



READ THE LABEL BEFORE USE

ECOTOXIC

GROUND 36zero

HERBICIDE

A water soluble herbicide for non-selective control of many annual and perennial weeds.

ACTIVE INGREDIENT: Contains 360g/litre glyphosate as the isopropylamine salt in the form of a soluble concentrate.

20L

Registered pursuant to the ACVM Act 1997, No. P10374

See www.foodsafety.govt.nz for registration conditions.

Approved pursuant to the HSNO Act 1996, No. HSR101102.

See www.epa.govt.nz for approval conditions.

Registered to and distributed by:

AGPRO (N.Z.) Limited

10 Polaris Place, East Tamaki, Auckland 2013

PO Box 58-963, Botany, Auckland 2163

Ph: 09 273 3456 www.agpro.co.nz

LBLG36ZERO.1



AGPRO



HAZARD CLASSIFICATION

Hazardous to the aquatic environment (chronic) Category 2.

ECOTOXICITY

Toxic to aquatic organisms and with long-lasting effects.

PRECAUTIONS

Non-Selective Herbicide – very toxic to some plant species.

Beware: Spray drift hazard. Use this product carefully. Avoid contact with foliage or green stems of fruit crops, desirable plants and trees. Spray drift may cause serious damage to desirable plants. Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area. Aerial application is recommended in non-crop areas only.

PERSONAL PROTECTION

Avoid contact with skin, eyes and inhalation of spray mist. When handling wear protective clothing such as waterproof gloves, overalls and boots. Wash splashes of concentrate from skin and eyes immediately. Do not eat, drink or smoke while using. Remove protective clothing and wash hands and face thoroughly before meals and after work. Clean protective clothing and equipment daily after work.

EQUIPMENT

Apply using well maintained and accurately calibrated equipment in accordance with current version of NZS 8409.

Flush equipment thoroughly with clean water after use. Decontaminate equipment before use on another crop. Do NOT mix or store this product in galvanized or unlined steel (except stainless steel) containers or spray tanks. The concentrate or solutions of may react with such containers to produce a highly flammable gas which may flash or explode if ignited.

STORAGE

Keep out of reach of children. Store in the original, tightly closed container, in a secure cool, dry place out of direct sunlight and away from seed, fertilizers, feed or foodstuffs. Stores containing more than 1000L of **GROUND 36zero** are subject to signage, secondary containment and require an emergency response plan.

SHELF LIFE: 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 product that is older than this.

DISPOSAL

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

Product Disposal: Dispose of this product only by using in according to label directions, or at a suitable landfill.

Container Disposal: Triple rinse container and add rinsate to the spray tank. Recycle clean container at an Agrecovery depot, or puncture and dispose at an approved landfill. Do not burn. Do not use container for any other purpose.

FIRST AID

For advice call the National Poisons Centre **0800 POISON (0800 764 766) (24 hours)** or a doctor. If medical advice is needed, have product container or label to hand.

If swallowed do NOT induce vomiting. Rinse mouth. For advice, contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor.

If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Get medical advice if irritation occurs. Wash contaminated clothing before re-use.

If in eyes, wash out immediately with water. Get medical attention if eye irritation persists.

If inhaled, move the person to fresh air immediately. Begin artificial respiration if breathing has stopped.

Maintain half upright position if breathing is difficult. Carry out artificial respiration if necessary.



AGPRO
(N.Z.) LIMITED



Batch Number:

Date of Manufacture:

LBG36ZERO.1

Safety Data Sheet

If additional safety information is required, refer to the Safety Data Sheet available from www.agpro.co.nz.

EMERGENCY RESPONSE

In a transport emergency call 111, Police or Fire Brigade.

For specialist advice in a chemical emergency call 0800 CHEMCALL (0800 243 622).

SPILLAGE

Exclude non-essential people from the area. Wear protective clothing and prevent material from entering waterways. Absorb spill with inert material such as soil, sand, etc, and place in labelled waste container that can be sealed. Wash area with water, and absorb with further inert material. Dispose of safely to a suitable landfill.

GENERAL INFORMATION

GROUND 36zero is a broad spectrum, non-selective, non-residual, foliar absorbed and translocated herbicide for control of emerged weeds only. It is deactivated immediately upon contact with the soil and will not provide residual weed control. Plants should have sufficient leaf area for uptake, be actively growing, free of stress with clean foliage at time of spraying. Do not treat plants that are silt laden or affected by drought, frost, water logging, grazing, or previous herbicide application. The effects of **GROUND 36zero** may not be apparent for 3-7 days depending on weather conditions, weed species and the herbicide rate used. Some perennial weeds may not show effects for 14-21 days.

Cultivation may start from 1 day after spraying on annual weeds and 3 days after spraying perennial weeds. Cultivation should occur within 21 days of spraying. Reduced results may occur if dirty water (e.g. from ponds), hard water containing calcium salts, or water containing metal ions (e.g. iron) is used. If hard water cannot be avoided, the addition of a recommended surfactant is advised.

Accelerate penetrant may be used with **GROUND 36zero** to increase the rate of uptake into certain weeds.

MIXING AND COMPATIBILITY

Half fill the spray tank with clean water and add the required amount of **GROUND 36zero**, agitate and continue to fill the tank. If a penetrant is required, add this last to minimize foaming. Agitate well before spraying. When tank mixing with other herbicides, ensure these are fully dispersed before adding **GROUND 36zero**.

Be sure to observe all precautions, especially plant back periods when using other herbicides. Use tank mixes promptly. **GROUND 36zero** is compatible with most commonly used herbicides.

APPLICATION

Boom Equipment

GROUND 36zero can be applied in spray volumes up to 200L per hectare using fan nozzles at pressures in the range of 200-280 kPa. Boom height should be set so a double overlap of nozzle pattern is achieved at the top of the target plants.

Aerial Equipment

Application should be made to forestry and non-crop areas only. **GROUND 36zero** can be applied by aircraft in spray volumes of up to 100L per hectare. Increase the spray volume in hilly terrain to ensure maximum target contact.

Handgun and Knapsack

Ensure a fine spray pattern to give complete coverage. For handguns use pressures of 1000-2000kPa and No.4 to No.6 spray tips.

Mistblower

Refer to DIRECTIONS FOR USE table.

Wiper Equipment

Mix only enough for immediate use, mixing a 33% solution (1 part **GROUND 36zero** with 2 parts water). 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.

RAINFALL

Rain occurring up to 2 hours after application may reduce effectiveness. When a penetrant is added the rainfast period is reduced to 20 minutes. Do not apply to wet plants as the efficacy may be reduced.

SPRAYER DECONTAMINATION

Always wash tank and flush equipment thoroughly with clean water after use. To avoid subsequent injury to sensitive crops, immediately after spraying thoroughly remove all traces of **GROUND 36zero** from mixing and spraying equipment as follows:

1. Drain tank, then flush tank, booms and hoses with clean water.
2. Half fill the tank with clean water and add 125 g of an alkali detergent per 100L water. Circulate through the system for at least 15 minutes with agitation then drain.
3. Drain the whole system.

4. Nozzles and filters should be removed and cleaned separately.
5. Finally, rinse tank thoroughly with clean water, flush through hoses and boom and allow to drain.

SITUATIONS FOR USE

SITUATIONS	COMMENTS
Agricultural Areas	May be used for the control of annual and perennial weed species as indicated in the Weeds Controlled Table
Asparagus	Pre-crop emergence and post harvest applications. In established ferns, apply as directed or shielded spray or with a weed wiper. Do not allow spray, spray drift or the wiper surface to contact any part of the asparagus plant.
Aquatic Areas: Drains and Waterways	Do not spray until 75% of the weed is above water level. Avoid treating silt laden plants Do not allow submergence for 6 hours post spraying.
Broadacre Crops Wheat, barley, oats	Can be used to control weeds prior to cultivation or prior to harvest. Do NOT apply more than 4 L / ha. Spray 7-12 days prior to harvest when the grain moisture is less than 30%. Do NOT harvest within 7 days of spraying. Do NOT spray under-sown crops. Do NOT spray crops that will be harvested for seed. Avoid treating plants under stress. Do NOT use as a pre-harvest desiccant.
Forestry	For control of all listed weeds as listed in the Weeds Controlled Table, prior to burning or planting of forest or nursery or around established trees. Do not allow spray to come into contact with foliage or green bark of desirable trees.
Industrial and Non-Agricultural Areas	Treat weeds as per Weeds Controlled Table.
Market Gardens	Apply before or after seeding but prior to crop emergence. Spraying can also be carried out prior to transplanting or as a post harvest clean up. For longer term control of seedling weeds, an appropriate residual herbicide can be used as a tank mix with GROUND 36zero , in accordance with label recommendations.
Minimum Tillage	Weeds should be actively growing and not under stress. For improved control of white clover and certain other broadleaf weeds, GROUND 36zero may be tank mixed with another herbicide product effective on those weed types. Consult companion herbicide label for further instructions on use, plant back periods and other restrictions.

SITUATIONS	COMMENTS
Orchards and Vineyards. Citrus, apple, pear, stonefruit, kiwifruit, grapes	<p>Apply as a directed or shielded spray. Do not apply near unprotected trees less than 3 years old. Do not let spray contact green foliage or new growth. Do not allow spray or spray drift to come into contact with the bark of stonefruit trees, or, green bark, suckers, buds, foliage or fruit of any other tree. Spray before crops bud, sucker or bloom. GROUND 36zero can be tank mixed with an appropriate herbicide for residual control.</p>
Pasture (grasses, clover)	<p>For the control of existing species prior to pasture renewal. For improved control of white clover and certain other broadleaf weeds, GROUND 36zero may be tank mixed with another herbicide product effective on those weed types. Consult companion herbicide label for further instructions on use, plant back periods and other restrictions.</p> <p>For the suppression of seed heads on unimproved pasture (Pasture Topping) apply 270mL/ha in spring at early seed head emergence. Do not use a penetrant. Do not use if soil moisture levels following application are too low for pasture growth. Do not use on ryegrass or on another improved pasture as suppression may occur. Brownout will occur but this will be temporary until the pasture grows back. Grazing may commence 3 days after treatment but for best results delay grazing for at least 21 days after treatment. As treatment will restrict grazing, limit the area to be treated.</p>
Recreational Areas Lawns, parks, turf, reserves and ornamentals	<p>Apply before the sowing and planting of these areas or use as a spot application. In mown areas allow sufficient re-growth before spraying. Can also be used around the base of established trees and shrubs as a directed or shielded spray. Avoid contact with any part of the shrub or tree.</p>

DIRECTIONS FOR USE

GROUND 36zero must not be applied at rates exceeding 20 L/ha (equivalent to 7.2 kg glyphosate/ha).

Prevent spray drift as it may cause severe damage to non-target plants.

WEED	RATE				COMMENTS
	Boom/Aerial L/ha	Handgun L/100L	Knapsack mL/15 L	Mistblower mL/10L	
Annual weeds	1.0-2.0	0.2	30	60	Use the high rate on larger weeds. May be tank mixed with residual herbicides such as one containing simazine.
Australian sedge	6-9	1.0	150	300	Apply from Nov-March. Burn or slash from 30 days after treatment.
Barley grass	1.0	0.2	30	60	Apply when plants are at early seed head stage (September-December). A herbicide containing simazine may be added for residual control.
Browntop	3	0.5	75	150	Apply when plants are actively growing and 5-10cm high. For taller plants, graze or burn and allow re-growth of 5-10cm height before spraying.
Californian thistle	4	1.0	150	300	Spray after the development of flower buds but before autumn browning. Mowing 10 days after treatment may improve control. Re-treatment the following summer may also be necessary to prevent re-infestation.
Cleavers	1.5	0.5	75	150	Spray actively growing plants after the majority reach early seed head.
Couch	3-6	1.0	150	300	For best results apply 4-6 L/ha in autumn to actively growing plants at least 10 cm high where no cultivation has occurred for at least 6 months. For suppression apply 3 L/ha in spring and repeat in the autumn.
Docks	4-9	1.0	150	—	Spray actively growing plants in spring and summer before seed heads have formed. Use higher rate for mature plants. In pasture, spray prior to reseeding or cropping to restrict re-establishment of seedlings.
Floating sweet grass	6	1.0	150	300	Apply at early seed head stage to actively growing, unstressed plants.
Indian doab	9	1.0	150	—	Apply at seed head stage before frosts occur
Johnson grass	6	1.0	150	300	Apply when actively growing
Kikuyu/Mercer grass	6	1.0	150	300	Apply at early seed head stage. On dense infestations, cut then spray the re-growth.
Nodding thistle	—	1.0	150	—	When applying with wiper ensure plants are actively growing (Oct-Apr) when at least 10cm of the plant can be wiped. A double pass is recommended and follow up with spot treatment if necessary.
Paspalum	4-6	1.0	150	300	Use low rate when plants are in early seed head. Use the higher rate on mature vegetative plants, before the onset of frosts.
Potato - volunteer	3	0.5	75	150	Spray actively growing plants.
Prairie grass	1.5	0.2	30	—	Apply at early seed head.
Ragwort	6	1.0	150	—	Apply to actively growing plants with sufficient leaf area for uptake. Use wiper when plants are 10-15 cm above the pasture using double pass in opposite directions. See note on Withholding Period.
Ratstail	5	1.0	150	—	Apply to actively growing plants (Mar-Apr). In dry conditions delay spraying until sufficient green foliage is present.
Rautahi (cuttygrass)	6	1.0	150	300	Apply to actively growing plants (Jan-Mar). Burning or slashing may take place after plants have browned out, usually 30 days after application.

WEED	RATE				COMMENTS
	Boom/Aerial L/ha	Handgun L/100L	Knapsack mL/15 L	Mistblower mL/10L	
Rushes	6	1.0	150	300	Wiper application should be carried out between Nov-May. Burning or slashing may take place after plants have browned out, usually 30 days after application.
Ryegrass (annual, Italian, short rotation hybrids) Established, > 8 months	3 - 4 + 100mL/100L AGPRO Organosilicone 4 + 100mL/100L AGPRO Organosilicone	1.0 + 100mL/100L AGPRO Organosilicone 1.0 + 100mL/100L AGPRO Organosilicone	150 + 100mL/100L AGPRO Organosilicone 150 + 100mL/100L AGPRO Organosilicone	300 + 10mL/10L Accelerate 300 + 10mL/10L AGPRO Organosilicone	Spray to actively growing plants when 5 to 10 cm tall. The higher rate may be necessary to reflect the spectrum of weeds present.
Ryegrass (perennial)	4 + 100mL/100L AGPRO Organosilicone	1.0 + 100mL/100L AGPRO Organosilicone	150 + 100mL/100L AGPRO Organosilicone	—	Apply anytime plants are actively growing and 3-10cm tall. Use low rate Jan-Jul when cultivation is to follow spraying. Use the high rate Aug-Sept. For pasture renewal select a suitable rate that reflects weed spectrum present.
Tall fescue	6	1.0	150	300	Apply to actively growing plants Jan-Mar
Yarrow	3-6	—	—	—	Apply to plants with 5-10 cm leaf. For best results cultivate 10 days after treatment. Use low rate when a competitive crop is to be drilled.

BRUSHWEEDS: Wait until stems have dehydrated before slashing or burning

WEED	RATE				COMMENTS
	Boom/Aerial litres/ha	Handgun litres/100L	Knapsack mL/15 L	Mistblower mL/10L	
Barberry	—	1.0	150	300	Apply from flowering to late fruit set (Jan- Apr). Growth should reach 1.5m before spraying.
Blackberry	9-20	1.5	150	300	Best results when sprayed mid to late summer after flowering to full fruit (Dec-Apr) but before frosts occur. Allow 6-10 weeks before slashing/burning or over-sowing. Use high rate for hard to kill blackberry, aerial applications and where no follow up treatment is planned.
Boxthorn	—	1.25	150	—	Apply to actively growing plants (Nov- Apr). Ensure complete coverage of dense thickets. Do not use additional surfactant or spray salt damaged plants.
Bracken	9 +250mL/100L AGPRO Organosilicone (min 500mL/ ha)	1.0 + 200mL/100L AGPRO Organosilicone	150 + 30mL AGPRO Organosilicone	300 + 20mL AGPRO Organosilicone	Apply after bracken fronds have unfurled (mid Jan-June) but before frost occurs
Broom					Apply to broom via ground application at anytime but for aerial application apply only when broom is in full leaf.
Buddleia	9	1.0	150	—	Apply using a handgun at anytime. For aerial application treat buddleia up to 2m high (Feb-Apr) using a spray volume of 200-300L/ha
Gorse	—	1.0 + 200mL/100L AGPRO Organosilicone	—	—	Apply anytime ensuring complete coverage of plant. Do NOT treat plants stressed by (for example) drought, grazing or previous herbicide applications.
Old mans beard	-	1.0-2.0	300	—	Apply Nov-Mar before first leaves brown. Use higher rate on stems over 1cm in diameter. If complete coverage is not possible, plants should be cut at ground level and the re-growth sprayed with the higher rate when the plants are at least 50cm long.
Pampas grass, toetoe	—	1.0	150	—	Spray in spring to autumn. Reduced control may result if plants are in full flower at the time of spraying. Ensure complete coverage.

BRUSHWEEDS: Wait until stems have dehydrated before slashing or burning

WEED	RATE				COMMENTS
	Boom/Aerial litres/ha	Handgun litres/100L	Knapsack mL/15 L	Mistblower mL/10L	
Ring fern	1-3	0.3	50	—	For effective control use 2 L/ha. For pasture manipulation, apply 0.7-1.4 L/ha from December to April. Use the higher rate for dense infestations. Burn 4-6 weeks after application.
Sweet brier	12 + 250mL/100L AGPRO Organosilicone (min 500mL/ha)	1.0 + 200mL/100L AGPRO Organosilicone	150 + 30mL AGPRO Organosilicone	—	Spray when plant is in late flowering to early leaf yellowing stage. Ensure full coverage.
Willow	9	1.0	—	—	Apply before leaf fall begins (Jan-Apr). Total coverage is essential for good control.

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 and oat grain: 7 days

Animal safety

A withholding period for stock grazing is not required except for 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 cultivating or grazing treated areas is delayed for 1 day for annual weeds and 3 days for perennial weeds to ensure full uptake and translocation.

For brushweed control, wait for stem dehydration before burning or slashing.

RESISTANCE MANAGEMENT

GROUP	9	HERBICIDE

GROUND 36zero contains the **GROUP 9** herbicide glyphosate. Rotate or alternate herbicide types during or between seasons to avoid resistance in some weed species. Some naturally occurring weeds may become resistant when excessive use of the same herbicide occurs. To prevent or delay the development of resistance, use in tank mixes and/or rotate use with herbicides with a different mode of action. Consult <http://nzzps.org> for alternative modes of action and details of resistance management strategies (if any).

CONDITIONS OF SALE

As the use of this product is beyond the control of AGPRO NZ Ltd, no warranty expressed or implied, beyond that covered under the Fair Trading Act is given by AGPRO NZ Ltd regarding its suitability, fitness, or efficacy for any purpose for which it is used by the user, whether in accordance with the directions or not. AGPRO NZ Ltd accepts no responsibility for any consequence whatsoever resulting from the use of this product.