



Pistol®

HERBICIDE

- ✓ A non-selective herbicide for control of annual and perennial weeds on natural surfaces not intended to bear vegetation, permeable surfaces overlaying soil and hard surfaces (railway ballast only).
- ✓ A suspension concentrate formulation containing 250g/L glyphosate and 40g/L diflufenican.

Pre and post emergent



MAPP 17451

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GB84992615C - RA5a - ARTICLE 5471353

SAFETY PRECAUTIONS

Operator Protection

Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment: WEAR SUITABLE PROTECTIVE GLOVES when handling the concentrate. WEAR SUITABLE PROTECTIVE GLOVES AND COVERALLS when applying the product and when handling contaminated surfaces. However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection. WASH HANDS before eating and drinking and after work.

Environmental Protection

Do not contaminate water with the product or its container. Do not clean application equipment near surface water. Avoid contamination via drains from farmyards and roads.

Extreme care must be taken to avoid spray drift onto non-crop plants outside the target area.

Hand-held equipment

Since there is a risk to aquatic life from use, direct spray must not be allowed to fall within 2 m of the top of the bank of any static or flowing waterbody or the top of a ditch which is dry at the time of application. Spray must be aimed away from water.

Vehicle-mounted equipment (boom sprayer)

To protect aquatic organisms, respect an unsprayed buffer zone to surface water bodies of 6 m. HORIZONTAL BOOM SPRAYERS MUST BE FITTED WITH THREE STAR DRIFT REDUCTION TECHNOLOGY. Low drift spraying equipment must be operated according to the specific conditions stated in the official three star rating for that equipment as published on HSE Chemicals Regulation Division's website. Maintain three star operating conditions until 30 m from the top of the bank of any surface water bodies.

DO NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall within 6 m of the top of the bank of a static or flowing water body, or within 1 m of the top of a ditch which is dry at the time of application. Aim spray away from water. NOTE: BUFFER ZONES OF MORE THAN 5 M CANNOT BE REDUCED UNDER THE LOCAL ENVIRONMENT RISK ASSESSMENT FOR PESTICIDES (LERAP) SCHEME.

The statutory buffer zone must be maintained and the distance recorded in Section A of the LERAP record form. The LERAP record form must be kept available for three years.

Storage and Disposal

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS. KEEP OUT OF REACH OF CHILDREN. KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place. EMPTY CONTAINER COMPLETELY and dispose of safely. PROTECT FROM FROST. RINSE CONTAINER THOROUGHLY by using an integrated pressure rinsing device or manually rinse three times. Add washings to sprayer at time of filling and dispose of safely.

Pistol®

A suspension concentrate formulation containing 250g/L glyphosate and 40g/L diflufenican



Warning

Very toxic to aquatic life with long lasting effects

Contains 1,2-Benzisothiazolin-3-one. May produce an allergic reaction.

Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

To avoid risks to human health and the environment, comply with the instructions for use.

IMPORTANT INFORMATION

FOR USE ONLY AS AN INDUSTRIAL HERBICIDE

Situation:

For use on natural surfaces not intended to bear vegetation, permeable surfaces overlaying soil, and hard surfaces (railway ballast only).

Maximum individual dose:

4.5 litres product/hectare

Maximum number of treatments:

1 per year

Latest time of application:

End of July

Other specific restrictions:

This product must only be used on natural or porous surfaces such as gravel where the user can establish that the underlying surface is soil and railway ballast surfaces. Do not use if an impermeable membrane lies between the porous surface and the soil.

Do not apply to any non-porous man-made surfaces

Hand-held equipment: To minimise spray drift, the product must be applied using a nozzle capable of producing a coarse quality spray.

Vehicle-mounted equipment: Respect an unsprayed buffer zone to surface water bodies of 6 m.

READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.

DIRECTIONS FOR USE

IMPORTANT: This information is approved as part of the Product Label. All instructions within this section must be read carefully in order to obtain safe and successful use of this product.

GENERAL INFORMATION

PISTOL® is a suspension concentrate formulation containing 250 g/L glyphosate and 40 g/L diflufenican. PISTOL® has foliar absorbed translocated activity, combined with soil acting properties, providing pre-emergence weed control. The product is applied post-emergence to control a wide range of annual and perennial broad-leaved weeds and grasses on porous surfaces on land not intended to bear vegetation.

Bayer Tip: For established deep rooted perennial weeds such as dandelion, thistle, dock and nettles which may re-generate, a post-emergence application is ideally required.

RESTRICTIONS

Since there is a risk to aquatic life from use, direct spray from hand-held equipment must not be allowed to fall within 2 m of the top of the bank of any static or flowing waterbody or the top of a ditch which is dry at the time of application. Do not allow direct spray from horizontal boom sprayer to fall within 6 m of the top of the bank of a static or flowing water body, or within 1 m of the top of a ditch which is dry at the time of application. Spray must be aimed away from water.

Applications should not be made to plants growing under stress conditions, such as drought or water-logging, as reduced levels of control may result.

Do not spray in windy weather.

Extreme care must be taken to avoid drift onto non-target plants. This includes leaf surfaces, young bark or suckers of valued plants. Failure to do so may result in permanent damage or plant death.

Where PISTOL® has been applied to sites that are subsequently to be cleared or grubbed, a period of at least 6 months should elapse between treatment and the sowing and planting of subsequent crops. In addition, the soil should be ploughed or dug afterwards to ensure thorough mixing in order to remove any risk of damaging subsequent crops or planting.

Where 'PISTOL®' or other products containing diflufenican are applied in successive years, levels of diflufenican will build up in the soil. Even where soils are thoroughly dug there may be a risk of damage to subsequent plantings.

Care should be taken when applying PISTOL® as heavy rain following application may wash the herbicide onto sensitive areas such as newly sown grass and areas about to be planted.

Where the soil organic matter content is greater than 10%, or for example where leaves have collected or where a mat of organic matter has built up, pre-emergence activity will be reduced.

For maximum persistence of activity the area treated should not be cultivated or raked following application.

For maximum pre-emergence and residual activity from PISTOL®, ensure good coverage of the spray swath. Untreated areas will not be protected. Overdosing should be avoided.

Do not add any wetting agent or adjuvant oil as this may result in reduced activity. However if using a CDA applicator, then an appropriate carrier may be used.

DO NOT APPLY PISTOL® OVER DRAINS OR IN DRAINAGE CHANNELS, GULLIES OR SIMILAR STRUCTURES FOR MOVING WATER.

WEEDS CONTROLLED

Strains of some annual weeds (e.g. black-grass, wild-oats, and Italian rye-grass) have developed resistance to herbicides which may lead to poor control. A strategy for preventing and managing such resistance should be adopted. This should include integrating herbicides with a programme of cultural control measures. Guidelines have been produced by the Weed Resistance Action Group and copies are available from the HGCA, CPA, your distributor, crop adviser or product manufacturer.

PISTOL® has a broad spectrum of activity if used at the recommended rate and under optimum conditions. It should give initial 'knockdown' of a wide variety of broad-leaved and grass weeds and thereafter residual control for a wide variety of broad-leaved weeds for at least 3 months, and up to 4 months on hard surfaces.

Weeds controlled such as:

Annual meadow-grass, annual nettle, buttercup, Canadian fleabane, mouse ear chickweed, chickweed, common daisy, common groundsel, ragwort, couch grass, cranesbill sp, dandelion, dock, fat hen, field forget-me-not, mayweed, perennial thistle, plantain sp, polygonaceae sp, red dead-nettle, rough-stalked meadow-grass, sowthistle, speedwell, willowherb. Effectiveness using three star drift reduction technology may be reduced.

Grasses may be the first weeds to return in treated areas and may require re-treatment with a glyphosate based product such as CDA Vanquish® Biactive.

Bayer Tip: Treated areas which may have been protected from the spray swath such as areas of soil shaded by a larger weed canopy at application may require re-treatment with a glyphosate based product such as CDA Vanquish® Biactive.

Long term control

Perennial weeds such as dandelions and docks emerging from established root-stocks after application will not be controlled.

SITUATION SPECIFIC INFORMATION

Use Areas

PISTOL® may be used in non-crop areas against weeds in open soil and against weeds growing in gravel or other porous surfaces. Examples of suitable use areas include fence lines, strips of land adjacent to buildings, industrial sites, timber yards, farm yards, oil and gas storage sites, power stations, electric sub stations, beneath pylons, around street/park obstacles.

PISTOL® may be used on railway track, railway sidings and other ballast areas of rail infrastructure.

PISTOL® must not be used on non-porous man made surfaces, for example paved areas, concrete or tarmac car parks and footpaths.

PISTOL® may be used on porous surfaces such as gravel ONLY where the underlying surface is soil. Do not use if an impermeable membrane lies between the gravel and the soil. The product must not be used on gravel where the underlying surface is concrete, tarmac or any other non-porous surface, or in situations where there is potential for run-off into surface waters.

Rate of Use

EQUIPMENT	AREA	PRODUCT REQUIRED	WATER VOLUME	Spray Quality (Nozzle)	Spray height	Buffer zone
Knapsack with 'conventional' nozzles	100m ²	45 ml	2 - 5L	Coarse * Hypro Polijet AN0.6 (provided or similar)	40 cm	2 m
	1000m ²	450 ml	20 - 50L			
	1 ha	4.5L	200 - 500L			
Knapsack with CDA Applicator **	100m ²	45 ml	200 ml	Volume Median Diameter at least 300 microns	-	2 m
	1000m ²	450 ml	2.0 L			
	1 ha	4.5L	20.5 L			
Vehicle-mounted boom	1 ha	4.5L	200 - 500L	Three star drift reduction nozzles	-	6 m

*Hypro Polijet AN0.6 nozzle provided gives, subject to calibration: a coarse spray with a flow rate of 0.6 L/min at 1 bar, giving 225 L/ha at 4kph walking speed, swath width of 40 cm, 40 cm nozzle height

** Carrier volume and spray quality determined using a RiverLynx Eliminator CDA applicator. Use a carrier volume such that the total volume is equivalent to 25 L/ha.

Application Timing

Apply PISTOL® post-emergence of the weeds at any time from February until the end of July, provided that the weeds are actively growing and have not begun the process of natural die-back. At least six hours, but preferably 24 hours of dry weather are required immediately following application for optimum control.

Bayer Tip: For post-emergence application ideally annual broad-leaved weeds should have at least two fully expanded true leaves and annual grasses should be at the one leaf growth stage or beyond. Some perennial weeds, including docks, perennial sowthistle and willowherb are best treated just before flowering or the setting of seed.

MIXING AND SPRAYING

Shake well before use. Half fill the spray tank (or carrier for CDA applicators) with clean water. Start gentle agitation and add the required quantity of PISTOL®. Mix and top up to the required volume with water or carrier. Use immediately.

WASH OUT THE SPRAYER THOROUGHLY AFTER USE, USING A WETTING AGENT OR PROPRIETARY TANK CLEANER WITH TWO RINSES, AS TRACES OF PISTOL® MAY CAUSE HARM TO OTHER SUSCEPTIBLE PLANTS SPRAYED LATER.

Equipment

Hand-held equipment

Use a knapsack sprayer fitted with a coarse nozzle using a pressure of around 1-2 bars to provide a coarse spray. Use of anti-drift nozzles or the use of a protector shield to avoid any drift is recommended.

NOZZLE: Hypro Polijet AN0.6 nozzle (provided) gives, subject to calibration: a coarse spray with a flow rate of 0.6 L/min at 1 bar, giving 225L/ha at 4kph walking speed, swath width of 40 cm, 40 cm nozzle height, or use similar nozzles that give coarse spray.

Alternatively, Pistol may be used through specialist CDA equipment with a suitable droplet spectrum (VMD minimum 300 microns). Refer to the lance manufacturer's instructions before use.

Vehicle-mounted equipment

Apply via a horizontal boom sprayer. Apply in 200 - 500 L/ha using three star drift reducing nozzles. Use the higher volume where weed foliage is dense. A spray pressure of at least 2 bars is advised. Good, even spray coverage of soil and weeds is essential. To prevent damage, extreme care must be taken to avoid drift onto non-target plants.

Good and even coverage of foliage and soil is essential for optimum activity.

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Bayer

The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.

Batch number : see on the pack

For 24 hour emergency information contact

Bayer CropScience Limited

Telephone: 00800 1020 3333

or nearest National Poisons Information Centre

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Milton Road
Cambridge
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Tel: 00800 1214 9451

www.environmentalscience.bayer.co.uk
for MSDS and larger label



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