Method[®] 240 SL Herbicide

For control of wilding conifers, woody weeds and broadleaf weeds in non-crop situations

Contains 240 g/L AMINOCYCLOPYRACHLOR as the potassium salt in the form of a soluble concentrate

GROUP 4 HERBICIDE

Net contents 10 L

READ LABEL AND BOOKLET COMPLETELY BEFORE USING

Approved pursuant to the HSNO Act 1996, No. HSR101543 See www.epa.govt.nz for approval conditions

KEEP OUT OF REACH OF CHILDREN

HSNO Classification Hazardous to soil organisms.

PRECAUTIONS

Read the label and booklet completely before use.

Responsible handling information is available at www.au.envu.com and this information should be read and understood before use.

Before a broadcast application is undertaken, a pre-application assessment of the intended application area needs to be conducted in order to map out no-spray zones in respect of the following sensitive non-target areas: Mahinga kai sites, susceptible non-target crops or desirable vegetation (determination of a set back distance) and beehives. A record of the pre-application assessment must be kept for inspection purposes. The record must contain sufficient information to allow for third party verification of the pre-application assessment.

DO NOT eat, drink or smoke while using this product.

Remove protective clothing and wash hands and face thoroughly before meals and after work.

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 directly into or onto water.

DO NOT use on plants that are intended to produce food for consumption by humans or animals.

DO NOT apply to areas that may be grazed by food-producing animals.

Pollinator's protection

DO NOT apply METHOD 240 SL HERBICIDE to plants if -

- a) Bees are foraging; or
- b) The plants are in flower or part-flower, and are likely to be visited by non-target invertebrate pollinators (including bees).

Move beehives to a safe location, if there is potential for them to be affected by the spray or spray drift.

Personal protection

When handling, wear long-sleeved shirt, long pants and elbow-length chemical resistant gloves.

Storage

Store in original container tightly closed and in a locked, dry, cool, well-ventilated area, away from foodstuffs.

Spills and Disposal

When dealing with spills wear personal protective clothing and equipment as described in the PERSONAL PROTECTION section. Contain the spill by damming, recover spilt product by absorbing with sawdust or an inert absorbent material then transfer the recovered spilt 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.

Disposal: Dispose of this product only by using according to the label or at an approved landfill. Avoid contamination of any water supply with product or empty container.

Container Disposal: Triple rinse container and add residue to mixture. Take to an Agrecovery collection site.

FIRST AID

If poisoning occurs, contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately.

CONDITIONS OF SUPPLY

READ THESE CONDITIONS OF SUPPLY BEFORE BUYING AND USING. IF THESE CONDITIONS ARE UNACCEPTABLE RETURN AT ONCE UNOPENED.

To the extent permitted by law 2022 Environmental Science AU Pty Ltd does not accept any liability or responsibility whatsoever for any loss, damage or injury whether direct, indirect or consequential howsoever arising in connection with these goods, including without limitation their storage, application, handling or use. 2022 Environmental Science AU Pty Ltd does not make any warranties (express or implied) with respect to fitness for purpose, merchantable quality or any other matter. To the extent only that 2022 Environmental Science AU Pty Ltd is prevented by law from contracting out of the Consumer Guarantees Act then these conditions apply subject to that Act. The Act shall not apply where these goods are acquired for business purposes.

Envu, the Envu logo and Method® are trademarks owned by Environmental Science U.S. LLC or one of its affiliates. ©2023 Environmental Science U.S. LLC

2022 Environmental Science AU Ptv Ltd

Suite 2.06, Level 2, 737 Burwood Rd, Hawthorn East, VIC 3123 Australia

Distributed by NZ AGRITRADE LTD 1 Robin Mann Place Christchurch Airport Christchurch 8041, New Zealand Ph + 64 03 341 4587

EMERGENCY RESPONSE

IN A TRANSPORT EMERGENCY DIAL 111 POLICE OR FIRE BRIGADE

For specialist advice in an emergency call +64 9801 0034 or 0800 425 459 toll free.

The toll free phone number is possibly accessible, but not guaranteed from payphones within New Zealand and is not accessible from outside of New Zealand.



Date of Manufacture

Batch No

(According to ADN/ADR/RID/IMDG/IATA not classified as dangerous goods.)

It is an offence to use this product on animals.

DIRECTIONS FOR USE

MIXING Ensure the concentrate is thoroughly mixed. Shake before use. Add the required amount of METHOD 240 SL HERBICIDE to a partly filled spray tank with the agitation system operating. Add the remaining water and any tank mixture partners. Maintain agitation until spraying is complete. DO NOT allow spray mixture to stand overnight. Flush equipment with clean water after use.

RESISTANCE MANAGEMENT

GROUP 4 HERBICIDE

METHOD 240 SL HERBICIDE contains aminocyclopyrachlor and has the disruptor of plant cell growth (auxin mimic) mode of action (Group 4). Some naturally occurring weed biotypes resistant to METHOD 240 SL HERBICIDE, and other Group 4 herbicides, may exist through normal genetic variability in any weed population. These resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds will not be controlled by METHOD or other Group 4 herbicides. DO NOT rely exclusively on METHOD 240 SL HERBICIDE for weed control. Use as part of an integrated weed management program involving herbicides with other modes of action and non-chemical methods of control. Since occurrence of resistant weeds is difficult to detect prior to use 2022 Environmental Science AU Pty Ltd accepts no liability for any losses that may result from the failure of METHOD 240 SL HERBICIDE to control resistant weeds.

RECOMMENDATION FOR CONTROL OF WILDING CONIFERS

Situation	Method of application	Product Rate	Comments	
Conservation land, regional parks, unimproved pasture (non-crop, not grazed)	Aerial foliar spray (boom spray)	1.3 L/ha + 1% methylated seed oil	Apply by helicopter or unmanned aerial vehicle (drone) spray equipment. Generally, aerial applications will require 150 to 600 L of spray solution per ha. DO NOT release spray at a height greater than 3 metres above the ground or canopy unless required for aircraft safety. All precautions and restrictions should be taken to minimize or eliminate spray drift. Wilding conifers should ideally be treated with this method during summer months (between December and February) when the trees are actively growing, and if possible, prior to coning.	
	Aerial foliar spray (individual plant treatment)	5 - 10 L per 100 L + 1% methylated seed oil	Apply by helicopter or unmanned aerial vehicle (drone) spray equipment. Generally, aerial applications will require 150 to 600 L of spray solution per ha. DO NOT release spray at a height greater than 3 metres above the ground or canopy unless required for aircraft safety. All precautions and restrictions should be taken to minimize or eliminate spray drift. Apply any time of year at time of active growth. The application volume required will vary with the height and density of the tree and the application equipment used. Ensure thorough coverage of foliage. The spray solution should reach the crown of the plants and trickle down into the canopy without run off.	
	Ground basal bark treatment	5 - 10 L per 100 L basal oil adjuvant or with 10% methylated seed oil	Apply with a sprayer using low pressure and solid cone or flat fan nozzles. Make applications to tree with stems less than 15 cm in basal diameter. Thoroughly wet the lower 30-50 cm of the trunk or stem (from ground line). Treat until run off at the ground line is noticeable. Trees with old or rough bark will require more spray solution than smooth young bark.	
	Ground spot spraying	200 - 500 mL/100 L water + 1% methylated seed oil	Apply with a handgun or a hand-held or backpack sprayer. Use sufficient spray volume to thoroughly and uniformly wet target weed or brush foliage. Spray the vegetation starting at top and covering sides. Avoid spraying to point of run off as injuries to desirable species or ground cover may occur.	
	Cut stump and stem treatment	5 - 10 L per either 100 L basal oil adjuvant or water + 10% methylated seed oil	Apply with a knapsack or backpack sprayer using low pressure and solid cone or flat fan nozzles. Spray the cut surface soon after cutting, thoroughly wetting the cambium layer next to the bark. On larger trees, treat only the outer 5-7.5 cm of the stump. On trees 7.5 cm or less in diameter, treat the entire cut surface. In addition to the cut surface, treat the sides of the stump/stem and the root collar area to prevent re-sprouting.	
	Trunk injection ("Drill and Fill")	0.5 mL (undiluted) per cut	Inject or use a hatchet, machetes, or similar equipment to make downward cuts into the cambium (inner bark) of the stem in such a way as to make a "pocket" large enough to retain the applied solution. Cuts/injections may be made at a height convenient to the applicator. Make one cut/injection for every 5 cm of diameter at breast height (DBH) on the target stem. For example, a 20 cm DBH stem would require 4 cuts. Cuts should be made at equal intervals around the tree.	

RECOMMENDATION FOR CONTROL OF WEEDS BY INDIVIDUAL PLANT TREATMENTS

Situation	Weed	Method of application	Product Rate	Comments
Conservation land, regional parks, unimproved pasture (non- crop, not grazed)	Gorse, broom, blackberry, thistles, other woody plants, vines and broadleaf weeds	Spot spraying	200 - 500 mL/100L water	Apply with a calibrated boom sprayer, a boom-less sprayer, or a hand- held or backpack sprayer. Use sufficient spray volume to thoroughly and uniformly wet target weed or brush foliage. Spray the vegetation starting at top and covering sides. Avoid spraying to point of run off as injuries to desirable species or ground cover may occur.
	Gorse, broom, other woody plants	Cut stump and stem treatment	5 - 10 L per 100 L basal oil adjuvant	Apply with a knapsack or backpack sprayer using low pressure and solid cone or flat fan nozzles. Spray the cut surface soon after cutting, thoroughly wetting the cambium layer next to the bark. On larger trees, treat only the outer 5-7.5 cm of the stump. On trees 7.5 cm or less in diameter, treat the entire cut surface. In addition to the cut surface, treat the sides of the stump/stem and the root collar area to prevent resprouting.
		Basal bark treatment	5 - 10 L per 100 L basal oil adjuvant	Apply with a sprayer using low pressure and solid cone or flat fan nozzles. Make applications to susceptible brush or tree species with stems less than 15 cm in basal diameter. Thoroughly wet the lower 30-50 cm of the trunk or stem (from ground line). Treat until run off at the ground line is noticeable. Brush or trees with old or rough bark will require more spray solution than smooth young bark.
		Trunk injection	0.5 mL (undiluted) per cut	Inject or use a hatchet, machetes, or similar equipment to make downward cuts into the cambium (inner bark) of the stem in such a way as to make a "pocket" large enough to retain the applied solution. Cuts/injections may be made at a height convenient to the applicator. Make one cut/injection for every 5 cm of diameter at breast height (DBH) on the target stem. For example, a 20 cm DBH stem would require 4 cuts. Cuts should be made at equal intervals around the tree.

GENERAL INSTRUCTIONS

METHOD 240 SL HERBICIDE is a soluble concentrate that is mixed in water and applied by aerial or ground equipment as a broadcast spray or individual plant treatment for control of wilding conifers and other woody and broadleaf weeds in unimproved pasture (not grazed), regional parks and conservation land. METHOD 240 SL HERBICIDE can be applied at any time of the year. Best results are obtained when the product is applied to actively growing weeds. Thorough coverage of target weeds is necessary for optimum control. For best performance, a methylated seed oil (MSO) adjuvant should be included in the spray solution. Excessive wetting of the target plant is not necessary but good spray coverage of the target plant is needed for best results. Weeds hardened off by cold weather or drought stress may not be controlled. METHOD 240 SL HERBICIDE is non-corrosive to spray equipment, non-flammable and non-volatile.

Biological activity

METHOD 240 SL HERBICIDE is quickly taken up by the leaves, stems and roots of plants. The effects of METHOD 240 SL HERBICIDE may be seen on plants from within a few hours to a few days. The most noticeable symptom is a bending and twisting of stems and leaves. Other advanced symptoms include severe necrosis, stem thickening, growth stunting, leaf crinkling, calloused stems and leaf veins, leaf-cupping, and enlarged roots. Death of treated broadleaf plants may require several more weeks and up to several months for some woody plant species. METHOD 240 SL HERBICIDE is rain-fast at 1 hour after application.

BEWARE: Apply this product carefully. Spray drift may cause serious damage to susceptible non-target crops or desirable vegetation. DO NOT allow spray drift to occur outside the treated area.

APPLICATION

METHOD 240 SL HERBICIDE may be applied by ground application using low and high-volume spray equipment and by aerial application by fixed-wing aircraft or by helicopter. Spray volumes should be selected to provide uniform and complete coverage of the target plants or application sites. The spray equipment must be thoroughly cleaned before METHOD 240 SL HERBICIDE is sprayed. Follow the clean-up procedures specified on the labels of the previously applied products.

Aerial application Apply by either fixed-wing aircraft or helicopter spray equipment. Generally, aerial applications will require 150 to 600 L of spray solution per ha. Do not release spray at a height greater than 3 metres above the ground or canopy unless required for aircraft safety. All precautions and restrictions should be taken to minimize or eliminate spray drift.

Ground application Apply by conventional broadcast application or by individual plant treatment. Apply 100 L - 1000 L of spray per ha. Apply with the spray boom or nozzle height as low as possible. DO NOT apply with a nozzle height greater than 1.2 metres above the ground or canopy unless necessitated by the application equipment.

Individual plant treatments Apply using an application method which targets individual woody species including foliar applications, cut stump and stem treatments, injection or basal bark treatments. Refer to Directions for Use table.

TANK MIXTURES

A methylated seed oil (MSO) or vegetable oil adjuvant may provide increased leaf absorption of METHOD 240 SL HERBICIDE. For broadcast applications and spot spraying, include the MSO or vegetable oil adjuvant at 1% v/v (1 L per 100 L spray solution). A non-ionic surfactant at a minimum rate of 0.25% w/w may also be used. For cut stump, stem and basal bark applications, include the MSO or vegetable oil adjuvant at 10% v/v (10 L per 100 L spray solution).

METHOD 240 SL HERBICIDE is compatible with other herbicides which are registered for the situations of use, methods of applications and timings as specified on this label. Refer to the tank mix product label for any additional instructions or use restrictions. As the formulations of other manufacturers' products are beyond the control of 2022 Environmental Science AU Pty Ltd, all mixtures should be tested prior to mixing commercial quantities. Some basal oils may be incompatible with METHOD 240 SL HERBICIDE causing a precipitate to form. If unsure, a jar test is recommended to determine physical compatibility. Test for compatibility by adding METHOD 240 SL HERBICIDE to a small quantity of desired basal oil at the proper ratio, allow to stand for 30 minutes and check for physical incompatibility or precipitates. The addition of an emulsifier may be needed to ensure compatibility. With any mixture, constantly agitate prior to and during application.

RESTRICTIONS

The maximum application rate of METHOD 240 SL HERBICIDE is 1.3 L/ha (equivalent to 312 g aminocyclopyrachlor/ha) for broadcast applications, with one application per year.

The applicator must ensure that METHOD 240 SL HERBICIDE is delivered as a coarse quality spray for ground-based application and coarse to very coarse droplets for aerial application as classified by the American Society of Agricultural & Biological Engineers (ASABE) droplet size classification scheme (American National Standard ANSI/ASABE S572.1, March 2009).

Spray drift prevention

Applications should be made only when there is little or no hazard from spray drift. Very small quantities of spray, which may not be visible, may seriously injure susceptible non-target crops or desirable vegetation.

DO NOT apply when wind speeds are less than 3 km/hr or more than 20 km/hr as measured at the application site.

DO NOT apply during a temperature inversion.

Apply using accurately calibrated and maintained equipment in accordance with the New Zealand Standard for the Management of Agrichemicals (NZS8409).

Runoff prevention

This product may impact surface water quality due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow groundwater. This product is classified as having a high potential for reaching surface water via runoff for several months after application. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

Leave treated soil undisturbed to reduce the potential for METHOD 240 SL Herbicide movement by soil erosion due to wind or water.

Applications made where runoff water flows onto agricultural land may injure or kill crops such as, but not limited to, sugar beets, fodder beets, potatoes, tomatoes, field beans, lucerne, grapes, fruit trees and vegetables.

Protection of waterbodies

Aminocyclopyrachlor has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

DO NOT apply through any type of irrigation system.

DO NOT contaminate water intended for irrigation.

DO NOT treat or allow spray drift or run-off to fall onto banks or bottoms of irrigation ditches, either dry or containing water, or other channels that carry water that may be used for irrigation purposes.

DO NOT apply on bare ground.

Only apply during active plant growth period to maximise potential for dissipation by plant uptake.

Non-target plant protection

DO NOT apply this product to areas where the roots of desirable trees and/or shrubs may extend unless injury or loss can be tolerated. A treatment set-back distance should be 2.5 times the canopy drip-line width of adjacent susceptible non-target crops or desirable vegetation. For example, if a nearby desirable non-target tree has a canopy drip-line width of 3 metres, the set-back from the tree should be 7.5 metres.

DO NOT apply if site-specific characteristics and conditions exist that could contribute to movement and unintended root zone exposure to susceptible non-target crops or desirable vegetation, unless injury or loss can be tolerated.

DO NOT make applications or otherwise permit this product or sprays containing this product to come into contact with any susceptible non-target crops or desirable vegetation.

DO NOT apply when powdery dry soil or sandy soils are known to be prevalent in the area to be treated. Treatment of powdery dry soil and light sandy soils, when there is little likelihood of rainfall soon after treatment, may result in off-target movement and possible damage to susceptible non-target crops or desirable vegetation when soil particles are moved by wind or water. Injury to susceptible non-target crops or desirable vegetation may result if treated soil is washed, blown, or moved onto land used to produce crops or land containing susceptible non-target crops or desirable vegetation.

Certain species, in particular, may be susceptible to damage or plant death from low doses of METHOD 240 SL Herbicide including, but not limited to, Beech species, Conifers (Douglas fir, Pinus species, Kauri), Eucalypt species, Legumes (clovers, lucerne, lupins), Manuka, Matagouri, Ornamental shrubs, Poplar species, Pohutukawa, Silver birch, Totara and Willow species.

For broadcast aerial application (includes but not restricted to aerial foliar spray application (AFSA) broadcast), it is recommended to only treat stands with over 80% canopy cover.

METHOD must not be applied within the following distance of a downwind susceptible non-target crop or desirable vegetation.

- (a) Broadcast ground-based application: 10 meters
- (b) Broadcast aerial application (includes but not restricted to AFSA broadcast): 100 metres

Note: The buffer zone needs to be calculated from the edge of the setback distance to the edge of the application equipment.

Post-application

DO NOT use plant material treated with this product for mulch or compost.

DO NOT plant the treated sites for at least one year after METHOD 240 SL HERBICIDE application if non-crop sites treated with METHOD 240 SL HERBICIDE are to be converted to a food, feed, or fibre agricultural crop, or to a horticultural crop. A field bioassay must then be completed before planting the desired crop.

Field bioassay

To conduct a field bioassay, grow to maturity test strips of the crop you plan to grow the following year. Select a representative area or areas of the field previously treated with METHOD 240 SL HERBICIDE to plant your bioassay crop(s). Be sure to consider factors such as size of field, soil texture, drainage and headlands when selecting the site(s) that are most representative of the soil conditions in the field. On large fields, more than one site may be needed in order to obtain reliable results.

Plant the test strips perpendicular to the direction in which the field was sprayed. The strips should be long enough to cross the width of several spray swaths. Large test strip areas are more reliable than small ones. Use standard cultivation and seeding equipment to plant the bioassay.

Prepare a seed bed and plant the crops and varieties you want the option of growing the following year. It is important to use the same planting time, conditions, techniques and cultural practices you normally use to plant and grow the bioassay crop(s). Also plant into an adjacent area not treated with METHOD 240 SL HERBICIDE to use as a comparison.

Crop response to the bioassay will indicate whether or not to plant the crop(s) grown in the test strips. If no crop injury (such as: poor germination/emergence, chlorosis, malformation or necrosis of the leaves) is evident from the crop(s) grown in the test strips, the intended crop may be planted. If herbicide symptoms or yield loss are observed, do not plant the crop(s).

SPRAYER CLEAN-UP

Low rates of METHOD 240 SL HERBICIDE can kill or severely injure most crops. Following a METHOD 240 SL HERBICIDE application, the use of spray equipment to apply other agrichemicals to crops may result in their damage. The most effective way to reduce this crop damage potential is to use dedicated mixing and application equipment.

To avoid subsequent injury to sensitive crops, immediately after spraying thoroughly remove all traces of METHOD 240 SL HERBICIDE from mixing and spray equipment by rinsing and decontamination as follows:

Rinsing

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

Quarter-fill the tank and add a standard alkali-based laundry detergent at 500 g (or mL)/100 L water and circulate throughout the system for at least 15 minutes. If using a concentrated laundry detergent use 250 g (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.

Cleaning water should be discharged onto a designated disposal area, or onto unused land away from desirable plants and water sources. Injury to or loss of desirable trees or vegetation may result if equipment is drained or flushed on or near these trees or vegetation or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots.

SAFETY DATA SHEET

Additional information is listed in the Safety Data Sheet.