2. Do not disturb treated plants for 21 days post spraying.
Rautahi (Cutty Grass), Rushes, Tall Fescue	Boom or aerial: 3.0 kg Handgun: 0.5 kg/100 litres Knapsack: 50 g /10 litres Mistblower: 150 g/10 litres	1. Spray Jan-March. 2. Do not burn or slash for 4 weeks post spraying.
Ring Fern	Boom or aerial: 0.5 - 1.5 kg Handgun: 0.15 kg /100litres Knapsack: 15 g/10 litres	1. Use the high rate for control. 2. Use 0.5 -1.0 kg /ha for Pasture Manipulation.
Ryegrass (Perennial)	Boom or aerial: 0.75 - 1.5 kg Handgun: 0.25 kg/100litres Knapsack: 25 g/10 litres	1. Use the low rate only when cultivation is to follow treatment. 2. Add Force® Penetrant at 200ml /100 litres
Sweet Briar	Boom or aerial: 6 kg Handgun: 0.5 kg/100 litres Knapsack: 50 g/10 litres	1. Add Force® Penetrant at 250ml/100 litres. 2. Spray to ensure full coverage any time from late flowering to early leaf yellowing.
Willow	Boom or aerial: 4.5 kg Handgun: 0.5 kg/100 litres Knapsack: 50 g/10 litres	1. Spray to ensure good leaf coverage from mid to late Summer.
Yarrow	Boom or aerial: 1.5 - 3.0 kg	1. For best results cultivation should follow treatment. 2. Only use the low rate when a competitive crop is planted after treatment.



ECOTOXIC

MACHETTE® 540

HERBICIDE

A non-residual, non-selective herbicide for weed control prior to planting crops and pasture, prior to harvesting some crops and for general weed control in horticulture, agriculture and forestry.

ACTIVE INGREDIENT: Contains 540 g/L glyphosate as the potassium salt in the form of a soluble concentrate

GSMC163/F03



MACHETTE® 540
NET CONTENTS: 20 Litres

Grosafe®

MACHETTE® 540



HAZARD CLASSIFICATION: Hazardous to the aquatic environment, chronic, Category 2

ECOTOXICITY:

Toxic to aquatic organisms, with lasting effects. Do not mix or load near any body of water, avoid spray drift over, or spillage into open water.

QUALIFIED HANDLER: This product must be under the control of an approved handler when applied directly onto or into water and the water has the potential to leave the place containing the application area.

RECORD KEEPING:

Records of use as described in NZS 8409 Management of Agrichemicals, must be kept if using 3kg or more of **MACHETTE® 540** applied directly onto or into water.

PERSONAL PROTECTION: Avoid contact with skin and eyes and breathing spray mist. When using wear waterproof gloves, suitable boots and cotton overalls. Remove protective clothing and wash hands and face thoroughly before meals and after work.

STORAGE: Store product in original container, tightly closed, in a cool, dry place. Keep out of reach of children, and away from foodstuffs. Storage must be in accordance with the current version of NZS 8409 Management of Agrichemicals. Stores containing more than 1000 L are subject to requirements for signage, secondary containment and an emergency response plan.

Solutions of **MACHETTE® 540** should be mixed, stored and applied only in stainless steel, aluminium, brass, copper, fiberglass, plastic or plastic lined containers. Do not mix or store this product in galvanized or unlined steel (except stainless steel) containers or spray tanks.

MACHETTE® 540 or solutions of **MACHETTE® 540** react with such containers to produce hydrogen gas which may form a highly combustible gas mixture which can flash or explode if ignited.

Shelflife: When stored appropriately this product should show no significant degradation for two years from 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. Contain spilled product and store in properly labelled, sealed drums for safe disposal. If spray mixture is spilled absorb with sawdust, soil or absorbent material and collect in drums as above. Deal with all spillages immediately. If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority.

DISPOSAL: Avoid contamination of any water supply with chemical or empty container.

PRODUCT DISPOSAL: If possible dispose of by using according to the label, otherwise dispose of in an approved landfill.

CONTAINER DISPOSAL: Triple rinse and add rinseate to the spray tank. Recycle empty container through Agrecovery (www.agrecovery.co.nz) Otherwise bury in a suitable land fill.

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

FIRST AID:

If medical advice is needed, have product container or label at hand. For advice call a doctor or the National Poisons Centre (0800 764 766).

IF SWALLOWED: Rinse mouth. Do NOT Induce vomiting. Call a POISON CENTRE or doctor for advice. **IF ON SKIN:** Wash with plenty of soap and water. **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, get medical advice. **IF INHALED:** Remove to fresh air and keep at rest in a position comfortable for breathing.

EMERGENCY RESPONSE 0800 CHEMCALL: (0800 243 622)

READ THE ATTACHED BOOKLET COMPLETELY BEFORE MIXING OR APPLYING

Registered and distributed by:
Grosafe
GROUP
Grosafe Chemicals Ltd
20 Jean Batten Drive
Mt Maunganui 3116
PO Box 14-450 Tauranga 3141
Tel: 0800 220 002
Email: info@grosafe.co.nz
www.grosafe.co.nz

MACHETTE® and FORCE® are registered trademarks of Grosafe Chemicals Ltd.

Batch No:
Date of manufacture:



Registered pursuant to the ACVM Act 1997, No P9567.
See www.foodsafety.govt.nz for registration conditions.
Approved pursuant to HSNO Act 1996, Approval Code: HSR100587.
See www.epa.govt.nz for approval conditions

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.

GSMC163/B04

GENERAL INFORMATION

MACHETTE® 540 is a broad spectrum, non-selective, non-residual herbicide that is not volatile and may be used in agriculture, horticulture, drains, aquatic areas, forestry and for other uses including general weed control. **MACHETTE® 540** is recommended prior to sowing pasture, crops and for the control of a wide range of brush weeds.

MACHETTE® 540 is absorbed by plant foliage and green stems. It is inactivated immediately upon contact with the soil and does not provide residual weed control. **MACHETTE® 540** moves from the point of foliage or stem contact into the root system controlling the plant above and below the ground. Visible effects may take up to 14 days or even longer depending on growing conditions. These effects are a gradual wilting and yellowing of the foliage which advances to deterioration of above and below ground parts.

Apply **MACHETTE® 540** only to healthy, actively growing plants with adequate leaves for herbicide uptake. Avoid treating plants that are silt laden or affected by drought, frost, water logging, grazing or previous herbicide application. Rainfall occurring up to 2 hours after application may reduce effectiveness. When **Force® Penetrant** organosilicone is added the rain free period may be reduced to 30 minutes. If **MACHETTE® 540** is applied to wet plants, efficacy may be reduced due to runoff.

Animal safety

After application of **MACHETTE® 540** a withholding period for grazing stock is not required (except where ragwort and other poisonous weeds are present). Stock should be withheld from the treated area until these plants brown out. In all other situations, it is recommended that grazing or cultivating is delayed for 1 day after treatment of annual weeds or 3 days if perennial weeds are present to ensure absorption of **MACHETTE® 540**. With brush weeds wait for stem dehydration to occur prior to burning or slashing.

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.

Withholding period:

Wheat, barley, oat grain - 7 days

RESISTANT WEEDS WARNING:

GROUP	9	HERBICIDE
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Resistance to this herbicide could develop from excessive use. The product contains and belongs to the glycine group of herbicides and has the inhibition of EPSP synthase mode of action. Some naturally occurring weed biotypes resistant to this product and other group 9 herbicides may exist through normal genetic variability in any weed population. The resistant weeds can eventually dominate the weed population if these types of herbicides are used repeatedly.

USE RECOMMENDATIONS:

Refer to "Weeds Controlled" section for rates of application.

General Weed Control

Handgun - mix 660mL of **MACHETTE® 540** with 100 litres of water (0.66% solution).

Knapsack - mix 100mL of **MACHETTE® 540** with 15 litres of water.

Small sprayers - mix 6.5mL of **MACHETTE® 540** with every 1 litre of water.

Apply to completely wet the foliage but not to run-off.

Brush weed Control - **MACHETTE® 540** may be used to control a wide range of brush weeds and woody plants.

Agricultural Areas - **MACHETTE® 540** may be used for the control of annual and perennial weeds as directed in agricultural land prior to sowing any edible or non-edible crop or pasture. Where white clover control is required, tank mix with a suitable white clover herbicide and observe recommended waiting periods prior to planting legumes. Cultivation may start from 3 days after spraying perennial weeds and 1 day for annual weeds.

Pasture - Direct (Spot) Application - **MACHETTE® 540** is non-selective and may damage or kill any plant in the sprayed area. Apply as a directed low pressure spray. Retreatment and/or pasture improvement may be necessary to restrict seedling re-establishment.

Pasture - Selective Wiper Application For the control of erect weeds in pastures.

Pasture Renewal - **MACHETTE® 540** may be used to control existing pasture species prior to re-seeding pasture or establishing crops.

Pasture Seed head Suppression (Unimproved Pasture) - Use in unimproved pasture to delay onset of flowering and to maintain pasture grasses in a vegetative growth phase. Treat spring pasture at early grass seed head emergence with 180–200mL **MACHETTE® 540**/ha. Temporary pasture brownout will occur. Do not use **Force® Penetrant** or any other surfactant. Accurate spray calibration is important. Grazing can be carried out at any time after 3 days from treatment, but for optimum results graze from 21 days after treatment. DO NOT USE ON RYEGRASS OR OTHER IMPROVED PASTURES AS YIELD SUPPRESSION MAY OCCUR. IT IS ADVISABLE NOT TO TREAT MORE THAN 10-15% OF THE FARM IN ANY ONE YEAR. DO NOT USE WHEN SOIL MOISTURE LEVELS ARE INADEQUATE FOR PASTURE GROWTH FOLLOWING APPLICATION.

Spraying of Silage Before Cutting: Where paddocks are to be used for cropping after silage, **MACHETTE® 540** may be applied before the silage is cut. Use 2.0-2.7 L/ha plus **Force® Penetrant** 100 mL/100 litres of water in 100-200 litres of water per hectare.

Use the high rate on perennial ryegrass or if the silage is rank or lodged. Refer to higher label rates on other specific weeds. After spraying wait at least 4 days before cutting. Grass quality is maintained for 7-10 days after the initial planned cutting date, even into the early stages of brown-out.

Spraying of Silage or Hay Paddocks After Cutting - Before spraying ensure that there is at least 5-10 cm of actively growing green leaf on all tillers. Typically, this takes three weeks or more after cutting. Refer to application rates in the table. Always use **Force® Penetrant**.

Pre-Harvest Weed Control: Wheat, Barley, Oats - For wheat, barley and oats - apply 7-12 days prior to harvest when the grain moisture content is less than 30%. Do not harvest within 7 days after treatment to allow time for the herbicide to translocate into the weed roots. Do not use as a pre-harvest desiccant. Do not apply to under sown crops including clovers as they may be severely damaged. Do not apply to crops which will be harvested for seed. Use rates up to 2.67 litres/ha depending on the specific weeds to be treated. Avoid treating drought stressed plants.

Orchards/Vines: Citrus, Apples, Pears, Stone fruit, Kiwifruit, Grapevines - Apply as a directed or shielded spray or with wiper equipment. For long term control of annual weeds **MACHETTE® 540** may be tank mixed with a suitable residual herbicide. Do not apply near unprotected trees less than 3 years old. Do not allow spray or spray drift to contact any part of stone fruit trees, or green bark, suckers, buds, foliage or fruit of other trees. Do not allow wiper surfaces to contact any part of the trees. Weed foliage coated in copper or calcium based compounds may reduce the activity of **MACHETTE® 540**.

Market Gardens: MACHETTE® 540 can be applied before or after seeding and prior to crop emergence. **MACHETTE® 540** can be applied prior to transplanting or as a post-harvest clean-up for longer term control of seedling weeds. **MACHETTE® 540** may be tank mixed with suitable residual herbicides. Use in accordance with the label recommendations for these products.

Asparagus: MACHETTE® 540 can be applied following the final harvest and immediately after removal of all spears but before crop regrowth occurs. Prior to planting or crop emergence. Do not treat emerging spears. In established ferns as a directed or shielded spray or with wiper equipment. Do not allow spray, spray drift or the wiper surface to contact any part of the asparagus plants.

Industrial and Non-agricultural Areas: MACHETTE® 540 can be used for the control of annual and perennial weeds as directed. For residual control **MACHETTE® 540** can be tank mixed with simazine or another suitable residual herbicide. Exercise caution when using residual herbicides prior to planting trees, shrubs or other ornamental plants.

Turf grass and Recreational Areas: Apply before establishing lawns, parks, reserves and ornamentals. **MACHETTE® 540** can be applied around the base of established trees as a directed or shielded spray or by wiper equipment. Do not allow spray, spray drift or the wiper surface to contact any part of the tree. In mown areas, allow sufficient re-growth before spraying.

Aquatic Areas: Drains and Waterways: Ensure that 75% of the weed to be treated is above water level or efficacy may be reduced. Following spray application do not submerge the treated plant as this will cause the herbicide to be washed off. Avoid treating silt laden plants.

Forestry: MACHETTE® 540 can be applied for the control of grasses and a wide range of brush weeds. The addition of **Force® Penetrant** is required for the control of bracken and gorse. Do not allow spray, spray drift or the wiper surface to contact the foliage or green bark of desirable trees as severe injury can occur.

APPLICATION INSTRUCTIONS:

For broadcast boom application flat fan, wide angle nozzles (e.g. 110°) using pressures of 200-280 kPa are preferred. Set boom height to ensure a double overlap of the spray pattern at the top of the weed canopy. Apply in 100-200 litres of clean water per hectare. For orchard application wide angle, even spray nozzles are preferred.

For knapsack or handgun applications adjust equipment to apply a fine spray. Use the minimum spray volume necessary to achieve uniform and complete coverage. Handgun spraying pressures of 1,000-2,000 kPa and No.4 to No.6 spray tips are recommended.

Wiper Application - pre-mix 1 part of **MACHETTE® 540** and 2 parts of clean water to prepare a 33% solution. Mix only enough herbicide for immediate needs and allow the wiping area to become fully saturated before commencing. The wiping area must remain moist and clean otherwise reduced results will occur. In heavy weed infestations or when treating perennial weeds such as Californian thistle or multi-crown ragwort, a double pass in opposite directions on the same day will give the best results. As weed density increases, decrease ground speed.

Aircraft Application - **MACHETTE® 540** may be applied by aircraft in forestry and non-cropping areas only. Aerial application of **MACHETTE® 540** is not recommended on cropping land or near desirable plant species as even slight drift may cause severe injury or destruction. Do not apply in gusty or windy conditions or in other conditions conducive to drift, e.g. still air and inversion conditions.

Mist blower Application - Use a solution of 200mL of **MACHETTE® 540** in 10 litres of water. For the micron attachment increase to 1.3 litres of **MACHETTE® 540** in 10 litres of water. Provide complete coverage and spray to wet but not to runoff.

WEEDS CONTROLLED - BRUSHWEEDS

Weed	Boom or Aerial L/Ha	Handgun L/100L	Knapsack mL/10L	Mistblower mL/10L	Critical Comment
Barberry	-	0.66	66	200	Apply Jan to April from flowering to late fruit. Where bushes have been cut, regrowth should be 1.5 meters tall before spraying.
Blackberry	6 - 12.3	0.66 - 1	66	200	Apply to healthy plants from blossom to ripe fruit stage prior to Autumn frosts (Dec to Apr). Only bushes with a well developed canopy of leaves should be treated. Early treatment (Dec. to Jan.) may be preferred in drought prone areas. Leave sprayed blackberry for 40-60 days before burning or slashing and over sow the area. Where treatment has been carried out under marginal conditions some regrowth can be expected within 1-2 years. For aerial application of hard to kill blackberry or where no follow-up pasture management is anticipated, use the higher rate.
Boxthorn	-	0.83	-	-	Apply Nov to Apr to actively growing plants. Avoid salt damaged plants. Spray to ensure complete coverage of dense thickets. DO NOT use additional surfactant as poor results may occur.
Bracken	6 + 250ml Force' Penetrant per 100L (Min 500ml/Ha)	0.66 + 200ml Force' Penetrant per 100L	66 + 20ml Force' Penetrant	-	Apply when fronds are unfurled (mid Jan. to June) but prior to frost browning. DENSE VIRGIN BRACKEN WITH HIGH TRASH CONTENT AND LOW LEAF TO ROOT RATIO SHOULD BE BURNT IN SPRING AND THE UNFURLED FROND REGROWTH SPRAYED THE FOLLOWING MARCH TO JUNE.
Broom	6 + 250ml Force' Penetrant per 100L (Min 500ml/Ha)	0.66 + 200ml Force' Penetrant per 100L	66 + 20ml Force' Penetrant	200 + 20ml Force' Penetrant	Aerial Application - Best results are obtained when plants are in full leaf. Handgun Application - Apply all year round. Ensure full coverage.
Buddleja	6	0.66	66	-	Handgun - If actively growing treat all year. Aerial - Treat buddleia up to 2 meters high during Feb. to Apr.
Gorse	-	0.66 + 200ml Force' Penetrant per 100L	-	-	Apply all year round. Spray to ensure complete coverage.
Old Mans's Beard	-	0.66 - 1.3	130	-	Apply Nov to Mar prior to leaf senescence. Vines too high for complete coverage should be cut at ground level in winter or spring and the regrowth sprayed in Mar when plants are at least 0.5 meters long. Follow-up treatment will be necessary to control seedlings. Use the low rate for small vines.
PampasGrass Toetoe	-	0.66	66	-	Apply Spring-Autumn. Ensure complete coverage. Best results are achieved when applied after flowering.
Ring Fern	0.66 - 2	0.2	23	-	Control: Apply 2 litres/ha in Jan to Apr Pasture Manipulation: Apply 700ml - 1.4 litres/ha Dec to Apr. Use the high rate for dense infestations. Burn 4-6 weeks after treatment and oversow with pasture.
Sweet Briar	8 + 250ml Force' Penetrant per 100L (Min 500ml/Ha)	0.66 + 200ml Force' Penetrant per 100L	66 + 20ml Force' Penetrant	-	Apply from late flowering to early leaf yellowing. Best results achieved with full coverage.
Willow	9 - 12 + 250ml Force' Penetrant per 100L (Min 500ml/Ha)	0.66 + 200ml Force' Penetrant per 100L	-	-	Apply from Jan. to Apr. before leaf fall begins. Total spray coverage is essential for best results. Use the high rate for pussy willow control.

WEEDS CONTROLLED - ANNUAL WEEDS

Weed	Boom or Aerial L/Ha	Handgun L/100L	Knapsack mL/10L	Mistblower mL/10L	Critical Comment
Annual Weeds	0.66 - 1.3	0.13	13	40	Use higher rate for larger weeds.
Barley Grass	0.66	0.13	13	40	
Cleavers	1	0.33	33	100	
Rye Grass Short rotation (Annual, Italian, Hybrid)					Ensure plants are actively growing and have at least 5-10 cm of green leaf. Add Force' Penetrant at all times.
Estab. < 8mths	2 - 2.7 + 100ml Force' Penetrant per 100L	0.66 + 100ml Force' Penetrant per 100L	66 + 10ml Force' Penetrant	200 + 10ml Force' Penetrant	
Estab. > 8mths	2.7 + 100ml Force' Penetrant per 100L	0.66 + 100ml Force' Penetrant per 100L	66 + 10ml Force' Penetrant	200 + 10ml Force' Penetrant	

WEEDS CONTROLLED - PERENNIAL WEEDS

Weed	Boom or Aerial L/Ha	Handgun L/100L	Knapsack mL/10L	Mistblower mL/10L	Critical Comment
Australian Sedge	4 Aerial 6	0.66	66	200	Apply from Nov to Mar Where rank growth is present the area should be burnt 12-18 months prior to aerial application to ensure adequate spray coverage.
Brown Top	4	0.66	66	200	Apply to 5 -10cm high actively growing plants. Some regrowth may occur. Longterm control requires a pasture renewal programme utilising annual crops and repeat applications of MACHETTE® 540 before re-establishing perennial pasture.
Californian Thistle	2.7	0.66	66	200	Apply after flower bud development but before autumn browning. To ensure maximum shoot emergence do not cultivate for 6 months prior to treatment. Wiper - a double pass at low speed is recommended in heavy infestations. Mowing thistles 10 days after treatment may assist control. Retreatment may be necessary in the following season.
Couch	2 - 4	0.66	66	200	For suppression use 2 litres/ha, for control use 2.7 - 4 litres/ha when growing conditions are satisfactory. Autumn treatment is preferable. Use the high rate in late spring. Apply to plants with at least 4-5 leaves (at least 10-15 cm leaf length) and active shoot and root growth. Do not cultivate for 6 months prior to application to ensure maximum shoot emergence. Some regrowth may occur. Long term control requires a pasture renewal programme utilising annual crops and repeat applications of MACHETTE® 540 before re-establishing perennial pasture. See the Use Recommendations section for control of couch in a pre-harvest situation.
Chewings Fescue Red Fescue	6 + 100ml Force Penetrant per 100L	0.66 + 100ml Force Penetrant per 100L	-	-	Apply to healthy actively growing plants with 10-15 cm leaf length. Spring treatment gives best results. Some regrowth may occur. Long term control requires a pasture renewal programme utilising annual crops and repeat applications of MACHETTE® 540 before re-establishing perennial pasture.
Dock	2.7 - 6	0.66	66	-	Treat plants in spring or summer when actively growing and in full leaf. Use low rate for seedlings and young plants. Use high rate for control of established plants.
Floating Sweet Grass, Reed Sweet Grass	4	0.66	66	200	Apply to actively growing plants when most have reached early seed head.
Indian Doab	6	0.66	66	-	Apply when most plants have reached early seed head.
Johnson Grass	4	0.66	66	200	Apply to actively growing plants.
Kikuyu	4	0.66	66	200	Apply to actively growing plants. Under dense growth conditions mulch and allow at least 10-15 cm of regrowth before treatment. Long term control requires a pasture renewal programme utilising annual crops and repeat applications of MACHETTE® 540 before re-establishing perennial pastures.
Mercer Grass Aquatic Non-aquatic	6 4	1 0.66	100 66	300 200	
Nodding Thistle	4	0.66	66	-	Wiper Application (see Application Instructions). Apply when actively growing when at least 10cm of the weed can be wiped. In heavy infestations a double pass is recommended.
Paspalum	2.7 - 4	0.66	66	200	Use the low rate from Jan to Apr (early seed head) prior to frosts. Use 4 litres/ha on vegetative plants.
Potato (self set)	2	0.33	33	100	
Prairie Grass	1	-	-	-	
Ragwort	4	0.66	66	-	Apply when actively growing. Wiper - apply when plants are 10-15cm above the pasture. In heavy infestations a double pass is recommended. Caution: Ragwort plants may become more palatable following spraying and stock should be removed until the treated plants brown out.
Ratstail	3.3	-	-	-	Apply to actively growing plants in Autumn.
Rautahi (Cutty Grass)	4	0.66	66	200	Apply to actively growing plants from Jan to Mar Burning or slashing may take place from 30 days after treatment following brownout. Wiper (Rushes only). Apply Nov to May.
Rushes	4	0.66	66	200	
Ryegrass Perennial	2.7 + 100ml Force Penetrant per 100L	0.66 + 100ml Force Penetrant per 100L	66 + 10ml Force Penetrant	-	Ensure plants are actively growing and have at least 5 - 10 cm of green leaf. Add Force Penetrant at all times.
Tall Fescue	4	0.66	66	200	Apply to actively growing plants Jan to Mar.
Yarrow	2 - 4	-	-	-	Apply to plants with 5-10cm of leaf. Cultivate with a minimum of 2 grubblings from 10 days after treatment. Use the 2 litre rate when a competitive crop to yarrow is to be drilled. Use the 4 litre rate when the crop to be drilled is a poor competitor.

For wiper see application instructions in directions.



DANGER
KEEP OUT OF REACH OF CHILDREN

SCYTHE[®]

HERBICIDE

A non-selective contact herbicide for the control
of a wide range of broadleaf and grass weeds
in orchards, vineyard and non crop areas.

ACTIVE INGREDIENT: Contains 200 g/l glufosinate ammonium
in the form of a soluble concentrate.

NET CONTENTS: 20 litres

GSSY574/F03

Grosafe[®]

SCYTHE®

HAZARD CLASSIFICATIONS: Eye irritation Category 2, Reproductive toxicity Category 2, Specific target organ toxicity (repeated exposure) Category 1, Hazardous to soil organisms, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment chronic Category 3.

DANGER: Causes target organ damage from repeated oral doses at high rates. Causes serious eye irritation. May cause reproductive/development damage from repeated doses.

ECOTOXICITY: Harmful to aquatic life with long-lasting effects. Harmful to soil organisms and to terrestrial vertebrates. Do not apply directly into or onto water. Take all reasonable steps to ensure that the product does not cause any adverse effects to the environment beyond the application area.

PERSONAL PROTECTION: When mixing or loading wear overalls, impervious gloves and eye/ face protection. Wash hands and exposed skin after work. Wash personal protection clothing and equipment before re-use.

STORAGE: Store in original container tightly closed and in a locked, dry, cool, well ventilated area, away from foodstuffs, fertiliser and seeds. Storage should be in accordance with current version of NZS 8409 Management of Agrichemicals. When stored appropriately this product should show no significant degradation for 2 years from the date of manufacture. Contact the proprietor for further information about the use of this product if it is older than this.

SPILLS: When dealing with spills wear personal protective clothing and equipment as described in the PERSONAL PROTECTION section. Contain spilled material, absorb with sawdust or inert material and place in properly labeled, sealed drums for safe disposal. If spray mixture is spilt absorb and collect in drums as above. Deal with all spillages immediately. If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority.

DISPOSAL: Avoid contamination of any water supply with product or empty container.

PRODUCT DISPOSAL: If possible dispose of by using according to the label, otherwise dispose of in an approved landfill or bury below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots.

CONTAINER DISPOSAL: Triple rinse container and add residue to mixture. Recycle containers if possible, otherwise crush and bury in an approved land fill.

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

FIRST AID: If exposed or concerned, get medical advice. For advice call a doctor or the National Poisons Centre (0800 764 766) If swallowed do NOT induce vomiting. Rinse mouth. Get medical advice if feeling unwell. If in eyes, immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do after the first few minutes and continue rinsing. If on skin, wash with plenty of soap and water. Get medical attention if eye or skin irritation persists.

EMERGENCY RESPONSE 0800 CHEMCALL: 0800 243 622

GENERAL INFORMATION

Scythe is absorbed by the foliage and green stems of actively growing plants. It is inactive in soil and is not translocated within the plants, so thorough coverage is essential for good results. Visual effects of treatment will become evident more rapidly under ideal growing conditions: generally within 3 – 10 days. Rainfall within 2 hours of application may wash **Scythe** off the foliage, and within 6 hours will reduce effectiveness so that re-treatment may be necessary. Do not spray in temperatures below 10°C. Avoid contact with green parts, including immature bark, of desirable plants, as damage may occur. Do not mow or cultivate after treatment until the weeds start to die.

WITHHOLDING PERIOD: 28 days (all crops)

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.

MIXING / COMPATIBILITY: Add the required amount of **Scythe** to the partly filled spray tank, start agitation. Maintain agitation while filling and applying. **Scythe** is compatible with most commonly used residual herbicides.

RECOMMENDATIONS FOR USE:

The maximum application rate of **Scythe** is 10 L/ha (2.03 kg ai/ha), with a maximum of two applications per year and a minimum application interval of 90 days. Only ground-based application methods can be used.

CROP	RATE	COMMENTS
Berryfruit (raspberries and brambles) primocane control	500-750 ml/100 litres, applied via cone nozzles in sufficient water to ensure complete coverage of primocanes.	Apply as a directed high volume spray to primocanes not exceeding 25 cm. Avoid drift onto foliage of fruiting canes. Use the high rate on vigorously growing crops. Add a non ionic wetter. Do not apply before the first primocanes have reached 15 cm. Do not apply to plants under stress.
Orchard and Vineyard weed control. (pipfruit, kiwifruit, stonefruit, grapes and citrus)	Choose rate according to the weeds present. If dilution rate is less than 1litre/100 litres of water add a non ionic wetter at label rate.	Apply in Spring when the majority of annual weeds have germinated. Appropriate residual herbicides may be applied in mixture for long-term weed control.
Stale seedbed preparation, especially where clover is a problem	3-5 litres in 200 - 300 litres of water per ha.	Apply to seedling weeds and clover in sufficient water to ensure complete coverage. May be applied up to one day before crop emergence.
Non-crop land: general weed control	7.5-10 litres in 300 - 500 litres water per ha. (100 ml/10 litre knapsack).	Apply to run-off. Appropriate residual herbicides may be applied in mixture for long-term weed control.

WEED SUSCEPTIBILITY:

Use the lower rates only when weeds are young, succulent and actively growing, or when the weed population is sparse, allowing good coverage and penetration. Use the higher rates when weeds are larger or the population is dense. **Scythe** may not control mature weeds or those with developed tap roots or underground storage organs. Some regrowth may occur following treatment.

Indicated dose range for major weeds

3 - 5 litres/ha

Annual poa, Asparagus seedlings, Beaked hawksbeard, Black nightshade, Calandrinia, Chickweed, Cleavers, Clover seedlings, Cornbind, Daisy, Dandelion, Mouse-eared chickweed, Musky storksbill, Redroot, Rough-stalked meadow grass, Scotch thistle, Sow thistle, Stagger weed, Summer grass, Spurrey, Stinking mayweed, Subterranean clover, Wild turnip, Willow weed, Wireweed.

5 - 7.5 litres/ha

Bristle grass, Bur medick, Catsear, Chewing's fescue, Clovers, Cut-leaved geranium, Docks, Fleabane, Parsley piert, Prairie grass, Ryegrasses*, Sheep's sorrel, Storksbill, Strawberry, Twin Cress, Yorkshire fog.

7.5 - 10 litres/ha

Broom, Buttercups*, Couch, Field pansy, Crowfoot grass, Gorse, Hawksbeard, Kikuyu grass, Mallow, Paspalum, Tall fescue, Wild strawberry, Willow herb, Yarrow.

10 litres plus/ha

Bracken, Indian doab, Meadow rice grass, Plantains, Rape, Rushes, Sedges.

* Resistant weeds: Hairy buttercup, some Ryegrass strains

Registered pursuant to the ACVM Act 1997, No P009031 See www.foodsafety.govt.nz for registration conditions.

Approved pursuant to HSNO Act 1996, HSR 007813. See www.epa.govt.nz for approval conditions.

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 PROPRIETOR:

Grosafe
CHEMICALS LTD

20 JEAN BATTEN DRIVE
MT MAUNGANUI 3116
POBox 14-450 Tauranga 3143
FREE PHONE 0800 220 002
info@grosafe.co.nz
www.grosafe.co.nz



9 421902 986574 >

Batch No:

Date of Manufacture:

Scythe® is a registered trademark of Grosafe Chemicals Ltd. GSSY574-Y/B01





DANGER
Keep out of reach of children
ECOTOXIC
Read label before use

KNOCKDOWN PLUS® HERBICIDE

Grass friendly herbicide for the control of gorse, broom, blackberry and other brush weeds. Also for broadleaf weed control in turf.

ACTIVE INGREDIENT: Contains 600g/litre triclopyr as the butoxy ethyl ester in the form of an emulsifiable concentrate.

GSKP019/F02



Grosafe®

KNOCKDOWN® PLUS

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

FLAMMABILITY
 Combustible liquid. Keep away from heat, sparks, open flames and hot surfaces. No smoking.

TOXICITY
 May be fatal if swallowed and enters airways. May cause an allergic skin reaction and serious eye irritation. May cause organ damage through prolonged or repeated exposure.

ECOTOXICITY
 Very toxic to aquatic life and with long lasting effects. Hazardous to soil organisms. Hazardous to terrestrial vertebrates. Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area. Do not apply onto or into water. Do not mix or apply near any body of water, avoid spray drift over, or spillage into water.

QUALIFIED PERSON: The person mixing, loading or applying this product must be suitably qualified.

RECORD KEEPING: Records of use as described in NZS 8409 Management of Agrichemicals must be kept if more than 3 kgs of KNOCKDOWN PLUS* is applied within a 24 hour period where the substance is likely to enter air or water and leave the application area.

PERSONAL PROTECTION: When mixing or applying wear overalls, impervious gloves and eye/ face protection. Do not breathe mist, vapours or spray. Use only outdoors or in well-ventilated area. Do not eat, drink or smoke while using the product. Wash hands and exposed skin before meals and after work. Wash protective clothing and equipment before reuse. Contaminated work clothing should not leave the work place.

STORAGE: Store locked up in original container tightly closed and in a dry, cool, well ventilated area away from foodstuffs. Keep out of reach of children. Storage of 100L or more requires signage, secondary containment and an emergency response plan.

In case of fire: Use water spray or foam.

SHELF LIFE: When stored appropriately this product should show no significant degradation for 2 years from date of manufacture. Contact the supplier for further information about the use of this product if it is older than this.

SPILLS: When dealing with spills wear personal protective clothing and equipment as described in the PERSONAL PROTECTION section. If spill, contain and absorb with inert material such as soil or sand, collect into properly labelled drums that can be sealed for safe disposal. Deal with all spillages immediately. If contamination of drains, streams, watercourses, etc. is unavoidable, advise the local water authority.

DISPOSAL: Avoid contamination of any water supply with product or empty container.

PRODUCT DISPOSAL: If possible dispose of by using according to the label. Otherwise dispose of in an approved landfill or bury below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots.

CONTAINER DISPOSAL: Do not use packaging for storage of any other products. Triple rinse empty container and add rinsate to spray tank. Recycle 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: For advice call the National Poison Centre, telephone 0800 POISON [0800 764 766] for advice. Have product container or label at hand.

IF SWALLOWED: Do NOT induce vomiting. Rinse mouth with water. Immediately call a Poison Centre or doctor.

IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTRE or doctor if you feel unwell. Wash contaminated clothing before re-use.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists then get medical advice/attention.

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a Poison Centre or doctor for advice if you feel unwell.

EMERGENCY RESPONSE 0800 CHEMCALL: (0800 243 622)

GENERAL INFORMATION:

KNOCKDOWN PLUS* is damaging to clovers at the rates recommended for brush weed control. To minimise clover damage, hard graze to remove as much clover leaf as possible before spraying.

For best results, spray brush weeds between November and February when they are actively growing. Use the higher rate for periods of less active growth between February and May. Spraying during winter dormancy or when plants are stressed (e.g. from drought, hard grazing, water logging, previous cutting or salt damage) can give variable results. Follow-up treatment may be required for complete control.

EQUIPMENT: Apply using well maintained and accurately calibrated equipment. Do not use strainers finer than 300 micrometers. Clean equipment thoroughly after use with clean water. Do not use equipment which has applied KNOCKDOWN PLUS* or applying other materials to desirable plants unless it has been thoroughly decontaminated using procedures recommended for phenoxy herbicides.

ANIMAL SAFETY: Poisonous plants may become more palatable after spraying. Stock should be kept away from the treated area until the plants have died down.

DIRECTIONS FOR USE:
 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.
Gun Spraying
 Completely wet the foliage and stems from all directions. Use a spraying pressure of 1000 - 2000 kPa.

WEED	RATE / 100L	NOTES
Gorse, Broom	200ml	During periods of soft active growth between November and February.
	300ml	When spraying outside the optimal period or when plants are not actively growing.
	Note: The use of an organosilicone penetrant such as Force® Penetrant at 100ml /100L is recommended to improve control of gorse.	

WEED	RATE / 100L	NOTES
Blackberry	300ml	During periods of active growth in summer and early autumn.
	600ml	For hard grazed or lower growing types found in the North Island, East Coast and Northland regions. Some 'difficult-to-kill' species, especially in Northland are not well controlled.
	Note: Remove canes in the following spring by burning, slashing or crushing.	
Lupin	150ml	Apply during active growth from spring until late summer.
Sweet Brier	500ml	Apply from late flowering to early leaf yellowing.
Old Mans Beard	400ml	Treat November - March before leaf senescence.
Tutu	300ml	Treat regrowth after frond expansion.
Fennel	300ml	Apply to actively growing plants.

Aerial Application

Apply with a calibrated aircraft using the half overlap-opposite pass technique. Use 200 - 400 litres of water per hectare. Use low drift nozzles which minimise the production of small droplets. The use of a drift control agent is recommended. Preferred wind conditions are a light constant breeze away from any sensitive crop. Some follow-up ground treatment may be required.

WEED	RATE LITRES/HA	NOTES
Gorse, Broom	10	Apply only during active growth (post flowering). Hard grazed scattered gorse should be ground treated. Best results are obtained from treating bushes less than 2m high with less than 3cm diameter stems.
	5	Use for desiccation 3-4 months before burning.
	3	To control actively growing seedlings beyond the cotyledon stage.
	Note: The use of an organosilicone penetrant such as Force® Penetrant at 250ml /100L is recommended to improve control on gorse.	
Lupin	3	Apply during active growth from November to January.
Tutu	8	Treat fresh regrowth after frond expansion. Follow-up ground treatment may be required.
Blackberry	10	Apply during active growth in summer to early autumn. Remove canes in the following spring by crushing, burning or slashing. There will be some regrowth requiring follow-up treatment, especially in Northland and the North Island East Coast regions.

Stump Swabbing: Barberry, hawthorn, woolly nightshade, wattle, willow: Mix one part KNOCKDOWN PLUS* with 20 parts water or diesel. Using a paintbrush or knapsack liberally cover the cut surface and stem to ground level. If using diesel agitate while filling and during use.

Knapsack: Use 60ml KNOCKDOWN PLUS* per 10 litres water.

Mist blower: Use 100ml/10 litres water. For ULV attachments use 500ml/10 litres water, with a number 3 or 4 hole.

Forestry: Aerial release of radiata pine.

For gorse, broom, lupins, Himalaya honeysuckle, wattles. Use 1-2 litres/ha. Apply the lower rate when young trees are not dormant. Only use the higher rate when trees are dormant and within one year of planting. Some minor tree distortion may occur. Note that only weed suppression will be obtained.

Turf Grass: To control hydrocotyle, creeping oxalis and some other broadleaf weeds. Apply 2 litres/ha. Some burning of fine turf grasses may occur.

Lawnbay: Use 10ml per 3 litres of water per 100 square metres. Apply twice in different directions. Do not use clippings from treated areas for compost or mulch for 6 months after treatment.

Registered pursuant to the ACVM Act 1997, No P9568
 See www.foodsafety.govt.nz for registration conditions.

Approved pursuant to HSN0 Act 1996, Approval Code: No HSR100917
 See www.epa.govt.nz for approval conditions.

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 Maunganui 3116
 POBox 14-450 Tauranga 3141
 Tel: 0800 220 002
 Email: info@grosafe.co.nz
www.grosafe.co.nz

Batch No:
 Date of Manufacture:



KNOCKDOWN PLUS® and Force® are the registered trademarks of Grosafe Chemicals Ltd.

2016/03/03



WARNING
Keep out of reach of children
Read label completely before mixing or applying
Not to be used on turf
ECOTOXIC

PICCOLOTM

HERBICIDE

Controls certain broadleaf weeds in fodder
brassicas and radiata pine.

ACTIVE INGREDIENTS: 150g/L picloram and 225g/L clopyralid
both as the monoethanolamine salt in the form of a soluble concentrate.

GSPC738/F01



Grosafe[®]

PICCOLO™

HAZARD CLASSIFICATION:
 Eye irritation Category 2, Hazardous to soil organisms, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment chronic Category 3

This product must not be used for any purpose, or in any manner, contrary to this label unless authorised under appropriate legislation.

TOXICITY: Causes serious eye irritation.
ECOTOXICITY: Harmful in the aquatic environment with long-lasting effects. **SELECTIVE HERBICIDE** – very toxic to some plant species. Harmful to terrestrial vertebrates.
Do not apply onto or into water. Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area. Do not allow spray drift over aquatic environments.
 Do NOT use on the bottoms of drains, ditches or irrigation channels. Treated vegetation shall not be disposed of at any green waste recycling centre.
QUALIFIED HANDLER: This product must be under the control of a suitably qualified handler when mixed, loaded or applied.
RECORD KEEPING: Records of use as described in NZS 8409 Management of Agrichemicals must be kept if using 3kg or more of PICCOLO is applied to an application area within 24 hours.
TRANSPORT: Do not carry more than 1L on a passenger service vehicle. Quantities of 1L or less carried on a passenger service vehicle must be contained within sealed packaging.
PERSONAL PROTECTION: Avoid contact with skin or eyes and inhalation of spray mist. When handling wear eye protection, waterproof gloves, boots and overalls. Do not eat, drink or smoke while using. Remove protective clothing and wash hands and face thoroughly before meals and after work. Wash contaminated clothing and protective equipment before re-use.
STORAGE: Keep out of reach of children. Store in original container tightly closed and in a locked, dry, cool area away from foodstuffs, seeds, and fertilisers. Storage must be in accordance with the current version of NZS 8409 Management of Agrichemicals. Stores containing more than 1000 L of PICCOLO require signage and secondary containment, and emergency response plan.
EQUIPMENT: Apply using well maintained and accurately calibrated spray equipment. Clean equipment thoroughly after use.
SPILLS: When dealing with spills wear personal protective clothing and equipment as described in the PERSONAL PROTECTION section. Contain spilled product with inert material and store in properly labelled, sealed drums for safe disposal. If spray mixture is spilled, absorb and collect in drums as above. 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. DO NOT contaminate any water supply with product or empty container. DO NOT dispose of this product, spray mix or equipment cleaning water down drains or sewers. DO NOT burn.
CONTAINER DISPOSAL: Triple rinse empty container and add rinsate 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 medical advice is needed, have product container or label at hand. **For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately.** If swallowed, do NOT induce vomiting. Rinse mouth. Get medical advice. If inhaled, remove to fresh air and keep at rest in a position comfortable for breathing. Get medical advice if you feel unwell. If on skin, wash with plenty of soap and water. If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice if eye irritation persists.

EMERGENCY RESPONSE 0800 CHEMCALL (0800 243 622)

DIRECTIONS FOR USE FODDER BRASSICAS

WEEDS	RATE	COMMENTS
Fathen, Black nightshade, Thorn apple, Redroot (suppression only)	350 ml/ha	Apply to actively growing 2-8 true leaf seedlings. Time of application should be determined by the growth stage and activity of the weed and not the crop. Always apply PICCOLO to fodder brassicas in mixture with EnSpray 99° Spraying Oil. Aerial and ground broadcast application: Use 500ml EnSpray 99° per 100 litres of spray mix.

SOIL RESIDUES AND CROP ROTATIONS

CROP	COMMENTS
Clovers	Establishment and growth are possible in pastures sown after brassicas treated with recommended rates of PICCOLO . To minimise potential damage to clovers from picloram soil residues, allow a minimum of 6 months after treatment, deep plough and surface cultivate before sowing pasture.
Cereal crops	May be sown following brassicas treated with PICCOLO
Potatoes, peas, lucerne, beans, curcubits, tomatoes and other crops which are highly susceptible to picloram	DO NOT sow for at least 1 year and not until it has been demonstrated that it is safe to do so. DO NOT use PICCOLO if it will be necessary to sow susceptible crops within the above-suggested periods. Avoid repeat treatments of PICCOLO to successive brassica crops as this can increase the potential for soil residues.

The rate of decline of soil residues is dependent on several factors (including soil type and rainfall) and will vary from district to district. Under low rainfall conditions (less than 800mm per year) or in heavy, poor draining soil, delay planting of susceptible crops for at least two years. If in doubt regarding other crops, or for further information consult a Grosafe representative.

RADIATA PINE

WEEDS	RATE	COMMENTS
Gorse, Broom	2.0 - 2.5 L/ha	Add Force® Ultra (500ml/ha). See Selectivity note below.
Woolly nightshade, Fleabane, Fireweed, Foxglove, Ragwort, Tree lucerne, Wattles	2.0 L/ha	For maximum suppression of gorse and broom, apply during the period of soft active growth when there is good soil moisture. At treatment, gorse and broom should be no less than 10cm high and preferably no more than 50cm high. Application outside these conditions may result in reduced weed suppression. For effective weed suppression, DO NOT apply beyond the end of February in the growth season. In some situations, retreatment during the following active growth season will be beneficial. PICCOLO may not adequately suppress new regrowth from stumps or coppice.
Thistles	1.0 L/ha	

RADIATA PINE RELEASE FROM GORSE AND BROOM:

Aerial Application: Apply 2.0-2.5 L/ha of **PICCOLO** with 500 ml/ha **Force® Ultra**

Spot Spray: Mix 200 ml of **PICCOLO** in 10 L of water. Apply 10 ml of mix per square metre over the tree. **DO NOT** add **Force® Ultra** to spot mixes.

Timing: For maximum suppression of gorse and broom, apply during the period of soft active growth when there is good soil moisture. At treatment, gorse and broom should be no less than 10 cm high and preferably no more than 50 cm high. Application outside these conditions may result in reduced weed suppression. For effective weed suppression, **DO NOT** apply beyond the end of February in the growth season. In some situations, retreatment during the following active growth season will be beneficial. **PICCOLO** may not adequately suppress new regrowth from stumps or coppice.

Selectivity: With accurate application, good selectivity to Radiata Pine is achieved. In some instances, some twisting of needles and stems may occur. This is transient and will not affect long-term growth of the tree. **PICCOLO** is **injurious to legumes such as clovers and lotus.**

Compatibility: **PICCOLO** is compatible with formulations containing haloxyfop-p 520 g/L as an EC or a S-metolachlor 312.5 g/L + Terbutylazine 187.5 g/L as a SC. **Force® Ultra** should not be used when **PICCOLO** is mixed with other herbicides. Use **EnSpray 99°** Spraying Oil when mixing **PICCOLO** with a haloxyfop-p 520g/L EC formulation.

Registered pursuant to ACVM Act 1997, No. P10164 See www.foodsafety.govt.nz for registration conditions
 Approved pursuant to the HSN Act 1996, HSR 000762 See www.epa.govt.nz for controls

Registered to and distributed by:

Grosafe Chemicals Ltd
 20 Jean Batten Drive
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 PO Box 14-450 Tauranga 3141
 Tel: 0800 220 002
 Email: info@grosafe.co.nz
www.grosafe.co.nz

Batch No:

Date of Manufacture:



RESISTANCE MANAGEMENT

GROUP 4 HERBICIDE

PICCOLO contains chemicals from the pyridine carboxylic-acid group of herbicides (Group 4) which have an auxin mimic mode of action. Some naturally occurring individual weeds may become resistant when excessive use of the same herbicide occurs. To maximise the effectiveness of herbicides, products containing alternate modes of action should be used in the spray program. Use strictly in accordance with label instructions and follow any resistance management strategies from www.resistance.nzpps.org/.

ANIMAL SAFETY

Poisonous plants (including but not limited to black nightshade, ragwort and thornapple) may become more palatable after spraying. If concerned that stock health may be affected, stock should be kept away from the area until the plants have died down.

APPLICATION

PICCOLO can be applied using conventional ground or aircraft spraying equipment. Equipment should be decontaminated **before and after** using **PICCOLO**, particularly if herbicides such as MCPA, MCPB, 2,4-D or sulfonylurea herbicides have been used prior to **PICCOLO** or if susceptible crops are to be sprayed after use of **PICCOLO** (see Crop Rotations in the brassica use directions section below). Small amounts of the above herbicides can severely affect brassica crops.

MIXING

Half fill the spray tank and add the required amount of **PICCOLO**. Add the remainder of the water, with the agitator running. If required add the **EnSpray99®** Spraying Oil or **Force® Ultra**. Maintain agitation during spraying. Only mix sufficient spray solution for immediate use and avoid storing.

Cleaning spray equipment:

Rinsing - After using **PICCOLO** or any of the above-mentioned herbicides, 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, quarter fill the tank and add a standard alkali based laundry detergent at 500g (or mL)/100L water and circulate throughout the system for at least 15 minutes. If using a concentrated laundry detergent use 250g (or mL)/100L water. **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. The effectiveness of decontamination should be checked by applying water from the decontaminated sprayer to sensitive plants such as beans or peas and observing if any symptoms develop in the sprayed plants over 10 days. If sulfonylurea herbicides have been used, follow the directions on the relevant herbicide label for decontamination of spray equipment. Cleaning water should be discharged onto a designated disposal area, or onto unused land away from water sources and desirable plants.

Using the spray equipment:

IMPORTANT: In order to select the appropriate nozzles for the required spray quality and operate the equipment to minimise spray drift, this product must be applied in accordance with the New Zealand Standard for the Management of Agrichemicals (NZS8409).

Aerial and boom spraying (Brassicas only): Use a minimum 100-300 litres of water per hectare applied as a coarse quality spray as defined by the British Crop Protection Council (BCPC) system or the American Society of Agricultural Engineers (S572) (ASAE). Use higher water rate where weeds are dense.

Controlled Droplet Application (CDA) Spraying (Brassicas only): Use not less than 30 litres water per hectare using spray equipment which will produce a droplet size of 250-300 microns. Trials indicate that CDA application may result in less effective weed control than conventional boom spraying.

Aerial spraying (Radiata Pine only): Use a minimum 150 litres of water per hectare using the double pass, overlap flying system and applied as a coarse quality spray as defined by the British Crop Protection Council (BCPC) system or the American Society of Agricultural Engineers (S572) (ASAE). Select a nozzle configuration to ensure thorough coverage. Disc and core nozzles are recommended. In calculating area treated, allow for topography to ensure the correct herbicide rate per hectare is applied.

Spot Spraying (Radiata pine): Use a pressure of 1000-2000 kPa through a No. 6-8 tip and apply to give full coverage of leaves and stems from all directions.

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.

Other than for animal safety or crop rotation purposes a withholding period is not required when used as directed. The restraint on sending treated green material to a green waste recycling centre is not required 12 months after treatment.

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.

Piccolo®, EnSpray 99® and Force® are registered trademarks of Grosafe Chemicals Ltd.

GSPC798/B01



WARNING

ECOTOXIC

Keep out of reach of children

RECLAIM[®] BRUSHKILLER HERBICIDE

A herbicide for the control of a
range of brushweeds.

ACTIVE INGREDIENT: Contains 100g/litre picloram as the amine salt and
300 g/litre triclopyr as the butoxyethyl ester, in the form of an emulsifiable concentrate.

GSR8369/F04



RECLAIM[®] BRUSHKILLER
NET CONTENTS: 20 Litres

Grosafe[®]

RECLAIM® BRUSHKILLER

HAZARD CLASSIFICATION:

Acute toxicity oral Category 4, Eye irritation Category 2, Skin sensitisation Category 1, Specific target organ toxicity, repeated exposure Category 2, Hazardous to the aquatic environment, acute Category 1, Hazardous to aquatic environment, chronic Category 1, Hazardous to soil organisms, Hazardous to terrestrial vertebrates

TOXICITY
WARNING: Harmful if swallowed. Causes serious eye irritation. May cause an allergic skin reaction. May cause organ damage from repeated oral exposure at high doses.

ECOTOXICITY
 Highly toxic to aquatic plants. Toxic to plants and harmful to terrestrial vertebrates. Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area. Handle and apply with care, spray drift may cause severe damage to other desirable plants. Do not apply directly into or onto water. Avoid contamination of any water supply with product or empty container. Decontaminate equipment after use.

QUALIFIED HANDLER: This product must be under the control of an appropriately trained handler during mixing, loading and use.

RECORD KEEPING: Records of use must be kept when 3 kg or more is applied within 24 hours in a place where the substance is likely to enter air or water and leave the application area.

PERSONAL PROTECTION: When mixing or loading wear overalls, impervious gloves and eye/ face protection. Wash hands and exposed skin after work.

STORAGE: Store in original container tightly closed and in a locked, dry, cool, well ventilated area, away from foodstuffs, seeds and fertilisers. Storage must be in accordance with the current version of the New Zealand Standard for the Management of Agrichemicals (NZS8409). Stores containing more than 100 L require signage, secondary containment and an emergency response plan. When stored appropriately this product should show no significant degradation for two years from the date of manufacture. Contact the distributor for further information about the use of this product if it is older than this.

SPILLS AND DISPOSAL: When dealing with spills wear personal protective clothing and equipment as described in the PERSONAL PROTECTION section. Contain and collect spill. Absorb with suitable inert absorbent material and store in properly labelled, sealed drums for safe disposal. If spray mixture is spilled absorb and collect in drums as above. Deal with all spillages immediately. If contamination of drains, streams, watercourses, etc. is unavoidable, advise the local water authority.

PRODUCT DISPOSAL: If possible dispose of by using according to the label, otherwise dispose of in an approved landfill or bury below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots.

CONTAINER DISPOSAL: Triple rinse container and add residue to spray mixture. Recycle empty container through Agrecovery (www.agrecovery.co.nz), otherwise bury in a suitable land fill.

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

FIRST AID: For advice call a doctor or the National Poisons Centre (0800 764 766). If swallowed, give a glass or two of water but do NOT induce vomiting. Get medical advice if you feel unwell. If splashed in eyes, wash out immediately with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, get medical attention. If on skin, remove contaminated clothing immediately. Wash skin immediately with plenty of soap and water. If skin irritation or rash occurs, get medical advice. In case of inhalation of spray remove to fresh air. Get medical attention if breathing is difficult or person feels unwell.

EMERGENCY RESPONSE 0800 CHEMCALL: (0800 243 622)

SPRAY EQUIPMENT

Hand gun: Apply the recommended mix to give full coverage of leaves and stems, from all directions. Use a No. 6–8 tip and pressure of not less than 1,000 kPa or greater than 2,000 kPa.

Aerial application: Apply 200–400 litres spray-mix per hectare as a coarse spray (BCPC or ASAE S572). To minimise drift it is recommended to spray when wind speed is between 3 and 20 km/hr. Do not spray if sensitive plants are downwind. Aerial applications may require some follow-up ground spraying.

Knapsack: Apply the spray mix to give full coverage of leaves and stems.

Mistblower: Use only where good coverage can be achieved. Use a marker dye.

All applications must be in accordance with the New Zealand Standard for the Management of Agrichemicals (NZS 8409).

CLEANING SPRAY EQUIPMENT

After use empty the spray unit and drain the whole system. Wash the spray tank with a pressure hose. Drain the spray unit and clean filters, pump, lines, hoses and nozzles. Quarter fill the tank with clean water and circulate through the pump, lines, nozzles. Repeat this process. Note: rinse water should be sprayed on ground already sprayed or on waste land away from desirable plants or water sources.

DECONTAMINATION: Before spraying sensitive crops with equipment that has been used to apply Reclaim® Brushkiller, rinse the system as above. Quarter fill the tank and add an alkali based laundry detergent at the rate of 500g (or mL) per 100 litres of water (half the rate for concentrated cleaners). Circulate through the system for fifteen minutes. Do not use cleaners containing chlorine. Drain the system. Clean filters and nozzles. Flush the system with clean water.

MIXING: Half fill the spray tank with water and add the measured amount of Reclaim® Brushkiller. Start the agitator and add the remainder of the water. If required add Force® Penetrant. Maintain agitation while spraying. Mix only sufficient spray-mix for immediate use. Do not store spray-mix.

WITHHOLDING PERIOD:

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.

STOCK SAFETY: Poisonous plants (such as inkweed, ragwort, lulu) can become more palatable after spraying. If concerned, stock should be kept away from treated areas until the plants have died.

RESISTANCE MANAGEMENT:

GROUP	4	HERBICIDE
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Reclaim® Brushkiller is a pyridine carboxylic-acid herbicide. Some weed species may become resistant following repeated doses. In such cases herbicides of different modes of action should be used. See: <http://nzpps.org/resistance/picolinic.php> for details of resistance management strategies.

CLOVER RE-ESTABLISHMENT: Residues of picloram (an active ingredient in Reclaim® Brushkiller) are harmful to legumes and may prevent early re-establishment after treatment. To check for such residues it is suggested a test area should be sown with clover 1–2 months prior to the planned drilling time.

DIRECTIONS FOR USE / DOSE RATES

Weed	Gun mls/100L water	Aerial litres/ha	Weed	Gun mls/100L water	Aerial litres/ha
Gorse	250–300	10	Lupin	100	2
Broom	250	10	Sweet Briar	300–500	12
Tutu	300	10	Matagouri	500	12
Blackberry	500–650	10	Woolly Nightshade	250	10

Knapsack: Use 6 ml Reclaim® Brushkiller per litre of water.

Mistblower: Use 100 ml / 10 litres. For ulv application use 500 ml / 10 litres, using the No. 3 or 4 hole.

COMMENTS

GORSE:

Ground application: Apply during the active growth period, from spring until early summer at a rate of 250 ml / 100 litres. In North Canterbury use 300 ml / 100 litres. If growth is slow or in adverse conditions add Force® Penetrant at 100 ml / 100 litres spray mix. A follow up treatment may be necessary for complete control.

Aerial application: Apply during active growth. Add Force® Penetrant to the spraymix at 2 litres/hectare. Bushes should be less than 3m high, with stems less than 3 cm in diameter.

BROOM: Apply during the active growth period, from spring until early summer. Bushes should be less than 3m high, with stems less than 3 cm in diameter.

TUTU: Apply to fresh regrowth after frond expansion.

BLACKBERRY: Apply during summer and autumn when bushes are growing actively. Higher rates will be required in the East Coast of the North Island and in Northland. Note: in Northland some strains of this weed are difficult to kill.

SWEET BRIAR: Apply in November to early January. Aerial application should be restricted to bushes less than 2m high.

MATAGOURI: For best results spray in November - December when the plants are growing actively.

WOOLLY NIGHTSHADE: Ground and aerial application: Apply when growing actively. The use of Force® Penetrant is recommended.

RAGWORT and other weeds: Use the gorse application rate for the control of such broadleaf weeds as ragwort, fennel, nettle, inkweed and thistles.

BARBERRY, OLD MAN'S BEARD, HAWTHORN, WOOLLY NIGHTSHADE, WATTLE, WILLOW and other brushweeds.

STUMP TREATMENT:

Mix 1 part Reclaim® Brushkiller with 20 parts water or diesel oil. Using a paintbrush or knapsack sprayer apply to the freshly cut surface and stems to ground level. If using diesel oil maintain agitation.

TREES, Stem treatment: With an axe or hatchet, make shallow cuts at waist height, shaped to trap 1–2 mls

Reclaim® Brushkiller applied with a drench gun or similar. Treat when trees are growing actively.

RADIATA PINE: Aerial Release:

Weed	Dose rate	Comments
Thistles, lupins, gorse, broom, Himalaya honeysuckle, tutu, buddleia, wattle	1–2 litres/ha	Use the high rate only on dormant trees within one year of planting. Some minor tree distortion may occur. Suppression only of brushweeds will be obtained—follow-up treatment may be required for full control. Use the low rate if pine trees are not dormant. Use on first year trees only.

Consult your Grosafe representative.

Registered pursuant to the ACVM Act 1997, No P8982.
 See www.foodsafety.govt.nz for registration conditions.
 Approved pursuant to HSNO Act 1996, Approval code: HSR 002485
 See www.epa.govt.nz for approval conditions.

WARRANTY This formulation is warranted to contain the specified active ingredient within accepted limits 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.

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www.grosafe.co.nz

Batch No:

Date of Manufacture:

GSRB369/B04



Reclaim® and Force® are the registered trademarks of Grosafe Chemicals Ltd



WARNING
KEEP OUT OF REACH OF CHILDREN
READ LABEL BEFORE USE

ZONDA[®]

STUMP GEL

NON SELECTIVE HERBICIDE

A ready to use herbicidal gel for direct application onto stump and cut stems; including wild ginger, agapanthus and woolly nightshade trees.

GSZSG354/F01



ACTIVE INGREDIENT: 43g/kg picloram as the potassium salt in the form of a gel.

Grosafe[®]

ZONDA® STUMP GEL



HAZARD CLASSIFICATIONS:
Skin sensitisation Category 1,
Hazardous to soil organisms

WARNING: May cause an allergic skin reaction. Toxic to the soil environment.

PERSONAL PROTECTION: Avoid breathing vapours. Wear protective gloves. Contaminated clothing should not be allowed out of workplace. Wash contaminated clothing before reuse.

STORAGE: Store in original container, tightly closed and away from foodstuffs. Store in a cool dry well ventilated area avoiding sunlight and extreme temperatures.

SHELF LIFE: When stored appropriately this product should show no significant degradation. Contact your supplier if you require further information about the product.

ENVIRONMENT: Take all reasonable steps to ensure the substance does not cause any significant adverse effects to the environment beyond the application area. Do not apply into or onto waterways. Avoid release to the environment.

SPILLS AND DISPOSAL: Deal with all spillages immediately. When dealing with spills wear personal protective clothing and equipment. Collect all spills in labelled drums that can be sealed for safe disposal. Avoid release to the environment. If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority.

PRODUCT DISPOSAL: If possible, dispose of by using all product according to the label, otherwise dispose of in an approved landfill.

CONTAINER DISPOSAL: Do not use this container for any other purpose. Triple rinse and dispose of 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 contact with skin occurs wash thoroughly with soap and running water. If skin irritation occurs, get medical advice / attention. If medical advice is needed have the product container or label at hand.

EMERGENCY RESPONSE: 0800 CHEMCALL (0800 243 622)

GENERAL INSTRUCTIONS:

Grosafe® Zonda® Stump Gel is a ready to use herbicide for direct application onto a wide range of trees, woody weeds, shrubs, scrambling perennial weeds and weeds with creeping or bulbous roots. Apply product immediately to cut stems or stumps by swabbing with the brush applicator. Smaller plants may die over a period of a couple of weeks and larger tree stumps could take a few months to die. If there is any regrowth reapply the **Grosafe® Zonda® Stump Gel**. It is best to apply when the plant is actively growing (Spring and Autumn). Do not apply during rainfall or 12 hours prior to rainfall as this will give a poor result. Do not apply on or around food or animal crops or areas to be grazed by animals. **Grosafe® Zonda® Stump Gel** is a non-selective herbicide – use only on plant species as listed below.

DIRECTIONS FOR USE:

Woody weeds: Old Mans Beard, Climbing Spindleberry, Japanese Honeysuckle, Grey Willow Gorse, Cotoneaster, Darwins Barberry, Elaeagnus and Woolly Nightshade. Cut stems horizontally and preferably no higher than 100mm above ground level, immediately apply a 5mm thick layer of **Grosafe® Zonda® Stump Gel** over the cut surface of the plant. On stems of 20mm diameter or greater treat 80% of the stems including the leader stems.

Woolly Nightshade trees: Cut a series of grooves 15–20mm deep around main trunks of the tree using an axe or pruning saw. The grooves should have a 20–40mm gap between each one and then immediately apply a 5mm layer of **Grosafe® Zonda® Stump Gel** over the surface.

Rhizomatous plants: Wild Ginger, Agapanthus and Kahili. Prune the Agapanthus horizontally at the base and immediately apply to the cut stem 5mm layer of **Grosafe® Zonda® Stump Gel** across the cut surface of the rhizome. On Kahili Ginger prune and treat the same as the Agapanthus but, if there are more than four rhizomes between the shoots, drill a 10mm hole in every fourth rhizome and fill the hole with **Grosafe® Zonda® Stump Gel**.

Wandering Jew: Apply **Grosafe® Zonda® Stump Gel** at 16g per square metre over the foliage using a paint roller or similar, making sure the foliage is completely flattened during the application.

LIABILITY: This product must be used strictly as directed. Grosafe® Chemicals Ltd will not be liable for any loss or damage arising from a failure to strictly follow the directions for use.

Approved pursuant to the HSN0 Act 1996 HSR101073
See www.epa.govt.nz for approval 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.

Distributed by:



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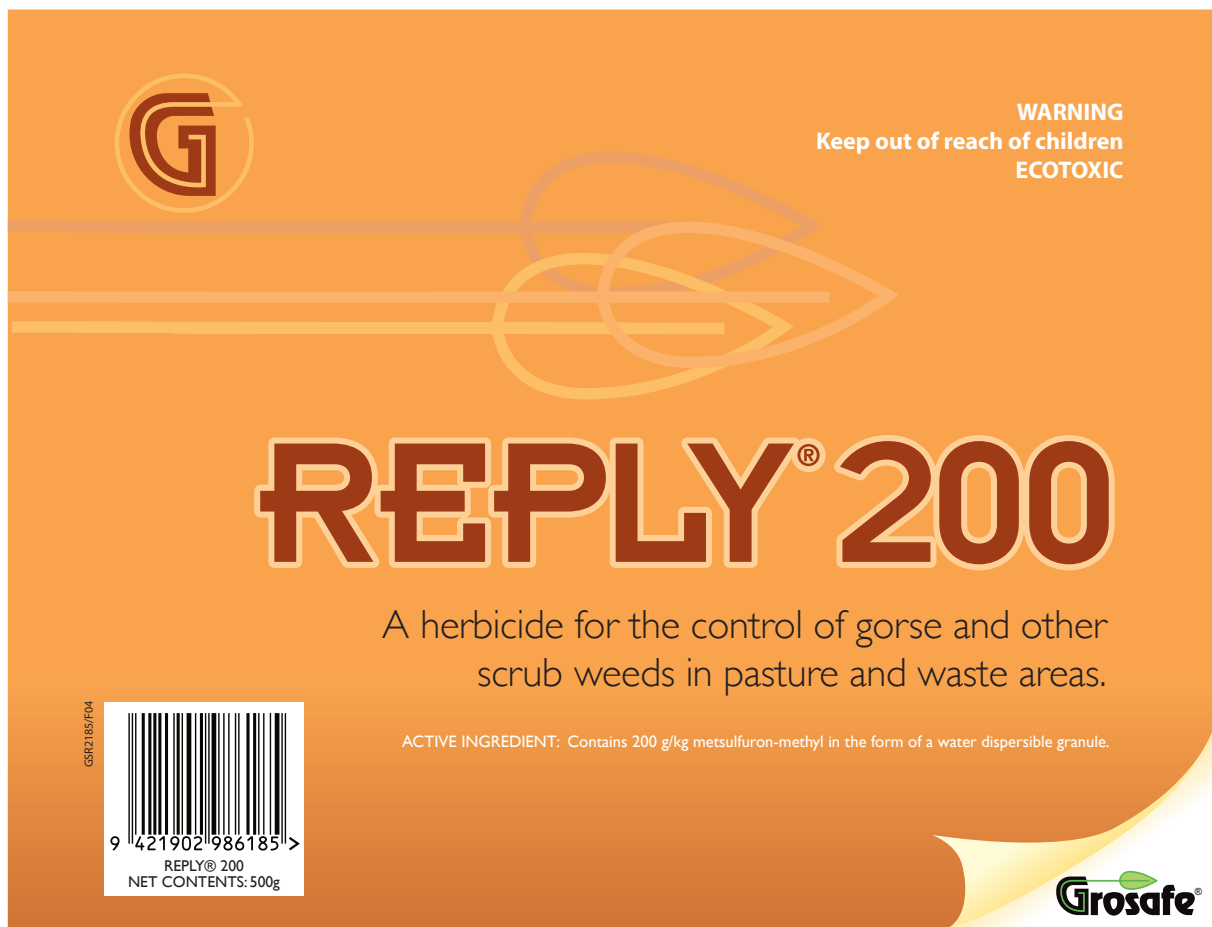
Batch No:

Date of Manufacture:

Zonda® is a registered trademark of Grosafe Chemicals Ltd.



GS25G354/802



HAZARD CLASSIFICATIONS:
 Eye Irritation Category 2; Hazardous to the aquatic environment acute Category 1; Hazardous to the aquatic environment chronic Category 1; Hazardous to soil organisms

TOXICITY
WARNING: Causes serious eye irritation.
ECOTOXICITY
 Very toxic to aquatic life and with long lasting effects. Very toxic to plant life. Do not apply directly into or onto water. Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area. Do not mix or load near any body of water, avoid spray drift over, or spillage into open water.
QUALIFIED HANDLER: A person mixing, loading, or applying this substance must be a suitably qualified or under the guidance of a suitably qualified person.
RECORD KEEPING: Records of use must be kept when 3 kg or more is applied within 24 hours in a place where the substance is likely to enter air or water and leave the application area.
PERSONAL PROTECTION: Avoid contact with eyes, skin and inhalation of spray. When mixing wear a face mask or goggles, rubber gloves and overalls. Do not eat, drink or smoke while using. Wash hands and face before rest, meals and after work. Wash protective clothing after use.
STORAGE: Store in accordance with the current version of NZS 8409 Management of Agrichemicals. Store product in original container, tightly closed, in a cool, dry place. Keep out of reach of children, and away from foodstuffs. Stores containing more than 100 kg are subject to requirements for signage, secondary containment and emergency response plans.
SPILLS: When dealing with spills wear personal protective clothing and equipment as described in the PERSONAL PROTECTION section. Contain and store in properly labelled, sealed drums for safe disposal. If spray mixture is spilled absorb and collect in drums as above. Deal with all spillages immediately. If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority.
DISPOSAL: Avoid contamination of water supply with chemical or empty container.
Product : If possible dispose of by using according to the label, otherwise dispose of in an approved landfill.
Container: Triple rinse empty container and add rinsate to the spray tank. Do not use packaging for storage of other products. Empty packaging should be crushed and disposed of at an approved landfill.
SAFETY DATA SHEET: A safety data sheet is available from Grosafe Chemicals Ltd.

FIRST AID: For advice call the National Poison Centre, telephone 0800 POISON (0800 764 766). Have product label or Safety Data Sheet at hand.
IF SWALLOWED: Rinse mouth with water. Contact a POISON CENTRE or doctor if person feels unwell. **IF ON SKIN:** Wash with soap and water. If skin irritation occurs get medical advice. **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 attention. **IF INHALED:** Remove person to fresh air and keep at rest in a position comfortable for breathing. Contact a POISON CENTRE or doctor if person feels unwell.

EMERGENCY RESPONSE 0800 CHEMCALL: (0800 243 622)

GENERAL INFORMATION:

Reply*200 is non-volatile and non-hormonal and this in conjunction with very low use rates adds to environmental acceptability. Best results are obtained when applied to actively growing weeds during late spring to autumn.

Mode of action: Rapidly absorbed by foliage and translocated in the plant. Stops plant growth by arresting cell division in the growing tips of roots and leaves. This action occurs very quickly and is followed by a slow decline in plant vigour and subsequent death.

Pasture Re-establishment: **Reply*200** is extremely injurious to ryegrass/white clover pasture. Soil residues may also prevent early re-establishment of ryegrass and clover and a minimum period of 3 months should elapse before oversowing. As persistence of the soil residue varies according to dose rate, soil type and rainfall, it is suggested that small areas be oversown 1-2 months prior to the planned time for sowing to check for possible harmful residues. Where a quick cover of vegetation is required, a resistant grass such as browntop can be oversown.

Rainfall: Rainfall within 1 hour following treatment may reduce effectiveness.

Surfactant: Add **Force* Penetrant** at 100 ml/100 litres of spray mix for handgun application as directed for specific weeds below, and add 1.5 litres per hectare for aerial applications when spraying gorse, manuka or kanuka.

Resistance Management: GROUP 2 HERBICIDE

Reply*200 is a member of the sulfonyl group of herbicides. Some naturally occurring weed biotypes resistant to **Reply*200** and other sulfonyl ureas may exist. These resistant weeds will not be controlled by **Reply*200** or other sulfonyl urea herbicides and may become dominant in that field. Cultural practices such as tillage, preventing weed escapes from going to seed and using herbicides with different modes of action within and between seasons can aid in delaying the spread and possible dominance of resistant weed biotypes.

RECOMMENDED FOR USE:

Weed	Handgun	Knapsack	Mistblower	Boom/aerial and ground
	Rate/100L	Rate/10L	Rate/10L	Rate/ha
Blackberry	60-100g	15g	30g	600-900g
Bracken	100g	15g	30g	500g
Broom	100g	15g	30g	—
Gorse	45g	15g	30g (60g/ulv)	1.5kg
Seedling gorse	—	—	—	500g
Kanuka	100g	15g	30g	900g
Manuka	100g	15g	30g	900g
Matagouri	75g	15g	30g	500g
Sweet Briar	100g	15g	30g	500g
Ragwort/Thistles	15g	3g	—	—

Blackberry: Use the highest rate on harder to kill blackberry types such as those occurring in Northland and on the East Coast of the North Island. **Reply*200** may be applied from November to June, but best results will be obtained from treatment from January to May. Whenever possible use ground application equipment. After treatment, when the canes become brittle, slashing, burning and/or intensive stocking with sheep or goats is recommended to prevent re-growth. Re-growth may require treatment two years after spraying.
Bracken: Apply when fronds are unfurled (Jan-June) but before frost browning. Best results can be expected when plants are burnt and frond regrowth is sprayed.
Broom: Apply from November to May to actively growing bushes. Ensure the addition of **Force* Penetrant** at 100 ml/100 litres.
Gorse: Apply at any time of the year. Add **Force* Penetrant** at 100 ml/100 litres for handgun, 10 ml/10 litres for knapsack and 1.5 litres per hectare for aerial applications.
Kanuka/Manuka: Apply at any time of the year. The addition of **Force* Penetrant** at 1.5 litres/ha is recommended when applying aerially.
Matagouri: Apply when bushes are actively growing, generally December-April. The addition of **Force* Penetrant** at 1.5 litres/ha is recommended when applying aerially.
Sweet briar: Apply from November-April. Ensure complete coverage of trees.

Forestry - Radiata pine only: Use only as a pre-plant treatment. Use 500 g/ha for the control of bracken, blackberry and seedling gorse. Do not plant trees within 2 months of spraying.

Application:

Aerial: Apply using the half overlap flying technique with minimal water rates of 200-400 litres/ha. Use nozzle configuration and flight pattern that ensures canopy penetration and full coverage of bushes otherwise significant regrowth will occur. Aerial application is recommended for use in non-crop areas only.

Handgun spraying: Apply to achieve full coverage off foliage and stems and penetration into bushes. Spray to the point of run-off. Use pressures of 1500-2500 kPa through a No.6 nozzle tip. For gorse, spraying to run-off is essential. The amount of spray required will vary with the height density and type of scrub weed. Following aerial application it is vital to implement follow-up spraying and/or management practices such as slashing, crushing or burning of bushes and oversowing of pasture species.

Knapsack: Use a hand knapsack only on small bushes where full coverage of foliage and stems can be achieved.

Mistblower: Obtain good coverage off foliage stems and penetration into bushes. For ULV attachments, use the largest setting.

Marker Dye Compatibility: **Reply*200** is compatible with most commonly used marker dyes, but tank mixtures with dyes based on acetic acid should be used within 24 hours.

Withholding Period: Do not graze treated areas with dairy cows within 3 days after application or 1 day for other stock.

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.

Registered pursuant to the ACVM Act 1997 No. P 7237.
 See www.foodsafety.govt.nz for registration conditions

Approved pursuant to the HSN0 Act 1996, Approval Code: HSR0000245
 See www.epa.govt.nz for approval 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.

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www.grosafe.co.nz

Batch No: _____ Date of Manufacture: _____
 Reply* and Force* are registered trademarks of Grosafe Chemicals Ltd.

CGS135/004



WARNING
Keep out of reach of children
ECOTOXIC

REPLY® 600



A herbicide for the control of gorse and other
scrub weeds in pasture and waste areas.

GS186-048/F04



ACTIVE INGREDIENT: Contains 600g/kg metsulfuron-methyl in the form of a water dispersible granule.

Grosafe®



REPLY® 600

HAZARD CLASSIFICATIONS:

Eye Irritation Category 2: Hazardous to the aquatic environment acute Category 1; Hazardous to the aquatic environment chronic Category 1; Hazardous to soil organisms

TOXICITY

WARNING: Causes serious eye irritation.

ECOTOXICITY

Very toxic to aquatic and plant life, including aquatic plants and with long-lasting effects. Hazardous to soil organisms. Avoid drift to non-target areas.

QUALIFIED HANDLER: A person mixing, loading, or applying this substance must be suitably qualified or under the guidance of a suitably qualified person.

RECORD KEEPING: A record of use must be kept according to HSN Regulations and N.Z. Standard for the Management of Agrichemicals (NZS 8409). If 3 kg or more is applied within 24 hours, in places where the product is likely to enter air or water and leave the application area, a written record is to be kept for each application.

PERSONAL PROTECTION: When mixing or applying wear a face mask or goggles, rubber gloves and overalls. Do not eat, drink or smoke while using. Wash hands and face before meals and after work. Wash protective clothing after use.

STORAGE: Store product in original container, tightly closed, in a cool, dry place. Keep out of reach of children, and away from foodstuffs. Store in accordance with the current version of NZS 8409 Management of Agrichemicals. Stores containing more than 100 kg are required to have signage, containment and an emergency response plan.

Shelflife: When stored appropriately this product should show no significant degradation for two years from 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. Contain spill and collect spill in labelled, sealed drums for safe disposal. If spray mixture is spilled absorb and collect in drums as above. Deal with all spillages immediately. If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority.

DISPOSAL: Avoid contamination of water supply with chemical or empty container.

PRODUCT DISPOSAL: If possible dispose of by using according to the label, otherwise dispose of in an approved landfill in accordance with local regulations.

CONTAINER DISPOSAL: Do not use packaging for storage of other products. Empty packaging should be crushed and disposed of at an approved landfill.

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

FIRST AID: For advice call the National Poison Centre, telephone 0800 POISON [0800 764 766]. Have product label or Safety Data Sheet at hand.

IF SWALLOWED: Rinse mouth with water. Contact a POISON CENTRE or doctor if person feels unwell. **IF ON SKIN:** Wash skin with plenty of soap and water. If skin irritation occurs get medical advice. **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. **IF INHALED:** Remove person to fresh air and keep at rest in a position comfortable for breathing. Contact a POISON CENTRE or doctor for advice if person feels unwell.

EMERGENCY RESPONSE 0800 CHEMCALL: (0800 243 622)

MANAGEMENT CONSIDERATIONS:

General: Reply® 600 is non-volatile and non-hormonal and this in conjunction with very low use rates adds to environmental acceptability. Best results are obtained when applied to actively growing weeds during late spring to autumn.

Mode of action: Rapidly absorbed by foliage and translocated in the plant, arresting cell division in the growing tips of roots. Action occurs very quickly and is followed by a slow decline in plant viability and subsequent death.

Pasture Re-establishment: Reply® 600 is extremely injurious to ryegrass/clover pastures. Soil residues may also prevent early re-establishment of ryegrass and clover and a minimum period of three months should elapse before overseeding. As persistence of the soil residue varies according to dose rate, soil type and rainfall, it is suggested that small areas be oversewn 1–2 months prior to the planned time for sowing to check for possible harmful residues. Where a quick cover of vegetation is required, a resistant grass such as browntop can be oversewn.

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.

Withholding period: Do not graze treated areas with dairy cows for 3 days after application or 1 day for other stock.

Rainfall: Rainfall within 1 hour following treatment may reduce effectiveness.

Surfactant: Add Force® Penetrant at 100 ml/100 litres of spray mix for handgun application as directed for specific weeds listed below, and add 1.5 litres per hectare for aerial applications when spraying gorse, manuka or kanuka.

Resistance Management **GROUP 2** **HERBICIDE**

Reply® 600 is a member of the sulfonyl urea group of herbicides. Some naturally occurring weed biotypes resistant to Reply® 600 and other sulfonyl ureas may exist. These resistant weeds will not be controlled by Reply® 600 or other sulfonyl urea herbicides and may become dominant in that field. Cultural practices such as tillage, preventing weed escapes from going to seed and using herbicides with different modes of action within and between seasons can aid in delaying the spread and possible dominance of resistant weed biotypes.

APPLICATION:

Aerial: Apply using the half overlap flying technique with water rates of 200–400 litres/ha, as two overlapping passes of 100–200 litres/ha. For foaming nozzle systems apply a minimum of 230 litres water/ha as two overlapping passes of 115 litres water/ha. Use nozzle configuration and flight pattern that ensures canopy penetration and full coverage of bushes otherwise significant regrowth will occur. Aerial application is recommended for use in non-crop areas only. Following aerial application, it is vital to implement follow-up spraying and/or management practices such as slashing, crushing or burning of bushes and oversowing of pasture species.

Handgun spraying: Apply to achieve full coverage offoliage and stems and penetration into bushes. Spray to the point of run-off. Use pressures of 1500–2500 kPa through a No. 6 nozzle tip. For gorse, spraying to run-off is essential. The amount of spray required will vary with the height, density and type of scrub weed.

Knapsack: Use a hand knapsack only on small bushes where full coverage offoliage and stems can be achieved.

Mistblower: Obtain good coverage of foliage stems and penetration into bushes. For ULV attachments, use the largest setting.

Marker dyes: Reply® 600 is compatible with most commonly used marker dyes, such as GroMark RedLine®, but tank mixtures with dyes based on acetic acid should be used within 24 hours.

Cleaning: To avoid injury to subsequently sprayed sensitive crops all traces of Reply® 600 must be removed from the mixing and spraying equipment immediately after use.

1. Drain tank. Then flush tank, pump and boom with clean water for 10 minutes.
2. Fill tank with clean water plus 1 litre chlorine bleach (3% sodium hypochlorite) per 100 litres water. Agitate, flush through system and drain.
3. Repeat step #2.
4. Remove all nozzles and filters and clean separately. Thoroughly rinse tank and flush clean water through pump and boom to remove chlorine solution.

RECOMMENDED USES:

Weed	Handgun	Knapsack	Mistblower	Boom/aerial and ground
	Rate/100L	Rate/10L	Rate/10L	Rate/ha
Barberry	35g	5g	10g	—
Blackberry	20–35g	5–8g	10–16g	200–300g
Bracken	35g	5g	10g	170g
Broadleaf weeds on waste areas, industrial sites	5g	1g	2g	50g
Broom	35g	5g	10g	—
Fennel	5g	1g	2g	50g
Gorse	20g	5g	10g (20g/ulv)	500g
(Seeding Gorse)	—	—	—	170g
Hawthorn	35g	5g	10g	—
Inkweed	25g	5g	10g	50g
Kanuka/Manuka	30g	5g	10g	300g
Matagouri	25g	5g	10g	170g
Old Man's Beard	35g	5g	—	170g
Privet	35g	5g	10g	—
Ragwort/Thistles	2.5–5g	1g	—	—
Sweet Briar	35g	5g	10g	170g
Wild Ginger	25g	5g	10g	—
Willows	35g	5g	10g	—

COMMENTS:

Barberry: Best results on bushes under 3 metres: treat from November to May.

Blackberry: Use the highest rate on harder to kill blackberry types such as those occurring in Northland and on the East Coast of the North Island. Reply® 600 may be applied from November to June, but best results will be obtained from treatment from January to May. Whenever possible use ground application equipment. After treatment, when the canes become brittle, slashing, burning and/or intensive stocking with sheep or goats is recommended to prevent regrowth. Re-growth may require treatment two years after spraying.

Bracken: Apply when fronds are unfurled (Jan–June) but before frost browning. Best results can be expected when plants are burnt in Spring and frond regrowth is sprayed in the following March to June.

Broadleaf weeds, annual, perennial: Treat when actively growing.

Broom: Apply from November to May to actively growing bushes. Ensure the addition of Force® Penetrant at 100 ml/100 litres.

Fennel: Treat when actively growing.

Gorse: Apply at any time of the year. Add Force® Penetrant at 100ml/100 litres for handgun, 10ml/10 litres for knapsack and 1.5 litres per hectare for aerial applications. Retreatment may be required.

Hawthorn: Best results on bushes under 3 metres: treat from November to March.

Inkweed: Treat when actively growing.

Kanuka/Manuka: Apply at any time of the year; but reduced control may occur during periods of peak flowering. Ensure complete coverage of tall growing bushes. Aerial: Apply at least 400 litres water/ha. The addition of Force® Penetrant at 1.5 litres/ha is recommended when applying aerially.

Matagouri: Apply when bushes are actively growing, generally December–April. The addition of Force® Penetrant at 1.5 litres/ha is recommended when applying aerially.

Old Man's Beard: Treat from November to May. Add Force® Penetrant at 100 ml/100 litres for handgun, 10ml/10 litres for knapsack and 1.5 litres/ha for aerial applications.

Privet: Apply in Spring and Autumn when actively growing.

Ragwort: Apply from rosette stage to flowering. Use the higher rate on multicrown plants. Direct spray to the centre of the plant. Seed from treated flowering plants will not be viable providing application is made before senescence (flowers discolour). After spraying remove stock until the treated plants are dead.

Sweet briar: Apply from November–April. Ensure complete coverage.

Wild Ginger: Apply from November–April.

Willows: Apply from November–April. Ensure complete coverage.

Forestry - Radiata pine only

Preplant treatment for radiata pine only. To control bracken, blackberry and seedling gorse, apply 170g Reply® 600 per hectare. Do not plant trees within 2 months of spraying.

Registered pursuant to the ACVM Act 1997 No. P 8544.
See www.foodsafety.govt.nz for registration conditions
Approved pursuant to the HSN Act 1996, Approval Code: HSR000242
See www.epa.govt.nz for approval 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
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PO Box 14-450 Tauranga 3141
Tel: 0800 220 002
Email: info@grosafe.co.nz
www.grosafe.co.nz

Batch No: Date of Manufacture:
Reply®, Force® and GroMark RedLine® are registered trademarks of Grosafe Chemicals Ltd.

CS060404/005



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



9 421905 738743 >
DIABLO[®]
NET CONTENTS: 5 Litres

Grosafe[®]

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 product or used 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 764 766) 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)

ANIMAL SAFETY

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 Gun 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, HSR 100933 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.

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Email: info@grosafe.co.nz
www.grosafe.co.nz

Diablo® is a registered trademark of Grosafe Chemicals Ltd.

Batch No:
Date of Manufacture:



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.

Clippings 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, hawkbeard, 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>Albizia 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/L (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	Bathurst 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.nzpps.org/



WARNING
KEEP OUT OF REACH OF CHILDREN
ECOTOXIC

GROGARD®

HERBICIDE


A selective herbicide for the control of broadleaf and grass weeds in forestry, lucerne, maize, sweetcorn, peas, certain orchard crops and non-crop situations.

ACTIVE INGREDIENT: Contains 900 g/kg terbuthylazine in the form of a water dispersible granule (WVG).

GSGG002/UR2



Grosafe®



HAZARD CLASSIFICATIONS:
 Acute oral toxicity Category 4; Acute inhalation toxicity Category 4; Hazardous to the aquatic environment acute Category 1; Hazardous to the aquatic environment chronic Category 1. Hazardous to soil organisms. Hazardous to terrestrial vertebrates.

TOXICITY
WARNING: Harmful if swallowed or inhaled.
ECOTOXICITY: Very toxic to aquatic life and with long lasting effects. Hazardous to soil organisms. Hazardous to terrestrial vertebrates.
 Beware: Spray drift hazard. Apply this product carefully. Spray drift may cause serious damage to other desirable plants. Do not allow drift to occur outside the target area. Do not apply directly into or onto water.
QUALIFICATIONS: A person mixing, loading, or applying this substance must be a suitably qualified person or under the guidance of a suitably qualified person.
RECORD-KEEPING: Records of use as described in NZS 8409 Management of Agrichemicals must be kept if 3kg or more of GROGARD® is applied within a 24 hour period and is likely to enter air or water and leave the application area.
PERSONAL PROTECTION: When mixing or applying wear overalls, impervious gloves and eye/ face protection. Avoid contact with or inhalation of spray mist. Wash hands and exposed skin before rest breaks, meals and after work. Clean protective clothing and equipment before re-use.
STORAGE: Store in original container tightly closed and in a secure, dry, cool, well-ventilated area, away from foodstuffs. Storage must be in accordance with the current version of the New Zealand Standard for the Management of Agrichemicals (NZS8409). Stores containing more than 100 kg require signage, secondary containment and an emergency response plan.
SPILLS AND DISPOSAL: When dealing with spills wear personal protective clothing and equipment as described in the PERSONAL PROTECTION section. Contain and collect spilled product and store in properly labelled, sealed drums for safe disposal. If spray mixture is spilled absorb and collect in drums as above. Deal with all spillages immediately. If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority.
DISPOSAL: Avoid contamination of any water supply with product or empty container.
PRODUCT DISPOSAL: If possible dispose of by using according to the label, otherwise dispose of to a chemical recovery service or in an approved landfill.
CONTAINER DISPOSAL: Ensure packaging is empty. Recycle empty packaging through Agrecovery (www.agrecovery.co.nz) or otherwise dispose of at a suitable land fill.
 Crush empty packaging and bury in a suitable landfill.
SAFETY DATA SHEET: A safety data sheet is available from Grosafe Chemicals Ltd.

FIRST AID: For advice call the National Poison Centre, telephone 0800 POISON [0800 764 766] for advice. Have label or Safety Data Sheet at hand.
IF SWALLOWED: Rinse mouth with water. Call a POISONS CENTRE or doctor if you feel unwell. **IF ON SKIN:** Wash skin with plenty of soap and water. If skin irritation develops, get medical advice. **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. **IF INHALED:** Remove person to fresh air and keep at rest in a position comfortable for breathing. Call the NATIONAL POISONS CENTRE or doctor if you feel unwell.

EMERGENCY RESPONSE: 0800 CHEMCALL (0800 243 622)

GENERAL INFORMATION:

GROGARD® controls a wide range of weeds. The weed spectrum includes: barley grass, black nightshade, browntop, cats ear, chickweed, clovers, cocksfoot, dove's foot, fat hen, Kentucky bluegrass, lotus, nodding thistle, Poa spp, redroot, Scotch thistle, seeding gorse, shepherd's purse, storks bill, sweet vernal, willow weed, Yorkshire fog, plus many other annual grasses and broadleaf weeds. It does not control deep rooted perennial grasses such as paspalum, kikuyu and Indian doab.

GROGARD® is absorbed through the roots and leaves, with signs of activity taking 1-3 weeks to become apparent. Rainfall within three hours of spraying will reduce the efficacy of a post-emergence application. For both pre and post-emergence treatments, rainfall or irrigation within one week of spraying is necessary to optimise residual control. For pre-emergence use, **GROGARD®** should be applied to a clean soil surface with a firm fine tilth and good soil moisture.

DIRECTIONS FOR USE:

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.

CROP	RATE	NOTES
Lucerne (Established)	830g-11 kg/ha in 200-300 litres of water/ha	Stands must be at least 2 years old. Use in a mix with 2-3 litres of paraquat 20% a.i. Lucerne must be completely dormant and closely grazed. Apply preferably in mid-winter. Use the higher rate for clovers or where longer residual control is required. Do not exceed the higher dosage rate as yield may be affected.
Orchards: - Pip fruit - Citrus - Grapes - Kiwifruit	3.3-4.4 kg/ha in 200-300 litres of water/ha	Do not apply to trees/vines less than one year old or plants growing in light sandy loam soils. Pre-emergence: Apply in spring to weed-free soil. Post-emergence: To control established weeds tank mix with glyphosate at recommended label rates.
Maize and Sweetcorn	1.7-2.0 kg/ha in 200-300 litres of water/ha	Pre-emergence: Addition of a suitable herbicide is needed to control grass weeds. Apply to a freshly worked seedbed after the crop has been sown but before the seedlings have emerged.
	1.7 kg/ha in 200-300 litres of water/ha	Post-emergence: Apply to actively growing weeds no larger than 5cm high. Add a non-ionic surfactant at the recommended label rate. NOTE: where weeds such as fat hen are resistant to triazine herbicides an appropriate post-emergence herbicide such as DICAMBA is required for control.
Peas	830g-11 kg/ha in 200-300 litres of water/ha	Use the higher rate for dry conditions. Apply to a freshly worked seedbed after the crop has been sown but before seedlings have emerged. Do not use on light sandy soils or on soils which are low in organic matter.

CROP	RATE	NOTES
Industrial Weed Control	8.3-11 kg/ha	For long term residual weed control in non-crop areas such as roadsides, footpaths, pipelines, industrial storage and waste sites and around farm buildings. Add glyphosate at recommended label rates for the knockdown of existing vegetation and to control deep-rooted perennial weeds.

WITHHOLDING PERIOD: Lucerne – 28 days

FORESTRY: Radiata pine, Douglas fir, Eucalyptus species (E. delegatensis, fastigata, and saligna) **GROGARD®** may be applied either pre-planting or as a release treatment over newly planted bare rooted trees.

For optimum results, apply **GROGARD®** to bare ground or when the weed population is less than 10cm high before rapid spring growth occurs.

NOTE: Where grass weeds predominate, especially the more difficult to kill perennial grasses, it is recommended that **GROGARD®** be tank-mixed with an approved selective grass killer such as Clethodim 240g/litre at recommended label rates.

Broadcast Treatment: Apply 8.3-11.0kg **GROGARD®** in 150-300litres of water/ha (refer application table for more detail).

Spot Treatment: Carefully calibrate equipment to apply 0.83-1.1g **GROGARD®** per square metre in sufficient water to obtain good coverage. Treat approximately two square metres around each tree (refer to the application table for suggested dilution rates).

Forestry Use:

PRODUCT	RATE	RATE	NOTES
	Broadcast Treatment Rate/ha applied in 150-300 litres of water/ha	Spot Treatment Rate/litre applied at 20ml spray solution per sq. metre	
GROGARD®	8.3-11.0kg	42-55g	General broadleaf and grass weed control, where existing vegetation is below 10cm in height. Add a non-ionic surfactant at the recommended label rate.
GROGARD® + Clethodim 240 + Emulsifiable crop mineral oil (adjuvant)	8.3-11.0kg 1 litre 1 litre/100 litres water	42-55g 3.5ml 10ml	For improved knockdown where grass weeds predominate and exceed 10cm in height.
NOTE: Use the higher rate of GROGARD® to control gorse seedlings			

Resistance management:

GROUP 5 HERBICIDE

GROGARD® contains the **GROUP 5** triazine herbicide, terbutylazine. Naturally occurring weed biotypes resistant to terbutylazine and other triazines are known to exist. Unless directed, do not use another product containing herbicides in the same groups in conjunction with **GROGARD®**. Where possible alternate the types of herbicides used within any one paddock over time. Herbicides from different groups should either be used alternately or mixed together to prevent the numbers of resistant individuals building up.

Registered pursuant to the ACVM Act 1997, No P9681.
 See www.foodsafety.govt.nz for registration conditions.

Approved pursuant to HSN Act 1996, Approval Code: HSR000388.
 See www.epa.govt.nz for approval conditions

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
 20 Jean Batten Drive
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 POBox 14-450 Tauranga 3141
 Tel: 0800 220 002
 Email: info@grosafe.co.nz
 www.grosafe.co.nz

Batch No: Date of Manufacture:

GROGARD® is a Trademark of Grosafe Chemicals Ltd

GS0002/803



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 Haloxypop-p as the methyl ester in the form of an emulsifiable concentrate


GSHE750/F01



9 421905 738750 >

HERALD[®]
NET CONTENTS: 5 Litres

Grosafe[®]



HERALD®

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; TEL drinking water and EEL water 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 rinsate 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. If 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 CHEMCALL: (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, HSR 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 Maunganui 3116
 PO Box 14-450 Tauranga 3141
 Tel: 0800 220 002
 Email: info@grosafe.co.nz
www.grosafe.co.nz



Batch No:

Date of Manufacture:



Herald® is a registered trademark of Grosafe Chemicals Ltd/

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 Musk storksbill	100				
Annual grass weeds Including annual ryegrass, summer grass, barnyard 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, mercur grass, browntop, rat tail, 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.

GSHE750/B01



WARNING
KEEP OUT OF REACH OF CHILDREN
READ LABEL BEFORE USE
ECOTOXIC



HEXAGARD[®] 750 HERBICIDE

For selective weed control in forestry and
non-selective weed control in industrial situations

ACTIVE INGREDIENTS: 637.5g/kg terbuthylazine plus 112.5g/kg hexazinone
in the form of a water dispersible granule.

GSHXC385/R1



HEXAGARD[®] 750
NET CONTENTS: 10 Kg



HEXAGARD® 750



HAZARD CLASSIFICATIONS:
Acute oral toxicity, Category 4; Eye irritation, Category 2; Specific target organ toxicity (repeated exposure) Category 2; Hazardous to aquatic environment (acute and chronic exposure), Category 1; Hazardous to soil organisms; Hazardous to terrestrial vertebrates.

WARNING: Harmful if swallowed. Serious eye irritant. May cause organ damage from repeated ingestion at high doses.
ECOTOXIC: Very toxic to aquatic organisms and to the soil environment. Harmful to terrestrial vertebrates.

Do not apply directly into or onto water.

Exposure to this product may injure or kill susceptible agricultural crops and native vegetation. Care should be taken to avoid spray to neighboring vegetation. It is recommended to conduct a site-specific risk assessment that considers the potential movement of spray drift downwind to sensitive areas. This includes assessment of the weather conditions, application equipment, topography and species of plants downwind.

The use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in the product leaching into ground water.

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

RECORD KEEPING: If 3kg or more of this product is applied within 24 hours, in a place where the product is likely to enter the air or water and leave the application area, written records must be kept.

PERSONAL PROTECTION: Avoid contact with eyes and skin. Avoid inhalation of spray mist. When mixing or applying, wear overalls, boots, gloves and eye protection. Clean protective clothing daily after work. Do not eat, drink or smoke while using. Remove protective clothing and wash hands and face thoroughly before meals and after work.

STORAGE: Keep out of reach of children. Store in the original, tightly closed container, in a cool, dry area away from foodstuffs. Avoid temperatures below -5°C and above 35°C. Storage must be in accordance with the New Zealand Standard for the Management of Agrichemicals (NZS8409). Stores containing 100kg or more require signage, secondary containment and an emergency response plan.

SPILLS AND DISPOSAL: Exclude non-essential people from the area. Wear protective clothing and prevent product from entering waterways. Sweep up granules into labelled containers that can be sealed for reuse or disposal. Absorb a liquid spill with inert material such as soil or sand and place in a waste container. Wash area with water and detergent, and absorb with further inert material. Dispose of safely to a suitable landfill.

DISPOSAL: Dispose of this product only by using in accordance with this label, or at a suitable landfill. Dispose of empty container to a suitable landfill. Do not burn. Do not use container for any other purpose.

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

FIRST AID:

Call the National Poisons Centre 0800 POISON (0800 764 766) (24 hr) or a doctor for advice. If swallowed do not induce vomiting. Get medical advice if person feels unwell. If splashed in eyes, wash out immediately with running water for several minutes. Remove contact lenses if present and easy to do, after the first few minutes. Continue rinsing. Get medical advice. If skin or hair contact occurs, remove contaminated clothing and wash with soap and running water. If inhaled, immediately move to fresh air and rest. Maintain half upright position if breathing is difficult.

EMERGENCY RESPONSE: 0800 CHEMCALL (0800 243 622)

USE:

This product is non-corrosive and almost non-abrasive and can be applied with boom spray (aerial) and conventional ground and spot spraying equipment. Use aerial application only for use in forestry plantations. Apply with well-maintained and calibrated spray equipment. Do not use strainers finer than 300 micrometres.

SPRAY DRIFT WARNING

Use this product carefully. Spray drift may cause serious damage to other desirable plants. Take all reasonable steps to ensure the product does not cause any significant adverse effects to the environment beyond the application area.

AERIAL APPLICATION:

To minimise the risk of damage from spray drift especially where susceptible vegetation is within 500 metres, use a coarse droplet (low drift nozzle) to minimize the production of small droplets (<100 microns). This product must not be applied when wind speeds are less than 3 km/hr or more than 20 km/hr as measured at the application site.

MIXING

As settling may occur during storage, shake/stir well or reticulate before use. This product mixes readily with water. Measure the correct quantity into the partly filled tank then add the remaining water with agitation. The spray mixture should be kept continually agitated before and during spraying, and before spraying after a stoppage. Unused spray mixture may settle overnight.

CLEANING EQUIPMENT:

All spray equipment including pumps, spray tanks, lines and nozzles, landing gear (aircraft) should be thoroughly washed with clean water after each day of spraying.

RAINFALL:

Rainfall within 3 hours following treatment may reduce effectiveness. Later re-treatment should be considered following heavy rain.

COMPATIBILITY:

Compatible with most commonly used herbicides.

GENERAL INFORMATION

This product is a selective herbicide for the control of grass and broadleaf weeds in radiata pine forestry. Weeds controlled include: barley grass, black nightshade, brown top, catsear, chickweed, clovers, cocksfoot, doves foot, fathen, fireweed, Kentucky bluegrass, nodding thistle, poa spp, ratstail, redroot, ryegrass species, Scotch thistle, seedling gorse, seedling pampas, shepherds purse, storkbill, sweet vernal, tall fescue, willow weed, Yorkshire fog, seedling broom, plus annual grasses and broadleaf weeds. For preplanting a Grosafe glyphosate product may be added to the spray mix at approved label rates. May also be used as a non-selective herbicide in industrial areas.

DIRECTIONS FOR USE

Not for use on food or animal feed crops.

The maximum application rate is 16.2 kg HexaGard 750/ha with a maximum of two applications per calendar year and a minimum interval period of six months between applications.

End-use situation	Application	Use rate	Comment
Forestry, Radiata pine	Broadcast	10.0 - 13.3 kg in 150 - 300 litres of water	Apply prior to spring growth. Use higher rate where longer residual activity is required. For control of paspalum, kikuyu and other perennial grasses, the addition of an approved selective grass killer at label rates is recommended.
	Spot	1.0 - 1.33 g per square metre	Calibrate equipment to ensure sufficient coverage. For spot spraying the normal water rate is 15 - 20 ml per square metre of area.
Non-cropland areas, Industrial areas, roadsides, footpaths, fencelines, etc	Broadcast	10.0 - 16.0 kg in 150 - 300L/ hectare	Apply sufficient spray to evenly cover the vegetation. Use the lower rate on light soils and the higher rate on soils with a high clay content and where long term weed control is desired. Where paspalum is present, add a Grosafe glyphosate product at approved label rates.
	Handgun	1.33kg in 100 litres of water	Apply in spring or autumn before major growth starts. Apply to give good even coverage of the vegetation ensuring that the application rate equates to around 1000 litres of spray mix per hectare.

Grosafe is a member of Agrecovery Rural Recycling Programme
www.agrecovery.co.nz

Approved pursuant to HSN0 Act 1996, Approval Code: HSR101467
See www.epa.govt.nz for approval 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.

Distributed by:

Grosafe®
CHEMICALS LTD

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info@grosafe.co.nz
www.grosafe.co.nz

BATCH No:

DATE OF MANUFACTURE:

GSHXG385/B01

HEXAGARD® is a Trade Mark of Grosafe Chemicals Ltd





WARNING
KEEP OUT OF REACH OF CHILDREN
READ LABEL BEFORE USE
ECOTOXIC



HEXAGARD[®] 750 EXTRA

HERBICIDE

For selective weed control in forestry and
non-selective weed control in industrial situations

ACTIVE INGREDIENTS: 610 g/kg terbuthylazine plus 140 g/kg hexazinone
in the form of a water dispersible granule.

GSHXGE392/R01



9 421905 738392 >

HEXAGARD[®] 750 EXTRA
NET CONTENTS: 10 Kg

Grosafe[®]

HEXAGARD® 750 EXTRA

HAZARD CLASSIFICATIONS:
 Acute oral toxicity, Category 4; Eye irritation, Category 2; Specific target organ toxicity (repeated exposure) Category 2; Hazardous to aquatic environment (acute and chronic exposure), Category 1; Hazardous to soil organisms; Hazardous to terrestrial vertebrates.

WARNING: Harmful if swallowed. Serious eye irritant. May cause organ damage from repeated ingestion at high doses.

ECOTOXIC: Very toxic to aquatic organisms and to the soil environment. Harmful to terrestrial vertebrates.

Do not apply directly into or onto water.

Exposure to this product may injure or kill susceptible agricultural crops and native vegetation. Care should be taken to avoid spray to neighboring vegetation. It is recommended to conduct a site-specific risk assessment that considers the potential movement of spray drift downwind to sensitive areas. This includes assessment of the weather conditions, application equipment, topography and species of plants downwind.

The use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in the product leaching into ground water.

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

RECORD KEEPING: If 3kg or more of this product is applied within 24 hours, in a place where the product is likely to enter the air or water and leave the application area, written records must be kept.

PERSONAL PROTECTION: Avoid contact with eyes and skin. Avoid inhalation of spray mist. When mixing or applying, wear overalls, boots, gloves and eye protection. Clean protective clothing daily after work. Do not eat, drink or smoke while using. Remove protective clothing and wash hands and face thoroughly before meals and after work.

STORAGE: Keep out of reach of children. Store in the original, tightly closed container, in a cool, dry area away from foodstuffs. Avoid temperatures below -5°C and above 35°C. Storage must be in accordance with the New Zealand Standard for the Management of Agrichemicals (NZS8409). Stores containing 100kg or more require signage, secondary containment and an emergency response plan.

SPILLS AND DISPOSAL: Exclude non-essential people from the area. Wear protective clothing and prevent product from entering waterways. Sweep up granules into labelled containers that can be sealed for reuse or disposal. Absorb a liquid spill with inert material such as soil or sand and place in a waste container. Wash area with water and detergent, and absorb with further inert material. Dispose of safely to a suitable landfill.

DISPOSAL: Dispose of this product only by using in accordance with this label, or at a suitable landfill. Dispose of empty container to a suitable landfill. Do not burn. Do not use container for any other purpose.

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

FIRST AID:

Call the National Poisons Centre 0800 POISON (0800 764 766) (24 hr) or a doctor for advice. If swallowed do not induce vomiting. Get medical advice if person feels unwell. If splashed in eyes, wash out immediately with running water for several minutes. Remove contact lenses if present and easy to do, after the first few minutes. Continue rinsing. Get medical advice. If skin or hair contact occurs, remove contaminated clothing and wash with soap and running water. If inhaled, immediately move to fresh air and rest. Maintain half upright position if breathing is difficult.

EMERGENCY RESPONSE: 0800 CHEMCALL (0800 243 622)

USE:

This product is non-corrosive and almost non-abrasive and can be applied with boom spray (aerial) and conventional ground and spot spraying equipment. Use aerial application only for use in forestry plantations. Apply with well-maintained and calibrated spray equipment. Do not use strainers finer than 300 micrometres.

SPRAY DRIFT WARNING

Use this product carefully. Spray drift may cause serious damage to other desirable plants. Take all reasonable steps to ensure the product does not cause any significant adverse effects to the environment beyond the application area.

AERIAL APPLICATION:

To minimise the risk of damage from spray drift especially where susceptible vegetation is within 500 metres, use a coarse droplet (low drift nozzle) to minimize the production of small droplets (<100 microns). This product must not be applied when wind speeds are less than 3 km/hr or more than 20 km/hr as measured at the application site.

MIXING

As settling may occur during storage, shake/stir well or reticulate before use. This product mixes readily with water. Measure the correct quantity into the partly filled tank then add the remaining water with agitation. The spray mixture should be kept continually agitated before and during spraying, and before spraying after a stoppage. Unused spray mixture may settle overnight.

CLEANING EQUIPMENT:

All spray equipment including pumps, spray tanks, lines and nozzles, landing gear (aircraft) should be thoroughly washed with clean water after each day of spraying.

RAINFALL:

Rainfall within 3 hours following treatment may reduce effectiveness. Later re-treatment should be considered following heavy rain.

COMPATIBILITY:

Compatible with most commonly used herbicides.

GENERAL INFORMATION

This product is a selective herbicide for the control of grass and broadleaf weeds in radiata pine forestry. Weeds controlled include: barley grass, black nightshade, brown top, catsear, chickweed, clovers, cocksfoot, doves foot, fathen, fireweed, Kentucky bluegrass, nodding thistle, poa spp, ratstail, redroot, ryegrass species, Scotch thistle, seedling gorse, seedling pampas, shepherds purse, storkbill, sweet vernal, tall fescue, willow weed, Yorkshire fog, seedling broom, plus annual grasses and broadleaf weeds. For preplanting a Grosafe glyphosate product may be added to the spray mix at approved label rates. May also be used as a non-selective herbicide in industrial areas.

DIRECTIONS FOR USE

Not for use on food or animal feed crops.

The maximum application rate is 16.2 kg HexaGard® 750 Extra /ha with a maximum of two applications per calendar year and a minimum interval period of six months between applications.

End-use situation	Application	Use rate	Comment
Forestry, Radiata pine	Broadcast	10.0 - 13.3 kg in 150 - 300 litres of water	Apply prior to spring growth. Use higher rate where longer residual activity is required. For control of paspalum, kikuyu and other perennial grasses, the addition of an approved selective grass killer at label rates is recommended.
	Spot	1.0 - 1.33 g per square metre	Calibrate equipment to ensure sufficient coverage. For spot spraying the normal water rate is 15 - 20 ml per square metre of area.
Non-cropland areas, Industrial areas, roadsides, footpaths, fencelines, etc	Broadcast	10.0 - 16.0 kg in 150 - 300L/ hectare	Apply sufficient spray to evenly cover the vegetation. Use the lower rate on light soils and the higher rate on soils with a high clay content and where long term weed control is desired. Where paspalum is present, add a Grosafe glyphosate product at approved label rates.
	Handgun	1.33kg in 100 litres of water	Apply in spring or autumn before major growth starts. Apply to give good even coverage of the vegetation ensuring that the application rate equates to around 1000 litres of spray mix per hectare.

Grosafe is a member of Agrecovery Rural Recycling Programme
www.agrecovery.co.nz

Approved pursuant to HSNO Act 1996, Approval Code: HSR101467
 See www.epa.govt.nz for approval 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.

Distributed by:

Grosafe®

 CHEMICALS LTD

20 JEAN BATTEN DRIVE
 MT MAUNGANUI 3116
 POBox 14-450 Tauranga 3143
 FREE PHONE 0800 220 002
info@grosafe.co.nz
www.grosafe.co.nz

BATCH No:

DATE OF MANUFACTURE:

GSHXG392/B01

HEXAGARD® is a Trade Mark of Grosafe Chemicals Ltd





WARNING
KEEP OUT OF REACH OF CHILDREN
READ LABEL BEFORE USE



HEXOGON PLUS[®]

HERBICIDE

A selective herbicide for the control
of weeds in Radiata pine forests,
established lucerne and
non-cropland areas.

ACTIVE INGREDIENT: Contains 900 g/kg hexazinone in the form of
a water dispersible granule.

NET CONTENTS: 2.5kg

GSHPO21/F03

Grosafe[®]

HEXOGON PLUS®



HAZARD CLASSIFICATION:

Acute oral toxicity Category 4, Acute inhalation toxicity Category 4, Eye irritation Category 2, Specific target organ toxicity (repeated exposure) Category 2, Hazardous to soil organisms, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1

TOXICITY: Harmful if swallowed or inhaled. Serious eye irritant. May cause organ damage from repeated oral exposure.

ECOTOXICITY: Very toxic to fish and with long lasting effects. Very toxic to the soil environment. Harmful to terrestrial vertebrates. **SELECTIVE HERBICIDE – VERY TOXIC TO SOME PLANT SPECIES.** Beware: Spray drift hazard. Apply this product carefully. Spray drift may cause serious damage to other desirable plants. Do not allow drift to occur outside the target area. Do not apply directly into or onto water.

QUALIFIED HANDLER: This product must be under the control of a suitably qualified handler when mixing, loading or applying.

RECORD KEEPING: Records of use as described in NZS 8409 Management of Agrichemicals must be kept if more than 3 kg of HEXOGON PLUS is applied within 24 hours and likely to leave the application area.

PERSONAL PROTECTION: When mixing or applying wear overalls, impervious gloves and eye/ face protection. Avoid contact with or inhalation of spray mist. Remove protective clothing and wash hands and face thoroughly before meals and after work. Do not eat, drink or smoke while using. Wash clothing and personal protection equipment before re-use.

STORAGE: Store in original container tightly closed and in a locked, dry, cool, well ventilated area, away from foodstuffs. Stores containing more than 100 kg are subject to requirements for signage, secondary containment and emergency response plans. Storage must be in accordance with the current version of NZS 8409 Management of Agrichemicals.

When stored appropriately this product should show no significant degradation for 2 years from the date of manufacture. Contact the proprietor for further information about the use of this product if it is older than this.

SPILLS: When dealing with spills wear personal protective clothing and equipment as described in the PERSONAL PROTECTION section. Contain spilled product and store in properly labelled, sealed drums for safe disposal. If spray mixture is spilled absorb and collect in drums as above. Deal with all spillages immediately. If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority.

DISPOSAL: Avoid contamination of any water supply with product or empty container.

PRODUCT DISPOSAL: If possible dispose of by using according to the label, otherwise dispose of in an approved landfill.

CONTAINER DISPOSAL: Crush and bury empty container in a suitable 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 if person feels unwell or experiences symptoms, call a doctor or the National Poisons Centre (0800 764 766). Have product container or label at hand.

If swallowed, rinse mouth, give a glass or two of water but do NOT induce vomiting. In case of inhalation of spray remove to fresh air and keep at rest in position comfortable for breathing. If in eyes, wash out immediately with running water for several minutes. Remove contact lenses, and continue rinsing. If irritation persists, get medical attention. If on skin, remove contaminated clothing immediately. Wash skin immediately with plenty of soap and water.

EMERGENCY RESPONSE 0800 CHEMCALL: (0800 243 622)

GENERAL INFORMATION:

HEXOGON PLUS is a selective herbicide for the control of weeds in radiata pine, established lucerne and for non-selective weed control of annual and perennial weeds and brush in non-cropland areas. HEXOGON PLUS is absorbed mainly by the roots but some foliar absorption does occur. HEXOGON PLUS inhibits photosynthesis and is most effective when applied to actively growing weeds in warm weather conditions.

DIRECTIONS FOR USE:

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.

APPLICATION: HEXOGON PLUS can be applied using all conventional spray equipment. Do not use strainers finer than 300 microns. Apply the product carefully to avoid spray drift onto adjacent sensitive crops.

MIXING AND COMPATIBILITY: HEXOGON PLUS mixes readily with water. While agitating, slowly add the required quantity of HEXOGON PLUS to a half-filled spray tank and continue filling. Maintain agitation during filling and spraying and agitate thoroughly after a stoppage before recommencing spraying. HEXOGON PLUS is compatible with other commonly used forestry herbicides. When using with liquid herbicides, add the HEXOGON PLUS first and ensure it is thoroughly mixed before adding the other herbicides.

RAINFALL: Delay spraying if rain is likely to fall within one hour following treatment. Note that rainfall subsequent to application is necessary to move the chemical into the root zone of the weeds.

RATES OF APPLICATION:

Radiata pine forests: Do not apply if stressed from drought, disease or recent transplant. Do not use on light soils, soils low in organic matter or water-logged soils. Do not add a surfactant if applied over the top of trees.

Site preparation: Prior to planting and before weeds have become established apply 2.1-8.3 kg of HEXOGON PLUS per hectare. Use the higher rates on heavy soils, in high rainfall areas, or for hard to kill weeds such as bracken, blackberry, seedling gorse, seedling broom, paspalum, kikuyu and Himalayan honeysuckle, or when weeds are actively growing.

Release spraying: Apply only during the months of September and October otherwise tree damage may occur. For the control of broadleaf weeds and grasses, apply HEXOGON PLUS at 2.1-4.2 kg per hectare over the trees. For the control of bracken, blackberry, seedling gorse, seedling broom, paspalum, kikuyu and Himalayan honeysuckle apply 5.8-8.3 kg of HEXOGON PLUS in 220-450 litres of water per hectare.

Aerial Application: Foaming nozzle system – Apply in a minimum of 230 litres of water per hectare applied as two overlapping passes of 115 litres per hectare.

Spot release application: use 25g HEXOGON PLUS to 1 litre of water and apply 10-15 ml per square metre for broadleaf weeds and grasses and 20-30 ml per square metre for bracken, blackberry, seedling gorse, seedling broom, paspalum, Himalayan honeysuckle and in high rainfall areas.

When tank mixed with GROGARD 900 WDG: For release spraying, apply 1.7-2.5 kg of HEXOGON PLUS plus 6.7- 8.3 kg of GROGARD 900 WDG per hectare. Use the higher rates on dense vegetation, hard to kill weeds such as Californian thistle, paspalum, seedling gorse and seedling broom, or where residual activity is needed to control summer germinating grasses. For spot applications, use 10g of HEXOGON PLUS plus 45 g of GROGARD 900 WDG in 1 litre of water and apply 15-25 ml of the mixture per square metre.

Lucerne (established): Use only on stands that have been established for at least 12 months. Apply when weeds are actively growing from October to January. The product may be applied after cutting or grazing. Some yellowing and growth reduction may occur. Do not apply if the crop is stressed (drought etc).

- Apply 1.0 kg of HEXOGON PLUS in 300 litres of water per hectare for the control of annual poa, white clover, subterranean clover, shepherds purse, sweet vernal, nodding thistle (after the flowering stalk has commenced to bolt) and mouse eared chickweed.

- Apply 1.5 kg of HEXOGON PLUS in 300 litres of water per hectare for the control of browntop, storks bill, ragwort (after the seed head has bolted), woolly mullein and nodding thistle (at rosette stage).

Caution: Some yellowing of lucerne foliage and growth stunting may occur. To minimise these effects, do not apply on lucerne suffering from drought stress. Do not apply to rank lucerne growth. Lucerne up to 10cm is acceptable but the less lucerne leaf exposed the better. Brassica crops should not be sown within 12 months of an application of HEXOGON PLUS.

Non-cropland areas: Apply 4.2-8.3 kg of HEXOGON PLUS in 220-450 litres of water per hectare. For knapsack spraying, use 40-80 g in 10 litres of water per 100 square metres. For handgun application, use 500 g in 100 litres of water. Use higher rates on heavy soils, in heavy rainfall areas, or on hard to kill weeds such as paspalum, yarrow, Californian thistle, kikuyu and scrub weeds.

Registered pursuant to the ACVM Act 1997, No P09574.
See www.foodsafety.govt.nz for registration conditions.

Approved pursuant to HSNO Act 1996, Approval Code: HSR000959.
See www.epa.govt.nz for approval conditions

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:

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BATCH No:

DATE OF MANUFACTURE:

GSHPO21/B05

HEXOGON PLUS and GROGARD are Registered Trade Marks of Grosafe Chemicals Ltd



DANGER
Keep out of reach of children
READ LABEL BEFORE USE

INTREPID[®]

HERBICIDE

A selective post-emergent herbicide for grass
weed control in broadleaf crops and forestry.

ACTIVE INGREDIENT: Contains 360g/L clethodim in the form of
an emulsifiable concentrate. Also contains 582 g/L dearomatised
hydrocarbon solvent and 17.5 g/L calcium dodecylbenzene sulphonate.

GSIN774F01



9 421905 738774 >
INTREPID[®]
NET CONTENTS: 5 Litres

Grosafe[®]

INTREPID®



HAZARD CLASSIFICATIONS:

Flammable liquid Category 4, Aspiration hazard Category 1, Skin irritation Category 2, Eye irritation Category 2, Specific target organ toxicity (repeated exposure) Category 2, Hazardous to soil organisms, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment chronic Category 3.

TOXICITY: May be fatal if swallowed and if aspirated into lungs. May cause skin and serious eye irritation. May cause liver damage from repeated oral exposure at high doses.

ECOTOXIC: Harmful to aquatic plants. Avoid contamination of any water supply with product or empty container. Very toxic to some plant species. Do not allow drift to occur outside the target area. Harmful to soil organisms and to terrestrial vertebrates.

FLAMMABILITY: Combustible liquid; keep away from naked flame. No smoking.

QUALIFIED HANDLER: This product must be under the control of a qualified handler during use. INTREPID® must not be applied into or onto water. INTREPID® must be applied via ground-based method only.

RECORD KEEPING: A written record of use of each application must be kept according to HSN0 Regulations and N.Z. Standard for the Management of Agrichemicals (NZS 8409) when 3 kg or more is applied within 24 hours, in places where the product is likely to enter air or water and leave the application area.

TRANSPORT: Do not carry more than 1L of INTREPID® on a passenger service vehicle.

PERSONAL PROTECTION: Avoid skin and eye contact and inhalation of spray mist. When mixing or applying wear eye protection, chemically resistant gloves, boots and overalls. Remove protective clothing and wash hands and face thoroughly before meals and after work.

STORAGE: Keep out of reach of children. Do not store near heat or flame. Store in original container tightly closed and in a locked, dry, cool area away from sources of ignition and foodstuffs. Store in accordance with NZS 8409 Management of Agrichemicals. Stores containing 100L are subject to signage, 1000L or more of INTREPID® require secondary containment and emergency response plans. Stores containing 500L of INTREPID® must have at least two fire extinguishers.

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. Contain spilled product with inert material and store in properly labelled, sealed drums for safe disposal. If spray mixture is spilled, absorb and collect in drums as above. Deal with all spillages immediately. Wash area with water and absorb with further inert material. 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 rinsate 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: For advice contact the National Poisons Centre 0800 POISON (0800 764 766) (24hrs) or a doctor. IF SWALLOWED do not induce vomiting. Get immediate medical advice. IF IN EYES, wash out immediately with running water for several minutes. IF ON SKIN OR HAIR, remove contaminated clothing and wash with soap and running water. If skin or eye irritation persists, get medical advice. IF INHALED, immediately move to fresh air and rest. Maintain half upright position if breathing is difficult. Call the National Poisons Centre 0800 POISON (0800 764 766) (24hrs) or a doctor immediately for advice.

EMERGENCY RESPONSE 0800 CHEMCALL: 0800 243 622

MIXING

Half fill the spray tank and with the agitator operating, add the correct volume of INTREPID®. Add the remainder of the water then add the adjuvant and agitate thoroughly before using. After standing, agitate spray solution well before reusing.

COMPATIBILITY

INTREPID is compatible with GroGard® or Diablo® other terbuthylazine and clopyralid derivatives. Do not apply in combination with other herbicides unless experience shows that efficacy is not affected. Do not apply within 7 days of phenoxy herbicides.

EQUIPMENT

Apply using well maintained spray equipment that is accurately calibrated to apply 100-400L of water per hectare. Use nozzles and pressures that produce a droplet size of 150-300 microns VMD. Use the high water rate for dense grass infestations. Clean equipment thoroughly after use.

RESISTANCE MANAGEMENT

GROUP 1 HERBICIDE

INTREPID contains a herbicide from the cyclohexanedione group and has the inhibition of acetyl coA carboxylase mode of action. Some naturally-occurring weed biotypes resistant to INTREPID® and other Group 1 Herbicides may exist through normal genetic variability in any weed population. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds will not be controlled by INTREPID® or other Group 1 Herbicides. To minimise this risk, use strictly in accordance with label instructions and resistance management strategies at www.resistance.nzpps.org/

DIRECTIONS FOR USE

For best results apply to young actively growing grass weeds. Do not apply to plants under stress from drought or waterlogging. Use the lower rate on seedling grass weeds (2-5 leaf) or actively regenerating rhizomes, and the higher rate on tillering plants or hardy rhizomatous grasses. On established sod-bound rhizomatous grasses and established turf ryegrass in non-cultivated crops, suppression only may be obtained. On crops which have been grazed, remove stock and allow grasses to freshen up for a few days (5-10cm new growth) before treating. To minimise any possible crop damage, avoid spray overlaps. INTREPID® is considered to be rainfast if applied at least one hour before rainfall. **Always add an emulsifiable crop mineral oil such as EnSpray99® at 2.0L/ha with all applications.**

CROP	CRITICAL COMMENT
White clover seed	Apply after closing up, to control annual and perennial ryegrass and other grass weeds.
Legume feeds (e.g. lucerne, lupins, clover, lotus, trefoil)	To control annual and perennial ryegrass and other grass weeds.
Fodder brassicas	Apply when grass seedlings are small (typically 3-6 weeks after planting) and well before canopy closure.
Forage herbs (e.g. plantain, chicory)	To control annual and perennial ryegrass and other grass weeds. Do not apply INTREPID® to plantain seed crops after flower heads are first visible in the base of the plants.
Orchards	To control actively growing grass weeds. Apply as a directed spray to the base of the trees to avoid fruit contact.
Vegetables	To control actively growing grass weeds. Do not apply more than 670ml/ha. Crop safety has been demonstrated on onions, carrots and lettuce. Where crop safety is unknown, a small area should be treated before widespread application. NB: Asparagus – do not apply during the cutting period.
Peas, lentils, oilseed, rape	To control wild oats. Apply 170ml/ha when the majority of oats are in the 2-5 leaf growth stage. A temporary effect on leaf colour and sheen may occur in peas. This does not affect crop vigour or yield.
Forestry (Radiata pine, Macrocarpa, Douglas fir)	Do not exceed 670ml/ha. Tree release - Spot treatment: Use 23ml INTREPID® plus 100ml EnSpray99® per 10L of water. Apply 20ml spray solution per square metre. To control broadleaf weeds and for residual control, apply in combination with GroGard® at recommended label rates.

GRASSES CONTROLLED AND RECOMMENDED USE RATES

Grass Species	Rates / ha
Wild oats, annual and perennial ryegrass, cocksfoot, barnyard grass, summergrass, floating sweet grass, canary grass, bristle grass, volunteer cereals. Note: Turf ryegrasses and tillered cereals will only be suppressed at these rates.	170 - 330ml
Annual poa, smooth witchgrass, soft brome, phalaris, tall fescue, prairie grass, rigput brome, browntop, barley grass. Note: Chewings fescue, Yorkshire fog and hairgrass will be suppressed but not controlled at these rates.	330 - 670ml
Couch, paspalum, Indian doab	1.3 - 2.0L

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

WITHHOLDING PERIOD:

Vegetable crops - 5 weeks.
Legume crops, forage herbs and fodder brassica crops - 3 weeks.

Registered pursuant to the ACVM Act, 1997, No. P10165 See www.foodsafety.govt.nz for registration conditions.
Approved under the HSN0 Act 1996, HSR100921 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
20 Jean Batten Drive
Mt Maunganui 3116
POBox 14-450 Tauranga 3141
Tel: 0800 220 002
Email: info@grosafe.co.nz
www.grosafe.co.nz

Batch No:

Date of Manufacture:



Intrepid®, Diablo®, EnSpray 99® and GroGard® are the registered trademarks of Grosafe Chemicals Ltd.

GSIN74EB01



DANGER
ECOTOXIC
KEEP OUT OF REACH OF CHILDREN
READ LABEL BEFORE USE

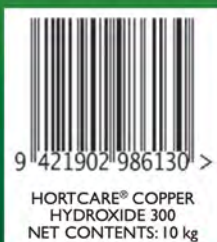
HORTCARE®
**COPPER
HYDROXIDE
300**



A protectant fungicide for the control
of a range of fungal and bacterial diseases
of fruit, vegetables, radiata pine and roses.

ACTIVE INGREDIENT: Contains 300g/kg copper as
copper hydroxide in the form of a water dispersible granule

GSQ-H130/BAG06



HORTCARE® COPPER HYDROXIDE 300



HAZARD CLASSIFICATION:

Acute oral toxicity Category 4, Serious eye damage Category 1, Skin sensitisation Category 1, 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: Causes serious eye damage.

Harmful if swallowed. May cause an allergic skin reaction from prolonged contact. May cause lung damage from repeated oral exposure at high doses.

ECOTOXICITY

Very toxic to aquatic organisms and with long-lasting effects. Harmful to terrestrial vertebrates. Do not apply directly into or onto water. Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area. Avoid contamination of any water supply with chemical or empty container.

QUALIFIED HANDLER: A suitably qualified handler is required when mixing, loading or applying.

PERSONAL PROTECTION: Use only outdoors or in well-ventilated area. Avoid breathing dust, mist or spray. When using wear a face mask or goggles, rubber gloves and overalls. Do not eat, drink or smoke while using. Wash hands and face before meals and after work. Wash protective clothing after use. Contaminated work clothing should not be allowed out of the workplace.

STORAGE: Store product in original container, tightly closed, in a cool, dry place. Keep out of reach of children, and away from foodstuffs. Storage must be in accordance with the current version of NZS 8409 Management of Agrichemicals. Stores containing more than 100kg are subject to requirements for signage, secondary containment and emergency response plans.

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

SPILLS AND DISPOSAL: When dealing with spills wear personal protective clothing and equipment as described in the PERSONAL PROTECTION section. Collect and store in properly labelled, sealed drums for safe disposal. If spray mixture is spilled absorb, with soil, sand or sawdust, and collect in drums as above. 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 or bury below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots.

CONTAINER DISPOSAL: Triple rinse and add rinseate to the spray tank. Take to an Agrecovery site, burn if circumstances, especially wind direction, permit or bury in a suitable land fill.

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

FIRST AID: For advice call a doctor or the National Poisons Centre (0800 764 766). Have product label or container at hand. If swallowed, rinse mouth but do not induce vomiting. Get advice if you feel unwell. If on skin wash with plenty of soap and water. If skin irritation or rash occurs, get medical advice. If in eyes flush with plenty of water. Remove contact lenses if present after first few minutes and keep rinsing. Immediately get medical advice. If inhaled remove to fresh air and keep at rest in a position comfortable for breathing. Get medical advice if person feels unwell.

EMERGENCY RESPONSE 0800 CHEMCALL (0800 243 622)

GENERAL INFORMATION: Hortcare® Copper Hydroxide 300 is a dry-flowable formulation, easy to pour and measure and readily dispersed in water in the spray tank forming a stable suspension.

MIXING INSTRUCTIONS: Half fill the spray tank with water, slowly add the required amount of Hortcare® Copper Hydroxide 300 while the agitation system is operating. Other products should be added only after the Hortcare® Copper Hydroxide 300 has been dispersed. Check compatibility charts before mixing. If phytotoxicity is in question (on tender foliage or when using high dose rates) test on a small area before full scale application. For optimum effect the spray mix should have a pH between 7.0 and 9.0.

WATER RATE: As a guide: for dilute high volume sprays use 200 litres (air assisted sprayers) or 800 litres (hydraulic sprayers) per hectare on vegetable crops, 2,500 litres on mature kiwifruit and grape vines, 3,000 litres on citrus and up to 6,000 litres on avocados and tree fruits. For low volume concentrate spraying calculate the dose in order to apply the same rate of Hortcare® Copper Hydroxide 300 as with dilute sprays. Full coverage is essential.

Resistance Management Strategy: **GROUP M1 FUNGICIDE**

Bacterial pathogens such as Psa can develop resistance to pesticides including copper products. To prevent resistance and retain all possible control options, use a programme that includes a range of products with different modes of action and do not apply below label rates.

It is an offence to use this product on animals.

WITHHOLDING PERIOD: 1 day

Leaf plucking in vineyards: Sheep must not be sent for slaughter for 2 months after being removed from the vineyard (and placed on clean feed).

DIRECTIONS FOR USE

The following information is based on data believed to be reliable. If in doubt check with local advisers, compatibility charts, industry associations. To avoid risk to crops test a small area first. Grosafe Chemicals make no warranty, and assume no liability in connection with any of this information.

CROP	DISEASE	RATE g/100L	APPLICATION RATE, TIMING
Apples	Black Spot	110	Full cover spray. Apply between silver tip and green tip (max 1cm green tip).
Asparagus	Stemphylium leaf spot	250–375	Spray at first appearance of disease, after closing up. Repeat at 14 day intervals. Up to six sprays may be required.
Avocado	Anthraxnose	70–90	Apply monthly from flowering to harvest. Use higher rate and shorten the interval when conditions favour the disease.
Beans	Bacterial blight	250–310	Apply at 7–14 day intervals when plants reach 15cm high.
Bushfruit, Cane fruit	Cane Wilt, Cane Spot, Spur Blight, Leaf Spot	70–90	Apply from bud burst at 10–14 day intervals. Use the higher rate early season or in conditions that favour the disease.
Brassica crops: Broccoli, Brussel Sprouts, Cabbage, Cauliflower	Downy Mildew	70–90	Apply at 10–14 day intervals following emergence or after setting out transplants.
Celery	Septoria Leaf Spot	90	After setting out transplants apply at 5–7 day intervals, depending on disease severity. EnSpray 99* spray oil may be added at 1 litre per 100 litres of spray mix.
Citrus	Melanose Verrucosis	45–90	Apply before and after blossom.
	Brown Rot	90–110	Apply in autumn to the skirts of the trees to a height of 1 metre, to the drip line and 50cm beyond. Use higher rate if conditions favour disease.
Cucurbits	Angular Leaf Spot, Downy Mildew	70–130	Apply at 7 day intervals when plants begin to vine.
Feijoa	Leaf Spot	70–90	Repeat as necessary.
Grapes	Black Spot, Downy Mildew	65–130	Apply at 10–14 day intervals from bud break to harvest. Adjust rate or stop if injury is observed.
Kiwifruit	Leaf Spot, Phomopsis sp., Botryosphaeria	70–90	Apply after harvest before leaf fall, after pruning, and two sprays four weeks apart prior to bud burst.
	Psa-V Pseudomonas syringae pv. Actinidiae	70–90	Apply after harvest but before leaf fall, after pruning, and two sprays four weeks apart prior to bud burst.
		50–90	Use from bud-break to harvest, but do not apply during flowering. Apply full dilute water rate, appropriate for the canopy density to give complete coverage. While efficacy and safety are not yet fully proven, it is recommended that the lower rate be applied to young, soft growth moving to the high rate as leaves mature. Apply alone, post-flowering, as tank mixing with other chemicals may result in phytotoxicity.
Lettuce	Downy Mildew	70–110	Apply at 7–10 day intervals following emergence or after setting out transplants.
Onions	Downy Mildew, Bacterial Blight	90	Apply at the first sign of infection and repeat every 10–14 days as required.
Passionfruit	Septoria Spot, Brown Rot, Grease Spot	45	Apply at 2–4 week intervals from November to March, alternating with maneb/mancozeb. For grease spot 2 week intervals may be required.
Peas	Downy Mildew, Leaf Spot	70–90	Apply at 7–14 day intervals following emergence.
Pear (including Nashi)	Black Spot	110	Apply one spray between silver tip and green tip (max. 1cm green tip). Non-bearing trees: apply cover sprays at 14–21 day intervals until vegetative growth ceases. Post Harvest: apply 190g/100 litres at 21 days from harvest to leaf fall. Reduce interval in wet weather. Smooth skin varieties: do not apply between green tip and harvest or russetting may occur.
	Fire Blight (Erwinia amylovora)	25–45	
Pinus radiata	Pine Needle Blight (dothistroma pini)	2.5–4.4kg/ha (aerial plantations) 1.25–3.1kg/ha (ground spray in nurseries)	Apply in 60–100 litres water in November or early December. Annual treatment may be required. Apply in 600–1,000 litre water/ha, with 1% Summer Oil. Begin in October and apply at 4 week intervals until planting out.
Potato	Early Blight, Late Blight	130–200	Apply every 7 days when plant reaches 15cm high, until 14 days before harvest.
Roses	Leaf Spot	100	Apply at first signs of new growth then at 14 day intervals depending on weather conditions. Do NOT use a spray adjuvant.
Strawberries	Leaf Spot	70–90	Begin spraying when plants are established and repeat at 7–10 day intervals through the season. Stop if signs of crop injury appear.
Stone Fruit	Leaf Curl, Shot Hole, Bladder plum	110	Apply when buds are swelling, within one week before buds open, with a second application of 115g/100 litres water 10–14 days later.
	Bacterial Blast	312	Apply at leaf fall and repeat every 4 weeks until bud movement, then treat as for Leaf Curl.
Tamarillo	Leaf Spot	70	Apply when infection is seen.
Tomato	Early Blight, Late Blight, Bacterial Speck, Bacterial Spot	70–130	Apply at 7–10 day intervals depending on weather conditions. Increase volume as crop matures; ensure coverage of upper and lower leaf surfaces. Repeat spray after 13mm rain or irrigation.

Registered pursuant to the ACVM Act 1997, No. P 8704. See www.foodsafety.govt.nz for registration conditions
Approved pursuant to HSNO Act 1996, Approval code: HSR000739. See www.epa.govt.nz for approval conditions

WARRANTY: This formulation is warranted to contain the specified active ingredient within accepted analytical tolerance when packed. The user bears the risk of 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
20 Jean Batten Drive
Mt Maunganui 3116
PO Box 14-450 Tauranga 3141
Tel: 0800 220 002
Email: info@grosafe.co.nz
www.grosafe.co.nz

Date of Manufacture:

Batch No:



Hortcare® and EnSpray 99* are registered trade marks of Grosafe Chemicals Ltd.

WARNING
KEEP OUT OF REACH OF CHILDREN

GREENBOR™



CONTINUOUS RELEASE

BORON FERTILIZER

Organic granular fertilizer



Chengeta
Crop Care

25kg net

Contains 100g/kg boron in the form of magnesium and calcium borate compounds

GREENBOR™

**PRODUCT DESCRIPTION AND SPECIFICATIONS:**

GREENBOR™ is a naturally occurring Calcium/Magnesium Borate which releases at a slow rate but continuously into the soil in moist conditions. GREENBOR™ contains 10% Boron

WARNING: May cause eye irritation and mild skin irritation. Avoid breathing dust.

PRECAUTIONS: Read product label before use. Use of gloves and eye protection should not be necessary for normal use conditions, however protection is advisable if area is excessively dusty. Minimize dust accumulation. Avoid breathing dust. Wash hands thoroughly after handling.

FIRST AID: In case of poisoning or if exposed or concerned: Call the NZ POISON CENTRE (0800 764 766) or a doctor if you feel unwell. Have product container or label at hand.

Eye contact: Hold eyelids apart and flush the eye continuously for at least 15 minutes.

Get medical attention if irritation persists.

Skin contact: Wash affected area with water.

Ingestion: DO NOT induce vomiting.

Give water to drink. Get medical attention.

Inhalation: If symptoms of nose or throat irritation occur or breathing is difficult, move to fresh air and keep at rest in a position comfortable for breathing. Begin artificial respiration if breathing has stopped. Get medical attention.

STORAGE: Store in a cool, dry place out of reach of children.

DISPOSAL: Dispose of empty packaging in normal rubbish collection to landfill or by burning in accordance with local Council regulations. Dispose of small quantities of unwanted product or residues to landfill. Consult local authorities for any special requirements.

CONDITIONS OF USE: The effectiveness of this product depends in part upon the correct methods of application, condition of the soil, climatic conditions and rainfall. As such no guarantee can be expressed or implied. If in doubt about the rate of application especially after longer term use of GREENBOR™ get a foliage analysis done and contact the supplier for more specific application rates.

Chengeta Crop Care shall not be liable for any loss, injury, damage or death whether consequential or otherwise whatsoever or howsoever arising whether through negligence or otherwise in connection with the sale, supply, use or application of this product. The supply of this product is on the express condition that the purchaser does not rely on Chengeta Crop Care Trading Ltd's skill or judgment in purchasing or using the same and every person dealing with this product does so at their own risk absolutely. No representative of Chengeta Crop Care Trading Ltd has any authority to add or alter these conditions.

Application Rates:

GREENBOR™ is designed to be applied annually at the following rates if soil results indicate the need for boron

Orchard Crops (Apples, Kiwifruit, Grapes)	25 - 40 kg/ha
Avocados	25 - 60 kg/ha
Brassicas and forage crops	25 - 40 kg/ha
Potatoes	25 - 40 kg/ha
Pastures	15 - 40 kg/ha

The above application rates will provide season long availability.

Soil test results will indicate whether additional amounts are required for the season.



Chengeta
Crop Care

Grosafe
CHEMICALS LTD



Product N. 01BV011, V02

Last review: 08/02/2019

TECHNICAL SPECIFICATION

FertiBagra 10G

Granular 2-4 mm

CAS No. 1319-33-1

CHEMICAL SPECIFICATION

Component	Content
Boric Oxide (B_2O_3)	32.2 % Expected
Boron (B)	10% Expected
Boric Oxide (B_2O_3)	30.6 % Minimum
Calcium Oxide (CaO)	< 19 %
Sodium Oxide (Na_2O)	< 12 %
Potassium Oxide (K_2O)	< 2 %
Magnesium Oxide (MgO)	1 – 2 %
Silicon Oxide (SiO_2)	3 – 5 %
Chloride (Cl)	4 - 6 %
Sulphate (SO_4)	5 - 8 %
Moisture (H_2O)	< 1 %

GRANULOMETRY SPECIFICATION

Malla A.S.T.M	mm	Range(%)
5	4.00	0 – 5
10	2.00	95 – 100

BULK DENSITY

	t/m ³
Typical Rank	0.60 - 0.80

PACKING

800 kg Polypropylene big bags.

ADDITIONAL INFORMATION

The above specification are established and guaranteed by the following Inkabor Analytical Methods.



Inkabor is an active member of the European Borates Association

Registered and distributed by:

Grosafe
CHEMICALS LTD

20 JEAN BATTEN DRIVE
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POBox 14-450 Tauranga 3143
FREEPHONE 0800 220 002
info@grosafe.co.nz
www.grosafe.co.nz

www.inkabor.com

GRUPPO
COLOROBIA



INKABOR BOLIVIA S.R.L.
 Oficina: Calle Presbítero Medina 2780, Zona Sopocachi Bajo. La Paz Bolivia
 Planta: Carretera Capachos Km. 1 ½ Urb. Florida Oruro- Bolivia
 Tel.: +591 2 2424249 (Oficina)/ + 591 2 5242833 (Planta)
 NIT 255274020
 www.inkabor.bo – info@inkabor.com

CERTIFICADO DE ANALISIS - CERTIFICATE OF ANALYSIS		FECHA/DATE: 31/01/2022																																								
		LAB No.: CC-CA-051																																								
		FACTURA No. /INVOICE No.: 00000077																																								
PRODUCTO / PRODUCT: FERTIBAGRA 10G		CANTIDAD / QUANTITY: 25.6000 TM																																								
CLIENTE / BUYER: PRIME TRADING LIMITED		PAIS / COUNTRY NEW ZEALAND																																								
<p align="center">ANALISIS QUIMICO /PARAMETERS</p> <table> <tr><td>B₂O₃</td><td>32.00%</td></tr> <tr><td>Cl</td><td>5.96%</td></tr> <tr><td>CaO</td><td>15.51%</td></tr> <tr><td>MgO</td><td>1.98%</td></tr> <tr><td>Na₂O</td><td>8.33%</td></tr> <tr><td>K₂O</td><td>0.52%</td></tr> <tr><td>Fe₂O₃</td><td>0.20%</td></tr> <tr><td>SiO₂</td><td>3.61%</td></tr> <tr><td>SO₄</td><td>3.74%</td></tr> <tr><td>Pb</td><td>23.0 ppm</td></tr> <tr><td>Cu</td><td>5.3 ppm</td></tr> <tr><td>Ni</td><td>7.6 ppm</td></tr> <tr><td>Cr</td><td>2.4 ppm</td></tr> <tr><td>Zn</td><td>29.0 ppm</td></tr> <tr><td>As</td><td>38.3 ppm</td></tr> <tr><td>Cd</td><td>2.6 ppm</td></tr> <tr><td>Hg</td><td><4 ppm</td></tr> </table> <p align="center">ANALISIS GRANULOMETRICO PROGRESIVO/ PROGRESSIVE GRANULOMETRIC ANALYSIS</p> <table> <tr> <td>MALLA/ MESH A.S.T.M. N°</td> <td>% ></td> </tr> <tr> <td>5</td> <td>13.37</td> </tr> <tr> <td>10</td> <td>89.20</td> </tr> </table> <p>N° LOTE/LOT I-011 F. PRODUCCION/PRODUCTION: 20/11/2021 F. VENCIMIENTO/EXPIRATION: 20/11/2026</p> <p align="center">OC: P21314T</p>			B ₂ O ₃	32.00%	Cl	5.96%	CaO	15.51%	MgO	1.98%	Na ₂ O	8.33%	K ₂ O	0.52%	Fe ₂ O ₃	0.20%	SiO ₂	3.61%	SO ₄	3.74%	Pb	23.0 ppm	Cu	5.3 ppm	Ni	7.6 ppm	Cr	2.4 ppm	Zn	29.0 ppm	As	38.3 ppm	Cd	2.6 ppm	Hg	<4 ppm	MALLA/ MESH A.S.T.M. N°	% >	5	13.37	10	89.20
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Registered and distributed by:



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 MT MAUNGANUI 3116
 PO Box 14-450 Tauranga 3143
 FREE PHONE 0800 220 002
 info@grosafe.co.nz
 www.grosafe.co.nz





Product N.01BV002, V08

Last review: 08/02/2019

TECHNICAL SPECIFICATION

FertiBagra 15G

Granular 2-4 mm

CAS No. 92908-33-3

CHEMICAL SPECIFICATION

Component	Content
Boric Oxide (B_2O_3)	48% Expected
Boron (B)	15% Expected
Boric Oxide (B_2O_3)	46 % Minimum
Calcium Oxide (CaO)	< 20 %
Sodium Oxide (Na_2O)	< 14 %
Potassium Oxide (K_2O)	< 2 %
Magnesium Oxide (MgO)	1 – 3 %
Silicon Oxide (SiO_2)	3 – 5 %
Chloride (Cl)	4 - 6 %
Sulphate (SO_4)	5 - 8 %
Moisture (H_2O)	< 1 %

GRANULOMETRY SPECIFICATION

Malla A.S.T.M	mm	Range(%)
5	4.00	0 – 5
10	2.00	95 – 100

BULK DENSITY

	t/m ³
Typical Rank	0.70 - 0.85

PACKING

700 kg Polypropylene big bags.

ADDITIONAL INFORMATION

The above specification are established and guaranteed by the following Inkabor Analytical Methods.



Inkabor is an active member of the European Borates Association

Registered and distributed by:

Grosafe
CHEMICALS LTD

20 JEAN BATTEN DRIVE
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INKABOR BOLIVIA S.R.L.
 Oficina: Calle Presbitero Medina 2780, Zona Sopocachi Bajo, La Paz Bolivia
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CERTIFICADO DE ANALISIS - CERTIFICATE OF ANALYSIS		FECHA/DATE: 31/01/2022																																								
		LAB No.: CC-CA-052																																								
		FACTURA No. /INVOICE No.: 00000075																																								
PRODUCTO / PRODUCT: FERTIBAGRA 15G		CANTIDAD / QUANTITY: 24.5000 TM																																								
CLIENTE / BUYER: PRIME TRADING LIMITED		PAIS / COUNTRY NEW ZEALAND																																								
<p align="center">ANALISIS QUIMICO /PARAMETERS</p> <table> <tr><td>B₂O₃</td><td>46.16%</td></tr> <tr><td>Cl</td><td>5.39%</td></tr> <tr><td>CaO</td><td>15.57%</td></tr> <tr><td>MgO</td><td>1.98%</td></tr> <tr><td>Na₂O</td><td>9.65%</td></tr> <tr><td>K₂O</td><td>0.54%</td></tr> <tr><td>Fe₂O₃</td><td>0.07%</td></tr> <tr><td>SiO₂</td><td>4.22%</td></tr> <tr><td>SO₄</td><td>4.38%</td></tr> <tr><td>Pb</td><td>30.2 ppm</td></tr> <tr><td>Cu</td><td>5.5 ppm</td></tr> <tr><td>Ni</td><td>7.0 ppm</td></tr> <tr><td>Cr</td><td>6.0 ppm</td></tr> <tr><td>Zn</td><td>40.1 ppm</td></tr> <tr><td>As</td><td>24.6 ppm</td></tr> <tr><td>Cd</td><td>1.6 ppm</td></tr> <tr><td>Hg</td><td><4 ppm</td></tr> </table> <p align="center">ANALISIS GRANULOMETRICO PROGRESIVO/ PROGRESSIVE GRANULOMETRIC ANALYSIS</p> <table> <tr> <th>MALLA/ MESH A.S.T.M. N°</th> <th>% ></th> </tr> <tr> <td>5</td> <td>11.36</td> </tr> <tr> <td>10</td> <td>95.78</td> </tr> </table> <p>N° LOTE/LOT I-009 F. PRODUCCION/PRODUCTION: 25/10/2021 F. VENCIMIENTO/EXPIRATION: 25/10/2026 OC: P21315T</p>			B ₂ O ₃	46.16%	Cl	5.39%	CaO	15.57%	MgO	1.98%	Na ₂ O	9.65%	K ₂ O	0.54%	Fe ₂ O ₃	0.07%	SiO ₂	4.22%	SO ₄	4.38%	Pb	30.2 ppm	Cu	5.5 ppm	Ni	7.0 ppm	Cr	6.0 ppm	Zn	40.1 ppm	As	24.6 ppm	Cd	1.6 ppm	Hg	<4 ppm	MALLA/ MESH A.S.T.M. N°	% >	5	11.36	10	95.78
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Registered and distributed by:



CHEMICALS LTD

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 FREE PHONE 0800 220 002
 info@grosafe.co.nz
 www.grosafe.co.nz

**GRUPPO
COLOROBIA**



WARNING

Keep out of reach of children
Read label before use

GROMARK[®] REDLINE

Red marker dye additive to provide a temporary
indication of spot or boom sprayed areas.

GSCWRL644F01



9 421905 738644 >
GROMARK[®] REDLINE
NET CONTENTS: 5L



GROMARK REDLINE



HAZARD CLASSIFICATIONS:

Acute oral toxicity Category 4, Skin irritation Category 3, Eye irritation Category 2, Specific target organ toxicity single exposure Category 2 Hazardous to terrestrial vertebrates

WARNING: Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. Harmful to terrestrial vertebrates.

ENVIRONMENT: Avoid release to the environment. Do not apply directly into or onto water. Avoid contamination of any water supply with product or empty container.

PERSONAL PROTECTION: When mixing or loading wear protective gloves and eye/face protection. Avoid breathing vapours. Wash hands thoroughly after handling. Contaminated work clothes should not be allowed out of the workplace. Do not eat, drink or smoke when using this product.

STORAGE: Store in original container, tightly closed and away from foodstuffs. Store in a locked, cool dry well ventilated area avoiding sunlight and extreme temperatures.

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

SPILLS AND DISPOSAL:

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 containers when empty and add residue 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 exposed or concerned, get medical advice. Have product label or safety data sheet on hand. For advice call a doctor or the National Poison Centre (0800 764 766). IF ON SKIN: Wash with plenty of soap and water. Remove immediately all contaminated clothing. IF SWALLOWED: Rinse mouth with water. Do not induce vomiting. Call the NATIONAL POISON CENTRE or doctor for advice. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. If skin irritation or rash occurs or if eye irritation persists, get medical attention.

EMERGENCY RESPONSE: 0800 CHEMCALL (0800 243 622)

GENERAL INFORMATION:

GroMark RedLine is a low toxicity, non-corrosive dye but it is intense and persistent. **GroMark RedLine** is an intense red marker dye that will identify any area that has been sprayed. The use of this product will help cut wastage due to double spraying, as well as increasing the accuracy of spraying. Care should be taken to avoid getting spray onto unwanted areas. Spillages are likely to cause some permanent discolouration.

MIXING:

Shake well before use.

Add **GroMark RedLine** dye to partly filled spray tank and thoroughly mix before adding any herbicide. Maintain agitation through filling and spraying.

DIRECTIONS FOR USE:

Use between 50mL and 100mL of **GroMark RedLine** per 100 litres of water to achieve the desired colour intensity.

COMPATIBILITY:

GroMark RedLine is compatible with most commonly used crop protection products.

Approved pursuant to the HSNO Act 1996 HSR002503
See www.epa.govt.nz for approval 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.

Distributed by:



Grosafe Chemicals Ltd
20 Jean Batten Drive
Mt Maunganui 3116
PO Box 14-450 Tauranga 3141
Tel: 0800 220 002
Email: info@grosafe.co.nz
www.grosafe.co.nz

Batch No:

Date of Manufacture:

GSGMRL644/B01





DANGER

Keep out of reach of children
Read label before use

ENSPRAY 99[®]

An emulsifiable, narrow range spray oil for the control of armoured scale on kiwifruit, armoured scale, greenhouse thrips and six-spotted mite on avocados, scale, aphids and mites on citrus, pip and stone fruits, thrips on citrus and powdery mildew on grapes. Also for use with herbicides to enhance spreading, sticking and uptake.



ACTIVE INGREDIENT: 821g/L (980ml/L) mineral oil in the form of an emulsifiable concentrate. Unsulphonated residue not less than 99.0 %

GROE99/499/F07



Grosafe[®]

ENSpray 99®



HAZARD CLASSIFICATIONS: Aspiration hazard Category 1, Eye irritation Category 2, Designed for biocidal action.

TOXICITY:

DANGER: May be fatal if swallowed and enters airways. Serious eye irritant.

ECOTOXIC:

Designed for biocidal action. Do not apply directly into or onto water. Avoid contamination of any water supply with product or empty container.

PERSONAL PROTECTION: When mixing or loading wear overalls, impervious gloves and eye/face protection. Avoid breathing spray mist. Wash hands and exposed skin after work.

STORAGE: Store in original container tightly closed and in a locked, dry, cool, well ventilated area, away from foodstuffs. When stored appropriately this product should show no significant degradation for 2 years from the date of manufacture. Contact the distributor for further information about the use of this product if it is older than this.

SPILLS AND DISPOSAL: When dealing with spills wear personal protective clothing and equipment as described in the PERSONAL PROTECTION section. Contain and absorb with suitable inert absorbent material and store in properly labelled, sealed drums for safe disposal. If spray mixture is spilled absorb and collect in drums as above. 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.

CONTAINER DISPOSAL: Triple rinse container and add residue to mixture. Recycle empty rinsed 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: For advice call a doctor or the National Poisons Centre (0800 764 766). If medical advice is needed, have product container or label at hand. If swallowed, do NOT induce vomiting. Immediately call the National Poisons Centre or doctor for advice. 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 attention. If on skin, wash with plenty of soap and water. If irritation occurs, get medical advice.

EMERGENCY RESPONSE – 0800 CHEMCALL (0800 243 622)

GENERAL INFORMATION: EnSpray 99® is a highly refined narrow distillation range spraying oil which contains emulsifiers to facilitate mixing with water.

It is an offence to use this product on animals.

DIRECTIONS FOR USE:

Mixing Instructions: Pour the required amount of water into the mixing tank then add EnSpray 99® and agitate well. When mixing with other pesticides add the other product first, according to the manufacturer's instructions, then add the EnSpray 99® last. Maintain continuous agitation while spraying.

Equipment: Apply using accurately calibrated and maintained equipment in accordance with the New Zealand Standard for the management of Agricultural Chemicals (NZS 8409). Apply only with ground-based application methods.

Restraints: Do not spray under conditions that cause slow drying: i.e. low temperatures, high humidity. Do not spray in the late evening or early morning or during the hours of darkness: this could cause damage to the fruit.

COMPATIBILITY: Adjuvant with herbicides - Use EnSpray 99® as an adjuvant with herbicides to enhance spreading, sticking and uptake. Use with herbicides such as Intrepid® (clothodim), Officiate® (flumetsulam) and Herald® (haloxyfop-p). Use 0.5 – 2 L/ha, depending on the specific recommendations on the herbicide label. EnSpray 99® is believed to be incompatible with folpet, captan, carbaryl and dodone, and should not be applied within 4 weeks of these products, or within 14 days of applications of sulphur or lime sulphur, once crop growth has commenced. As information is gained recommendations may change: consult your local adviser and the label of the proposed additive. If doubt remains do not mix products.

WITHHOLDING PERIOD: 1 day.

RECOMMENDATIONS FOR USE: The rates suggested are for high volume spraying to run-off.

Crop / Pest	Rate and Timing	Comments
Apples, Pears and Stonefruit - For the control of San Jose Scale, European red mite and aphids	1.5-2L/100L of water, from green tip to tight cluster. [see notes on varieties] Summer application: 1L/100L water.	Complete coverage is essential. If pest numbers are high, add a suitable insecticide.

NOTES:

1. Sensitive varieties: Do not spray Cox's Orange or Pippin later than early Green tip. Do not spray Gala between tight cluster and early fruit development.
2. In mixed blocks time the oil spray according to the earliest variety.
3. Monitor early varieties for bud swell at least 3 weeks in advance of normal timing.
4. Ensure crop is not under stress from drought or frost before application.

Crop / Pest	Rate and Timing	Comments
Avocados - For the control of armoured scale and greenhouse thrips.	1L /100L of water. Determine pest pressures by monitoring, or follow the high pest pressure recommendations as a precaution.	From late January to February apply two sprays one month apart. If pest pressure is high apply three sprays from Jan to April. May be applied once or twice, pre-flowering in Sept/Oct. Do not apply to plants under moisture stress.
For the control of six-spotted mite.	0.5 - 1L/100L of water.	To suppress six-spotted mite apply two sprays two weeks apart at first sign of infestation.
Citrus - For the control of scale insects, aphids, citrus red mite and thrips.	1L /100L of water. Apply during spring and summer.	Complete coverage is essential. Do not apply to citrus trees in hot dry weather when trees are suffering moisture stress. If pest populations are high or mealy bug is a problem add suitable insecticide.
Grapes - As a spray adjuvant for insecticides.	1L /100L of water. Apply from advanced bud swell to bud burst, mixed with a suitable insecticide.	EnSpray 99® will assist the spreading, adhesion and penetration of the insecticide into the bark crevices.
Powdery mildew control.	2L /100L of water.	Apply as a high volume spray to run-off. Repeat on a 7 – 10 day schedule. Allow a gap of 10-14 days pre and post a sulphur application. The action of EnSpray 99® is short lived: the use of a DMI fungicide may be required to maintain control over an extended break. May reduce the visible bloom on red varieties when used close to harvest. The use of this product may delay harvest by up to one week.
Kiwifruit For the control of Armoured scale (including Greedy Latania and Oleander scales)	Dormant to pre-flowering 1L /100L of water.	May be applied with oil compatible pesticide to control high pest numbers. Ensure crop is not under stress from drought or frost before application. Complete coverage is essential
Post flowering Spraying oils have the potential to cause phototoxic damage to kiwifruit. To minimise the risk of damage it is recommended: HAYWARD - 1L/100L of water. Do NOT apply during the period from 14 days after fruit set to 35 days after fruit set. The application of oil sprays after March increases the risk of fruit drop and care is essential. In orchard blocks with very heavy infestations of scale insects use 2L of EnSpray 99® per 100L water during the month of February. Note: The higher 2L rate may result in unacceptable skin marking, especially under slow drying conditions. Gold3 - May be applied at 1L per 100L water between 14-21 days immediately after fruit set and then again in the second or third week of February. Application outside of these times or at higher rate may result in unacceptable skin marking or fruit softening and/or premature fruit drop. NOTES: All applications should be in response to a demonstrated need and be in accordance with the Crop Protection Programmes for export kiwifruit. Use conventional airblast spray volumes post bloom of 2,000 to 2,200L of water per hectare. The use of concentrate spraying or very high volumes of water (>2,500L) are not advised. Avoid spray overlap and slow drying conditions.		

Registered pursuant to the ACVM Act 1997, No P9104. See www.foodsafety.govt.nz for registration conditions.
Approved pursuant to HSNO Act 1996, No HSR 100946. See www.epa.govt.nz for approval conditions

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
20 Jean Batten Drive
Mt Maunganui 3116
PO Box 14-450 Tauranga 3141
Tel 0800 220 002
Email: info@grosafe.co.nz
www.grosafe.co.nz

Batch No:

Date of Manufacture:



EnSpray 99®, Intrepid®, Officiate® and Herald® are registered trademarks of Grosafe Chemicals Ltd.

GROES99/B06



DANGER

Read Label before use
Keep out of reach of children

FORCE[®] ULTRA

An organo-silicon surfactant for improved penetration
and adhesion of agricultural, forestry and horticultural
herbicides and other pesticides.

ACTIVE INGREDIENT: contains 100% Polyalkyleneoxide
Modified Heptamethyltrisiloxane

GSFL06/F01



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FORCE[®] ULTRA
NET CONTENTS: 20 Litres

Grosafe[®]

FORCE ULTRA[®]



HAZARD CLASSIFICATION:
Acute inhalation toxicity Category 4, Serious eye damage Category 1, Hazardous to the aquatic environment chronic Category 2

TOXICITY: Harmful if inhaled. Causes serious eye damage.

ECOTOXICITY: Toxic to aquatic life with long-lasting effects.

Do not apply directly into or onto water. Take all reasonable steps to ensure the substance does not cause any significant adverse effects to the environment beyond the application area.

PERSONAL PROTECTION: Avoid eye contact and inhalation of vapours/mist/spray. Use only outdoors or in well-ventilated area. When mixing or applying, wear overalls, impervious gloves, eye/face protection and respirator. Wash hands and exposed skin thoroughly after handling. Wash contaminated clothing and personal protective equipment before re-use.

STORAGE: Store product in original container tightly closed and in a dry, cool, well ventilated area away from foodstuffs. When stored appropriately this product should show no significant degradation within 2 years from date of manufacture. Contact the proprietor for further information about the use of any product that is older than this.

SPILLS AND DISPOSAL: When dealing with spills wear personal protective clothing and equipment as described in the PERSONAL PROTECTION section.

Contain and absorb with suitable inert absorbent material and store in properly labelled, sealed drums for safe disposal. If spray mixture is spilled absorb and collect in drums as above. 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 specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots.

CONTAINER DISPOSAL: Triple rinse container and add residue to mixture. Recycle empty containers through AgRecovery (0800 247 326). Otherwise bury in a suitable landfill.

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

FIRST AID: If medical advice is needed, have product container or label at hand. IF INGESTED: Rinse mouth with water. Call a POISON CENTRE or doctor for advice if you feel unwell. IF ON SKIN: Wash skin with plenty of soap and water. If skin irritation occurs get medical advice. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IMMEDIATELY call a POISON CENTRE or doctor. IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTRE or doctor if you feel unwell.

EMERGENCY RESPONSE 0800 CHEMCALL: (0800 243 622).

GENERAL INFORMATION:

Force[®] Ultra increases the reliability of brush weed herbicides on weeds that are dormant, stressed due to hot, dry, frosty or dusty conditions or when previously grazed or mechanically slashed. Force[®] Ultra can also be used as a general purpose wetting agent with non-selective herbicides, including glyphosate in non-crop situations where the addition of a wetting agent is recommended. The addition of Force[®] Ultra can be used to reduce the rain-free period of brush weed herbicides. Force[®] Ultra also increases the visibility of the spray mix on the plant.

The following recommendations aim to control the egg masses of *Cicada* and *Passionvine hopper*. Spraying of Kiwifruit canes targets the control of populations that are within an orchard and will not affect external populations that may fly in. Accordingly, it is recommended to spray surrounding bush areas at the same time as orchard spraying takes place. It is also recommended to discuss treatment options with neighbours, as neighbourhood wide treatment will have a greater effect on overall control.

The *Cicada* eggs killed by this treatment are associated with the population that would emerge from the soil 2 or 3 summers after treatment, so no immediate effect should be expected. Ground spraying with Zespri approved insecticides in summer will complement this treatment by controlling the emerging *Cicadas*.

The *Passionvine hopper* eggs controlled are the population that would emerge in summer following treatment, so control should reflect in lower populations of *Passionvine hopper* within treated orchards.

Orchard sprayer: Apply 1.2 litres in 600-800 litres/ha with Zespri approved insecticides. Application may commence once leaf fall in complete through to 10 days before bud breaking sprays are to be applied, however, the preferred timing is early in dormancy before pruning and before early egg hatch. Thorough coverage of Kiwifruit canes is required for *Cicada* egg control and of old fruiting stalks and associated posts and wooden support structures for *Passionvine hopper* egg nest control.

Handgun application: Apply 100ml/100L with Zespri approved insecticides to the point of run-off. Spray surrounding bush areas with suitable spray equipment to get good coverage. *Mahoe*, *blackberry*, *wineberry* and *bracken fern* are favoured host plants for *Passionvine hopper*.

Application: Force[®] Ultra with Zespri approved insecticides may be applied day or night to dry plants. Force[®] Ultra with Zespri approved insecticides are rainfast once dry. Force[®] Ultra can be used with Zespri approved ground applied herbicides outside of dormancy.

Zespri approved insecticides are toxic to bees if they are contacted by spray or land on wet spray deposits. Do NOT apply when bees are working and mow any flowering plants under vines before application.

Force[®] Ultra will impart super wetting qualities for several days after application. Do not apply any other treatments to plants within 7 days.

RECOMMENDATIONS FOR USE:

Aerial application: Add Force[®] Ultra to the spray mix at a minimum rate of 1.5 litres per hectare. For brush weed applications use a minimum of 400 litres of spray mix per hectare.

Broadcast spraying: Add 100ml Force[®] Ultra per 100 litres of spray mix.

Handgun, Knapsack, Mistblower: Add 100–200ml Force[®] Ultra per 100 litres of spray mix.

Mixing: To minimise foaming, add the required amount of Force[®] Ultra to the nearly full tank, after other products have been added. Agitate or circulate before spraying.

Compatibility: Force[®] Ultra can be used with insecticides and fungicides – check pesticide product label for use rates. Force[®] Ultra is compatible with most commonly used water based marker dyes.

Application method	Rate per 100 litres water	Comments
With glyphosate formulations (Firstrate [®] 450, Hortcare [®] Glyphosate 360, 680) & Machette [®] 540		
Boom	100ml	Particularly beneficial for the control of ryegrass
Handgun, knapsack	100–200ml	Use higher rate under unfavourable conditions or with hard to kill weeds
Aerial:		
General weed control	200ml	
Bracken, Blackberry	250ml	Use a minimum of 500ml per hectare
Broom	500ml	Use a minimum of 2L per hectare
Gorse	750ml	Use a minimum of 2L per hectare
With metsulfuron (Reply [®] 200, Reply [®] 600)		
Handgun, knapsack	100–200ml	Use higher rate under unfavourable conditions
Aerial, boom:		
Gorse	500ml	Use a minimum of 2L per hectare
Kanuka, Manuka	2.0 litres/ha	
With brushkillers (Reclaim [®] Brushkiller)		
Handgun, knapsack	100–200ml	Use higher rate under unfavourable conditions
Aerial, boom:		
Gorse, Broom	2.0 litres/ha	
With Fungicides		
Handgun, knapsack	100ml	
In Kiwifruit with Zespri approved insecticides		
Handgun	100ml	
Orchard sprayer	1.2L in 600-800 litres water/ha	Use in dormant period. Follow instructions on the insecticide label

Approved pursuant to HSNO Act 1996, Approval Code: HSR 002503 See www.epa.govt.nz for approval conditions

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.

Distributed by:

Grosafe GROUP
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PO Box 14-450 Tauranga 3141
Tel: 0800 220 002
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www.grosafe.co.nz

Batch No:

Date of Manufacture:



Force[®], Firstrate[®], Hortcare[®], Reclaim[®], Reply[®] and Machette[®] are the registered trademarks of Grosafe Chemicals Ltd



DANGER
Keep out of reach of children

Hybrid[®] SB



A multifunctional non-ionic wetting and buffering adjuvant specially formulated to enhance performance of pesticides, plant growth regulators and foliar fertilisers.

Active Ingredients: Contains 560g/l alkylbenzene ether sulfonate solution, 560g/l hydroxypropanetricarboxylate as a soluble solution.

- Reduces surface tension
- Buffers tank mix
- Aids solubility of micronutrients and soluble fertilisers
- Prevents incompatibility of pesticide combination
- Prevents hydrolysis of pesticides



HAZARD CLASSIFICATION: Skin corrosion Category 1C Serious eye damage Category 1
Specific target organ toxicity – single exposure Category 3

PERSONAL PROTECTION: Causes severe skin burns and eye damage. May cause respiratory irritation. Goggles and eye/face protection. Wash hands and exposed skin after work.
STORAGE: Store locked up in original container tightly closed and in a locked, dry, well-ventilated area. Do not store in areas where children or livestock have access to this product should show no significant degradation for 2 years from the date of manufacture. Contact the proprietor for further information about the use of this product if it is older than this.

SPILLS AND DISPOSAL: When dealing with spills wear personal protective clothing and equipment as described in the PERSONAL PROTECTION section. Contain and clean up spills immediately. Dispose of surplus product in accordance with labelled, sealed drums for safe disposal. If spray mixture is spilled absorb and collect in drums as above. Deal with all spillages immediately. If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority.

CONTAINER DISPOSAL: Dispose of this product only by using according to the label or through a Chemical Recovery service or other licensed hazardous waste disposal facility.

SAFETY DATA SHEET: Triple rinse empty container and add rinseate to spray tank. Submit clean empty container to an Agrecovery® depot for recycling. Rinse and dispose of at an approved landfill.

FIRST AID: For advice, or if you feel unwell, call NATIONAL POISONS CENTRE (0800 POISON) for advice. Have product container or label at hand. **IF SWALLOWED:** Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTRE or doctor. **IF ON SKIN (or hair):** Take off immediately all contaminated clothing. Wash thoroughly with plenty of water. **IF IN EYES:** Flush cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE or doctor. **IF INHALED:** Remove to fresh air. Keep comfortable for breathing. Immediately call a POISON CENTRE or doctor.

EMERGENCY RESPONSE 0800 CHEMCALL: (0800) 243 6221

GENERAL INFORMATION: Hybrid SB® is a non-ionic sticker spreader with buffering agent. Hybrid SB® is specially designed to improve the efficacy of many pesticides by increasing the spreading and adhesion of spray deposits on leaf surfaces. Hybrid SB® enhances activity of pesticides. Hybrid SB® provides excellent surface tension reduction resulting in better coverage of plant surfaces. Hybrid SB® reduces the tendency for wash off of spray deposits by rainfall, heavy dew or rain. Hybrid SB® is compatible with most pesticides, herbicides, fungicides and oils. Optimum application and effects can be influenced by the crop/pest spray equipment, spray volume, pressure, droplet size, spray mixture and environmental factors. Hence it is recommended that careful observations of the deposit are made and adjuvant concentrations adjusted accordingly.



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Batch No:

Date of Manufacture:

KEY BENEFITS:

- Adjust and lower pH (only in Basic/ Alkaline water).
- Prolong effect of pesticides.
- Improve leaf absorption.
- Reduce surface tension to enhance spreading and sticking of pesticides on leaf surfaces.
- Chelating agent inside.
- Improve activity of pesticides, fertilisers and micronutrients in basic or alkaline water.

DIRECTIONS FOR USE:

For use on: Registered for: Agricultural/Horticultural Forestry, Industrial, Municipal, Non-Cropland, Ornamental, Rights-Of-Way, Turf, Aquatic and Other Uses.

The addition of an adjuvant to some pesticide or pesticide tank mixes may cause phytotoxicity to the foliage and/or fruit of susceptible crops. Hybrid SB® is a non-ionic wetting and buffering adjuvant. Prior to the application of Hybrid SB® with a pesticide and/or fertiliser, the user must have experience with the combination under similar environmental and crop cultural conditions.

Hybrid SB® may be applied by ULV or CDA using Ground or Aerial spray equipment. In most applications, use sufficient Hybrid SB® to allow for uniform wetting and deposition of spray onto leaf surfaces without undue runoff.

Hybrid SB® is a low volatile, non-flammable product that is safe in crops and not hazardous to the environment.

APPLICATION RATES:

Acid Hybrid SB® at 25-50ml/100 litres (0.025-0.05%) of water or mix until appearance of pink colour occurs in spraymix.

Approved pursuant to HSNO Act 1996.

Approval Code: (Group Standard) HS8002491
See www.epa.govt.nz for approval conditions

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

Hybrid SB® is the registered trademark of Napnutriscience Co., Ltd.



NET CONTENTS

1 Litre

Distributed by:
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20 Jean Batten Drive, Mt Maunganui 3116
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Tel 0800 220 002
Email: info@grosafe.co.nz | www.grosafe.co.nz

GS5H58529/17/1/00/0

"We had a very big job at a remote/hard to access location, meaning we had to look at an alternative to liquid chemical. We found Grosafe's dry HexaGard 750 WDG to be perfect for our work. It was easy to handle and store, with the bags being easy to measure and mix, creating a very low foam product, hassle free application and excellent results".

Ginge Ryan

Pilot, Eastland Heliservices, Gisborne

