

# POLARIS<sup>®</sup> 360

GROUP G HERBICIDE

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

READ THE ATTACHED BOOKLET COMPLETELY BEFORE MIXING OR APPLYING.

**Active Ingredient:** 

Contains 360 g/L GLYPHOSATE as the ISOPROPYLAMINE SALT in the form of a soluble concentrate

ADAMA New Zealand Limited Level 1, 93 Bolt Road Tahunanui, Nelson 7011 PO Box 1799, Nelson 7040 New Zealand Telephone 03 543 8275 www.adama.com



POLARIS 360 Label August 2020

# **REFER TO BOOKLET FOR FULL LABEL INSTRUCTIONS.**

HAZARD CLASSIFICATIONS: 9.1B



## PCBU RESPONSIBILITES

A PCBU with management or control of work using this substance must ensure that every worker who uses, handles, manufactures, or stores this hazardous substance (including hazardous waste) is, before the worker is allowed to carry out or supervise work involving those substances, provided with adequate information, training and instruction. This includes the use of personal protective equipment to be used to minimise risks to the health and safety of workers when carrying out work using this substance.

#### Toxic to aquatic life with long lasting effects.

#### EQUIPMENT

A PCBU with management or control of work using this substance must ensure that equipment used to handle this substance retains the substance, without leakage, at all of the temperatures and pressures at which the equipment is to be used; and dispenses or applies the substance, without leakage, at a rate and in a manner that the equipment is designed for. The PCBU must ensure that the equipment is accompanied by documentation that is readily available and readily understandable about the use and maintenance of the equipment.

#### STORAGE

Store in the original, tightly-closed container in a cool, dry place, out of direct sunlight and away from stockfeed or foodstuffs. Store in accordance with NZS 8409 Management of Agrichemicals. Secondary containment and emergency response plans are required where 1000 L or more of this product are stored. Refer to the product SDS for further information.

#### 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.

#### PERSONAL PROTECTION

When mixing or applying wear appropriate protective clothing including cotton overalls buttoned to the neck and wrist, impervious, elbow-length gloves, and eye protection. Remove protective clothing and wash hands, arms and face with soap and water before meals and after work.

#### SPILLAGE

Exclude all bystanders from the vicinity of the spill and prevent material from entering waterways. Wear appropriate protective clothing as in the personal protection section of this label to clean up spills. Absorb liquid spills with an inert material (such as vermiculite, earth, sand or synthetic absorbent substance) and place in waste 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.

### DISPOSAL

**Container Disposal -** Triple rinse empty container and add rinsate to spray tank. Submit clean empty container to an Agrecovery<sup>®</sup> depot for recycling. Alternatively, puncture and bury in a suitable landfill. Avoid contamination of any water supply with product or empty container.

**Product Disposal -** Dispose of this product only by using according to the label, or through the Agrecovery<sup>®</sup> Chemical Recovery service or other approved facility.

#### FIRST AID

If medical advice is needed, have product container or label at hand. For advice, or if you feel unwell, contact the National Poisons Centre 0800 POISON 0800 764 766) or a doctor.

# CONDITIONS OF SALE

ADAMA New Zealand Limited will not accept any responsibility whatsoever and howsoever and howsoever are arising and whether for consequential loss or otherwise in connection with the supply of these goods other than the responsibility for the merchantable quality of the goods and such responsibilities mandatorily imposed by the Statutes applicable to the sale and supply of these goods. To the extent allowed by such Statutes the liability of ADAMA New Zealand Limited is limited to the replacement of the goods or (at the option of ADAMA New Zealand Limited) the

refund of the price paid and is conditional upon a claim being made in writing and where possible sufficient part of the goods to enable proper examination being returned to ADAMA New Zealand Limited within thirty days of delivery.



Registered to and distributed by: ADAMA New Zealand Limited Level 1, 93 Bolt Road Tahunanui, Nelson 7011 PO Box 1799, Nelson 7040 New Zealand Telephone 03 543 8275 www.adama.com

Registered pursuant to the ACVM Act 1997, No. P9828 See www.foodsafety.govt.nz for registration conditions

Approved pursuant to the HSNO Act 1996, Approval No. HSR101102 See www.epa.govt.nz for approval controls

Polaris is a registered trademark of an ADAMA Group Company.



EMERGENCY RESPONSE (All hours) Ring from anywhere in New Zealand 0800 734 607 In a Transport Emergency Phone 111 Police or Fire

Batch Number: Date of Manufacture: Bar code to be inserted





# POLARIS<sup>®</sup> 360

GROUP G HERBICIDE

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

READ THIS BOOKLET COMPLETELY BEFORE MIXING OR APPLYING.

**Active Ingredient:** 

Contains 360 g/L GLYPHOSATE as the ISOPROPYLAMINE SALT in the form of a soluble concentrate

ADAMA New Zealand Limited Level 1, 93 Bolt Road Tahunanui, Nelson 7011 PO Box 1799, Nelson 7040 New Zealand Telephone 03 543 8275 www.adama.com



POLARIS 360 Label August 2020

Page 4 of 11

# READ THIS BOOKLET COMPLETELY BEFORE MIXING OR APPLYING.

HAZARD CLASSIFICATIONS: 9.1B



## PCBU RESPONSIBILITES

A PCBU with management or control of work using this substance must ensure that every worker who uses, handles, manufactures, or stores this hazardous substance (including hazardous waste) is, before the worker is allowed to carry out or supervise work involving those substances, provided with adequate information, training and instruction. This includes the use of personal protective equipment to be used to minimise risks to the health and safety of workers when carrying out work using this substance.

#### Toxic to aquatic life with long lasting effects.

#### EQUIPMENT

A PCBU with management or control of work using this substance must ensure that equipment used to handle this substance retains the substance, without leakage, at all of the temperatures and pressures at which the equipment is to be used; and dispenses or applies the substance, without leakage, at a rate and in a manner that the equipment is designed for. The PCBU must ensure that the equipment is accompanied by documentation that is readily available and readily understandable about the use and maintenance of the equipment.

#### STORAGE

Store in the original, tightly-closed container in a cool, dry place, out of direct sunlight and away from stockfeed or foodstuffs. Store in accordance with NZS 8409 Management of Agrichemicals. Secondary containment and emergency response plans are required where 1000 L or more of this product are stored. Refer to the product SDS for further information.

#### 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.

# PERSONAL PROTECTION

When mixing or applying wear appropriate protective clothing including cotton overalls buttoned to the neck and wrist, impervious, elbow-length gloves, and eye protection. Remove protective clothing and wash hands, arms and face with soap and water before meals and after work.

#### SPILLAGE

Exclude all bystanders from the vicinity of the spill and prevent material from entering waterways. Wear appropriate protective clothing as in the personal protection section of this label to clean up spills. Absorb liquid spills with an inert material (such as vermiculite, earth, sand or synthetic absorbent substance) and place in waste 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.

# DISPOSAL

Container Disposal - Triple rinse empty container and add rinsate to spray tank. Submit clean empty container to an Agrecovery<sup>®</sup> depot for recycling. Alternatively, puncture and bury in a suitable landfill. Avoid contamination of any water supply with product or empty container.

Product Disposal - Dispose of this product only by using according to the label, or through the Agrecovery<sup>®</sup> Chemical Recovery service or other approved facility.

## **FIRST AID**

If medical advice is needed, have product container or label at hand. For advice, or if you feel unwell, contact the National Poisons Centre 0800 POISO 764 766) or a doctor.

# SAFETY DATA SHEET

ZEALAND A Safety Data Sheet for this product is available from ADAMA New Zealand Limited on Nous Call 03 543 8275.

# **PRODUCT INFORMATION**

POLARIS 360 is a non-selective herbicide for use in agriculture and horticulture in the following situations:

Before planting crops and trees

NEW

- In pasture renovation and reduced tillage systems
- For pre-harvest weed control
- In vineyards, orchards and market gardens
- On turf and recreational areas
- In drains and waterways

POLARIS 360 is water soluble and absorbed by green plant tissue and then translocated throughout the plant including the root system to kill the entire plant. Plants should be actively growing and not under drought stress with clean foliage at the time of spraying. The product degrades in the soil and has no residual weed control activity.

Visible effects may not be apparent for 14 days depending on weather conditions, weed species and rate of application. Some perennial weeds may not show effects for 2-3 weeks.

# WEEDS CONTROLLED TABLE

WEED	BOOM/AERIAL L/HA	HANDGUN VOL/100 L	KNAPSACK mL/15 L	MISTBLOWER mL/10 L	WHEN TO APPLY
Annual weeds	1-2	200 mL	30	60	Use the higher rate for larger weeds. For residual control may be tank-mixed with a simazine 500 g/L product.
Australian sedge	6-9 (aerial)	1 L	150	300	Apply from November to March. Burn or slash from 30 days after treatment.
Barberry	-	1 L	150	300	Apply from flowering to late fruit stage (Jan-Apr). Regrowth should be 1.5m tall before spraying is carried out.
Barley grass	1	200 mL	30	60	Apply when plants are at early seedhead stage (Sep-Dec). A simazine 500 g/L product may be tank-mixed for residual control.
Blackberry	9-20	1.5 L	150	300	Apply from flowering fruiting stage (Dec-Apr), before frosts occur. For hard to kill blackberry, aerial application, or no follow-up action planed, use the higher rate. Allow 6-10 weeks before slashing or burning.
Boxthorn		1.25 L	150	-	Apply to actively growing plants (Nov-Apr). Ensure complete coverage of dense thickets. Do not use extra surfactant, or treat salt damaged bushes.
Bracken/broom	9 + 250 mL Pulse	1 L + 250 mL Pulse	150 + 30 mL Pulse	300 + 20 mL Pulse	Apply after bracken fronds have unfurled (mid-Jan-June), but before fronds occur. For ground application to broom anytime, but for aerial application when broom is in full leaf.
Browntop	3	500 mL	75	150 RPRIMARY	Apply when plants are 5-10 cm high. For taller plants, graze or burn and allow regrowth of 5-10 cm height before treatment.
Buddleia	9	1 L	150	NEW ZEALAND	Apply using handgun anytime. Aerial-treat buddleia up to 2 m high (Feb-Apr) using spray volume of 200-300 L/ha.

WEED	BOOM/AERIAL L/HA	HANDGUN VOL/100 L	KNAPSACK mL/15 L	MISTBLOWER mL/10 L	WHEN TO APPLY
Californian thistle	4	1 L	150	300	Apply after flow bud development. Re-treatment and/or cropping or pasture improvement may be necessary to restrict re-establishment from seed. Mowing thistles 10 days after spraying may assist control.
Cleavers	1.5	500 mL	75	150	Spray actively growing plants after most reach early seedhead.
Couch	3-6	1 L	150	300	For suppression, apply 3 L/ha in spring and repeat in autumn. For best results, apply 4-6 L/ha in autumn to active growth of at least 10 cm where no previous cultivation has occurred for at least 6 months.
Docks	4-9	1 L	150	-	Spray plants in spring or summer when actively growing and before seedheads have formed. Use the lower rate for seedlings and the higher rate for mature plants. In pasture situations boom spray prior to re-seeding or establishing crops to restrict seedling re- establishment. Under trees or vines may be tank-mixed with a simazine 500 g/L product for residual seedling control.
Floating sweet grass	6	1L	150	300	Spray actively growing plants after most reach early seedhead. Spraying plants under drought stress may give reduced results.
Indian doab	9	1 L	150	-	Apply at early seedhead stage before frosts occur.
Gorse	-	1 L + 200 mL Pulse	-	-	Apply anytime ensuring complete coverage of plants not stressed by drought, grazing or previous herbicide treatment.
Kikuyu/Mercer grass	6	1 L	150	300	Apply at early seedhead stage. On dense infestations, cut and spray the regrowth.
Nodding thistle	-	1 L	150	-	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 man's beard	-	1-2 L	300	DR PRIMAR MOUSTRIE	Apply Nov-Mar prior to first leaf browning. Use higher rates on stems over 1 cm in diameter. If complete coverage is not possible plants should be cut at ground level in winter and the regrowth sprayed with the higher rate when plants are at least 50 cm long (March).
Pampas	-	1 L	150	NEW ZEALAND 07/12/2020	Spray Spring-Autumn. Reduced control may result if plants are in

Page TOI MMAN

WEED	BOOM/AERIAL L/HA	HANDGUN VOL/100 L	KNAPSACK mL/15 L	MISTBLOWER mL/10 L	WHEN TO APPLY
grass/toetoe					flower at the time of spraying. Ensure complete coverage.
Paspalum	4-6	1 L	150	300	Spray at low rate if plants are at early seedhead stage. Use 6 L/ha on mature vegetative plants, before onset of frosts.
Potato (self set)	3	500 mL	75	150	Spray actively growing plants after most reach early seedhead.
Prairie grass	1.5	200 mL	30	-	Apply at early seedhead stage.
Ragwort	6	1 L	150	-	Spray when actively growing and ensure there is sufficient leaf area for herbicide uptake. When applying by wiper use on plants 10-15 cm above the pasture. For best results, a double pass is recommended with a follow-up spot treatment if necessary. Caution: Ragwort becomes more palatable after treatment. Keep stock away from treated areas until plants brown-off.
Ratstail	5	1 L	150	-	Apply at a spray volume of 200 L/ha in autumn. In dry conditions, delay spraying until sufficient green foliage is present.
Rautahi (cutty grass)	6	1 L	150	300	Spray to actively growing plants form Jan-Mar. Burning or slashing may begin 30 days after treatment following brown-off.
Rushes	6	1 L	150	300	Burning or slashing may begin 30 days after treatment following brown-off. Wiper application to be carried out in Nov-May.
Ring fern	1-3	300 mL	50	-	For effective control, apply 3 L/ha. For pasture manipulation, apply 1-2L/ha from Dec/Apr. Use higher rates for dense infestations. Burn 4-6 weeks after treatment.
Ryegrass	1.5-3 + 150 mL Pulse	500 mL + 100 mL Pulse	75 + 30 mL Pulse	-	Spray to actively growing plants 3-10 cm high. Use lower rate from (perennial) Jan-Jul when cultivation is to follow spraying, and the higher rate Aug-Dec.
Sweet brier	12 + 250 mL Pulse	1 L + 200 mL Pulse	150 + 30 mL Pulse	-	Spray when plant is in late flowering to early leaf yellowing stage. Ensure full coverage.
Tall fescue	6	1 L	150	300	Apply Jan-Mar to active growth.
Willow	9	1 L	-	PRIMARL R CD M HE	Apply before leaf fall begins (Jan- Apr). Total spray coverage is essential for best results.
Yarrow	3-6	-	- SININ	W ZEALAND 07/12/2020	Apply to plant with 5-10 cm of leaf. For best results cultivate 10 days after treatment. Use the low rate when a crop to be drilled is competitive to yarrow and higher

Jage & or Hypro

WEED	BOOM/AERIAL L/HA	HANDGUN VOL/100 L	KNAPSACK mL/15 L	MISTBLOWER mL/10 L	WHEN TO APPLY
					rate when it is a poor competitor.

## DIRECTIONS FOR USE

#### TAKE ALL REASONABLE STEPS TO ENSURE THAT THE SUBSTANCE DOES NOT CAUSE ANY SIGNIFICANT ADVERSE EFFECTS TO THE ENVIRONMENT BEYOND THE APPLICATION AREA.

# **EPA CONTROLS**

- Prevent spray drift as it may cause severe damage to non-target plants.
- This product must be under the control of a suitably qualified person when applied into or onto water. Refer to Schedule 10 of the Hazardous Substances (Hazardous Property Controls) notice 2017 for a list of suitable qualifications.
- Maximum application rate: This substance must not be applied at rates exceeding 20 L/ha.

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

## Agricultural areas

May be used for the control of annual and perennial weeds as indicated in the Weeds Controlled Table, prior to sowing any crop.

#### Minimum tillage

For total weed control prior to seeding in a reduced tillage system. Weeds should be actively growing and not under stress from frost, drought or waterlogging. In pastures where only annual weeds are present use 1 L/ha to control seedling annual weeds and 3 L/ha to control mature annual weeds. For perennial weeds the higher rate of 3 L/ha with the addition of organo-silicone surfactant at 200 mL/100 L is recommended. For the improved control of white clover, tank-mix with a dicamba 200 g/L product at 1.5 L/ha. Do not plant legume crops within 28 days of applying dicamba. Cultivation may start from 7 days after spraying perennial and 3 days for annual weeds. Cultivation should occur within 21 days after spraying. Do not sow until a satisfactory seedbed is formed.

#### Pasture

Spot application to specific weeds. May be applied to control a wide range of weeds in pasture. It is non-selective and may damage or kill any plant in the spray area.

#### **Pre-harvest**

#### Wheat, barley, oats and threshing peas

Spray 7-12 days prior to harvest when the grain moisture is less than 30%. Do not harvest within 7 days after spraying. Do not spray undersown crops. Do not spray crops that will be harvested for seed.

#### Threshing peas

Apply 7-14 days prior to harvest when the pods have dried. Avoid treating plants under group stress.

#### **Orchards/vines**

#### Crops – citrus, apple, pear, stonefruit, kiwifruit, grapes

Apply as a directed or shielded spray. For long term control of annual weeds POLARIS 360 may the be tank mixed with an approved herbicide for residual control. Do not apply to unprotected trees less than 3 years old. Do not allow spray or spray drift to contact any part of the stonefruit tree, or green bark, suckers, buds, foliage or fruit of other trees. Spray before crops bud, sucker or bloom.

NEW ZEALAND

07/12/2020

# Market gardens

# Applied before or after seeding but prior to crop emergence

Spraying can also be made prior to transplanting or as a post-harvest clean up. For longer-term control of seedling weeds it may be tank-mixed with an approved residual herbicide such as a simazine 500 g/L product in accordance with label recommendations.

# Asparagus

# Pre-crop emergence and post-harvest applications

Apply prior to planting or crop emergence. Do not treat emerging spears. Application can also be made after removal of all spears but before crop regrowth occurs. In established ferns, apply 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 plant.

## Industrial and non-agricultural areas

Treat specific problem weeds as indicated in the Weeds Controlled Table. Do not allow spray drift.

# **Recreational areas**

## Lawns, turf, parks, reserves and ornamentals

Apply before the sowing and planting of these areas. In mown areas, allow sufficient regrowth before spraying. Can also be sprayed around the base of established trees or shrubs, as a directed or shielded spray or with wiper equipment. Avoid spray drift or contact of the wiper surface with any part of the shrub or tree.

## **Drains and waterways**

For best results ensure that 75% of the weed to be sprayed is above water level. Avoid treating silt-laden weeds. Following spraying do not submerge the weed as this will cause the herbicide to be washed off.

### Forestry

# For the control of grasses and weeds as listed in the table

Can be applied for weed control prior to burning or planting of forest or nursery or around already established trees. Do not allow spray drift or spray contact with foliage or green bark of desirable trees.

# MIXING

Fill the clean spray tank with half the required amount of clean water. Add POLARIS 360 as required and mix well before adding the remaining water. If surfactant is required add this last to minimise foaming. Agitate well before spraying. When tank-mixing with other chemicals, add POLARIS 360 after other water-soluble concentrates, but before suspension concentrates such as a simazine 500 g/L product. Soil particles and hard water containing calcium salts deactivate POLARIS 360. If hard water cannot be avoided, the addition of a surfactant is recommended.

# **APPLICATION EQUIPMENT**

POLARIS 360 must only be applied in equipment made from stainless steel, fibreglass, plastic, aluminium, brass, or copper. All spray equipment including pumps, spray tanks, lines and nozzles, and landing gear of aircraft should be thoroughly washed with water after each spraying day.

#### Boom equipment

Application can be made in spray volumes up to 200 L/ha 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**

Applicable to forest and non-crop areas only. Can be applied by aircraft in spray volumes of 100 litres/ha. Increase spray volume in hilly terrain to ensure maximum target contact to not use in intensive horticultural cropping area.

HSNO classifications/9.1E

## Handgun and knapsack

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

#### Wiper equipment

Pre-mix 1 part POLARIS 360 in 2 parts clean water to make a 33% solution. 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.

# COMPATIBILITY

POLARIS 360 is compatible with commonly used herbicides.

## RAINFALL

Do not apply when rain is likely to occur within 6 hours of application.

# **RESISTANCE MANAGEMENT**

POLARIS 360 contains the GROUP G herbicide, glyphosate. Do not use another product containing a herbicide in the same group in conjunction with POLARIS 360, and where possible alternate the types of herbicides used within any one paddock over time. Herbicides from different group codes should either be used alternately or mixed together to prevent the numbers of resistant individuals building up.

## **CONDITIONS OF SALE**

ADAMA New Zealand Limited will not accept any responsibility whatsoever and howsoever arising and whether for consequential loss or otherwise in connection with the supply of these goods other than the responsibility for the merchantable quality of the goods and such responsibilities mandatorily imposed by the Statutes applicable to the sale and supply of these goods. To the extent allowed by such Statutes the liability of ADAMA New Zealand Limited is limited to the replacement of the goods or (at the option of ADAMA New Zealand Limited) the refund of the price paid and is conditional upon a claim being made in writing and where possible sufficient part of the goods to enable proper examination being returned to ADAMA New Zealand Limited within thirty days of delivery.



Registered to and distributed by: ADAMA New Zealand Limited Level 1, 93 Bolt Road Tahunanui, Nelson 7011 PO Box 1799, Nelson 7040 New Zealand Telephone 03 543 8275 www.adama.com

Registered pursuant to the ACVM Act 1997, No. P9828 See www.foodsafety.govt.nz for registration conditions

Approved pursuant to the HSNO Act 1996, Approval No. HSR101102 See www.epa.govt.nz for approval controls

Polaris is a registered trademark of an ADAMA Group Company. Pulse is a registered trademark of Nufarm Technologies USA Pty Ltd.

