



- Herbicide

MONSANTO AMENITY GLYPHOSATE

A foliar applied translocated herbicide for the control of emerged weeds in industrial and amenity situations, in forestry and on hard surfaces.

Degraded by micro-organisms/microbes in the soil.

A soluble concentrate containing 360 g/l glyphosate present as 480 g/l (41.1% w.w.) of the isopropylamine salt of glyphosate and polyoxyethylene amine surfactant

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

MAPP Number: 15227

Contents **e** 5 litres

PROTECT FROM FROST

Imported



Harmful



Dangerous for the environment

**HARMFUL BY INHALATION
RISK OF SERIOUS DAMAGE TO EYES.
TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE
AQUATIC ENVIRONMENT.**

IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER & SEEK MEDICAL ADVICE.

WEAR EYE/FACE PROTECTION

THIS MATERIAL AND ITS CONTAINER MUST BE DISPOSED OF IN A SAFE WAY.

USE APPROPRIATE CONTAINMENT TO AVOID ENVIRONMENTAL CONTAMINATION.

To avoid risks to man and the environment, comply with the instructions for use

Not for reformulation or repackaging.
No licence is granted under any patent.

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Lot number/production date:



The Voluntary Initiative

*This label has been produced according to the
Crop Protection Association Voluntary Initiative (VI) guidance.*

MONSANTO AMENITY GLYPHOSATE

A soluble concentrate containing 360 g/l glyphosate present as 480 g/l (41.1% w.w.) of the isopropylamine salt of glyphosate and polyoxyethylene amine surfactant

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IMPORTANT INFORMATION

FOR USE ONLY AS A HORTICULTURAL/INDUSTRIAL/FORESTRY HERBICIDE

Crops/situations:

Natural surfaces not intended to bear vegetation, permeable surfaces overlying soil, hard surfaces;
Amenity vegetation;
Forest nursery, forest (weed control, stump application and chemical thinning).

Maximum individual dose:	}
Maximum number of treatments:	} Full details are given in
Latest time of application:	} the attached leaflet
Other specific restrictions:	} (see Crop Specific Information - marked #)

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.**

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 AND FACE PROTECTION (FACE-SHIELD) when handling the concentrate and when handling contaminated surfaces.

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND RUBBER BOOTS when using hand-held sprayers and hand-held rotary atomisers.

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES, RUBBER BOOTS AND FACE PROTECTION (FACESHIELD) when using weed wiper equipment, making cut stump treatments and using stem injection equipment.

However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.

WHEN USING, DO NOT EAT, DRINK OR SMOKE.

WASH HANDS AND EXPOSED SKIN before eating and drinking or smoking and after work.

Environmental protection

DO NOT CONTAMINATE SURFACE WATERS OR DITCHES with chemical or used container *[do not clean application equipment near surface water/avoid contamination via drains from farmyards and roads]*.

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.

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. Triple rinsed containers may be disposed of as non-hazardous waste.

Medical advice

Medical guidance is available on a 24 hour basis by telephoning the National Chemical Emergency Centre on 01865 407333 or for doctors, from the National Poisons Information Service on 0870 600 6266.

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.

Warnings

EXTREME CARE SHOULD BE TAKEN TO AVOID SPRAY DRIFT AS THIS CAN SEVERELY DAMAGE NEIGHBOURING CROPS OR PLANTS.

DO NOT MIX, STORE OR APPLY MONSANTO AMENITY GLYPHOSATE IN GALVANISED OR UNLINED STEEL CONTAINERS OR SPRAY TANKS.

DO NOT leave spray mixtures in tank for long periods and make sure tanks are WELL VENTED.

Restrictions

A period of at least 6 hours and preferably 24 hours rain-free must follow application of Monsanto Amenity Glyphosate.

Do not spray onto weeds which are naturally senescent, or where growth is impaired by drought, high temperatures, a covering of dust, flooding or frost at, or immediately after application, otherwise poor control may result.

Do not spray in windy conditions as drift onto desired crops or vegetation could severely damage or destroy them.

After application, large concentrations of decaying foliage, stolons, roots or rhizomes should be dispersed or buried by thorough cultivation before crop drilling.

Applications of lime, fertilizer, farmyard manure and pesticides should be delayed until 5 days after application of Monsanto Amenity Glyphosate.

Weeds controlled

Monsanto Amenity Glyphosate is a foliar acting herbicide which controls annual and perennial grasses and most broad-leaved weeds when used as directed. It is important that all weeds are at the correct growth stage when treated, otherwise some re-growth may occur and this will need re-treatment.

Apply Monsanto Amenity Glyphosate herbicide once grasses and broad-leaved weeds have emerged and they have ACTIVELY GROWING green leaves.

- PERENNIAL GRASSES must have a full emergence of healthy, green leaf. (Common Couch, for example, becomes susceptible at the onset of tillering and new rhizome growth commences which usually occurs when plants have 4-5 leaves, each with 10-15cm of new growth).
- PERENNIAL BROAD-LEAVED WEEDS are most susceptible around the flowering stage.
- BRACKEN should be treated after frond tips are unfurled, but pre- senescence.

- OTHER SPECIES - recommendations for specific Areas of Use are given in the Recommendation Tables, pages xx-xx. *Printers note: insert page no.s*
- This product will not give an acceptable level of control of Horsetails (*Equisetum arvense*) – repeat treatment will be necessary.

Following Crops

Upon soil adsorption the herbicidal properties of Monsanto Amenity Glyphosate are lost permitting the drilling of crops 48 hours after application.

Planting of trees, shrubs etc may take place 7 days after application. Grass seed may be sown from 15 days after treatment.

Weed resistance strategy

There is low risk for the development of weed resistance to Monsanto Amenity Glyphosate.

Strains of some annual weeds (e.g. Black-grass, Wild oats and Italian Ryegrass) 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 (Monsanto).

Growers are encouraged to implement a weed resistance strategy based on (a) Good Agricultural Practices and (b) Good Plant Protection Practices by:

- Following label recommendations
- The adoption of complimentary weed control practices
- Minimising the risk of spreading weed infestations
- The implementation of good spraying practice to maintain effective weed control
- Using the correct nozzles to maximise coverage
- Application only under appropriate weather conditions
- Monitoring performance and reporting any unexpected results to Monsanto UK Ltd (01954 717575)

Sprayer Hygiene

It is essential to thoroughly clean-out spray tanks, pumps and pipelines and nozzle or disc assemblies, with a recommended detergent cleaner, between applying this product and other pesticides to avoid contamination from pesticide residues. Traces of Monsanto Amenity Glyphosate left in the equipment may seriously damage or destroy crops sprayed later.

#Crop specific information

Crops/situations:	Maximum individual dose (litres product/ hectare):					
Natural surfaces not intended to bear vegetation, permeable surfaces overlaying soil, hard surfaces	5.0					
Amenity vegetation	5.0					
Forestry, forest nursery: <ul style="list-style-type: none"> • Weed control • Stump application • Chemical thinning (by injection)	10.0 200ml/litre of water (20% solution of product in water) 2 ml per 10cm diameter (or less) of tree					
<p>Other specific restrictions:</p> <p>The maximum individual dose must not exceed 22.5 g/l glyphosate for hydraulic knapsack sprayers.</p> <p>When applying through rotary atomisers the spray droplet spectra produced must be of a minimum Volume Median Diameter (VMD) of 200 microns.</p> <p>Weed wipers may be used in any crop where the wiper or chemical does not touch the growing crop.</p> <p>For weed wiper applications, the maximum concentrations must not exceed the following:</p> <table data-bbox="130 1272 1305 1339"> <tr> <td>Weed wiper Mini</td> <td>1:2 dilution with water</td> <td rowspan="2">} Refer to weed wiper guidance under 'Mixing & Spraying' section</td> </tr> <tr> <td>Other wipers</td> <td>1:1 dilution with water</td> </tr> </table> <p>For stump application, the maximum concentration must not exceed 200 ml of product per litre of water (i.e., a 20% solution).</p>		Weed wiper Mini	1:2 dilution with water	} Refer to weed wiper guidance under 'Mixing & Spraying' section	Other wipers	1:1 dilution with water
Weed wiper Mini	1:2 dilution with water	} Refer to weed wiper guidance under 'Mixing & Spraying' section				
Other wipers	1:1 dilution with water					

RECOMMENDATION TABLES

AREA OF USE	TARGET WEEDS/USAGE	CROP/SITUATION	WEED INFESTATION	APPLICATION RATE l/ha	WATER VOLUME	APPLICATION TIMING AND GUIDANCE
NATURAL SURFACES NOT INTENDED TO BEAR VEGETATION, PERMEABLE SURFACES OVERLYING SOIL, RAILWAY BALLAST	Including roadsides, paths, and along fences & total weed control on industrial sites	Vegetation management	Annual weeds	1.5	80-400 l/ha*	Use areas include: Cleaning up weedy ground prior to planting or sowing and as a directed spray in ornamental plantings. Hydraulic sprayers, rotary atomisers or weed wipers may be used. DO NOT USE IN OR ALONGSIDE HEDGEROWS. DO NOT USE UNDER POLYTHENE OR GLASS
			Perennial grasses and broad-leaved weeds	4.0 - 5.0		
Hard surfaces (excluding railway ballast)	including roadsides, paths, concrete and alongside walls	Vegetation management	Annual weeds	1.5	80-400 l/ha*	Apply this product carefully. Ensure spraying takes place only when weeds are actively growing (normally March to October) and is confined only to visible weeds including those in the 30cm swath covering the kerb edge and road gulley – do not overspray drains
			Perennial grasses and broad-leaved weeds	4.0 - 5.0		
AMENITY VEGETATION	Vegetation management	Areas of semi-natural or ornamental vegetation including trees. Areas of bare soil around ornamental plants or areas intended for ornamental planting or clearance of allotments	Annual weeds	1.5	80-400 l/ha*	Hydraulic sprayers, rotary atomisers or weed wipers may be used DO NOT USE IN OR ALONGSIDE HEDGEROWS. DO NOT USE UNDER POLYTHENE OR GLASS
			Perennial grasses and broad-leaved weeds	4.0 - 5.0		
	Root suckers	-	All species	5.0		

* Rotary atomisers may be used at a water volume of 40 l/ha. Ensure droplet diameter falls within the range 200-300 microns.

Forestry weed control

Monsanto Amenity Glyphosate can be used for site preparation and for weed control in planted out trees.

AREA OF USE	TARGET WEEDS/USAGE	WEED INFESTATION	APPLICATION RATE L/HA.	WATER VOLUME	APPLICATION TIMING & GUIDANCE
Forestry: - Pre-planting	Arable land, planting, replanting, & grassland areas	Arable weeds	4.0	80-250 l/ha *	All tree species may be planted 7 days or more after treatment * Rotary atomisers may be used at a water volume of 40 l/ha. Ensure droplet diameter falls within the range 200-300 microns.
		Grassland weeds	5.0		
Forestry: - Post-planting (directed) in conifers & broad-leaved trees	Clean-up around trees with knapsack applications.	Annual/perennial grasses and broad-leaves	4.0	Knapsack sprayers : 200 – 250 l/ha or Weed wiper mini: 1 part Monsanto Amenity Glyphosate to 2 parts water See Mixing & Spraying section.	It is ESSENTIAL to use a TREE GUARD for all applications made in the growing season. Treat bracken after frond tips are unfurled but before senescence. Treat heather late August to end September. All other woody weeds are treated June-August, before leaf senescence (but after new growth of crop has hardened).
		Woody weeds: Bracken/Beech Brush/Brambles Sycamore/Oak Hazel/Willow/Ash	3.0		
		Heather (peat soils) Heather (mineral soils)	4.0 6.0		
		Rhododendron (*)	10.0		

AREA OF USE	TARGET WEEDS/USAGE	WEED INFESTATION	APPLICATION RATE L/HA.	WATER VOLUME	APPLICATION TIMING & GUIDANCE
Forestry: - Post-planting (overall application in dormant season in certain conifers – conifer release)	Grass weeds - Lowland areas - Upland areas Bracken Beech & Birch Brambles	Black Bent, Cock's-foot, Common Couch, Creeping Soft-grass, False Oat-grass, Fescues, Meadow-grasses, Other Bent species, Purple Moor-grass, Sweet Vernal-grass, Tufted Hair-grass, Wavy Hair-grass, Wood Small-reed (Bush grass) All infestation levels All infestation levels All infestation levels	1.5 2.0 2.0 2.0 3.0	Hydraulic sprayers: 200-250 l/ha or Hand-held equipment - see 'Mixing and Spraying' section	DO NOT OVERALL SPRAY trees being grown for ORNAMENTAL PURPOSES, including CHRISTMAS TREES. Species safe to spray when fully dormant and leader growth has hardened: Corsican, Lodgepole and Scots Pines, Norway Spruce, Sitka Spruce, Lawson Cypress, Western Red Cedar. Species safe to spray when fully dormant and leader growth has hardened but NOT in spring: Douglas Fir and Noble Fir If overall application takes place after the optimum timing weed control may be reduced. It is advisable to spray a limited area of forest to test crop safety under local conditions before widespread overall application in subsequent years. These recommended application rates refer to forestry usage only. Inadequate control may result if used in other areas. <u>Caution:</u> The timing of hardening of leader growth varies considerably between locations and between seasons. It may occur as early as the end of July or be delayed to October or later. To avoid damage to Lammas growth, sprays should be directed away from leaders.

AREA OF USE	TARGET WEEDS/USAGE	WEED INFESTATION	APPLICATION RATE L/HA.	WATER VOLUME	APPLICATION TIMING & GUIDANCE
Forestry: - Stump application for chemical thinning	Deciduous trees Coniferous trees	All species All species	10% solution of Monsanto Amenity Glyphosate in water 20% solution of Monsanto Amenity Glyphosate in water		Apply the solution to saturate the rim of the newly cut surface, with a suitable adapted clearing saw, spot gun or paintbrush. Treat as soon as possible (within a week) after felling, in the period November to March. Do not apply in the period of active sap flow in the spring/early summer. Do not cut trenches or drill holes and fill with the solution or use undiluted product. Note: for ease of identification of treated areas a suitable, commercially available, water-soluble dye may be added to the prepared spray solution.
Forestry: - Chemical thinning by injection of tree stems	Coniferous and deciduous species	-	2 ml neat Monsanto Amenity Glyphosate per cut per 10 cm diameter (or less) tree		Use a hatchet to cut one notch in trees up to 10cm diameter and apply 2 ml of the solution to each cut. Use two or three notches in trees over 10cm diameter. Do not treat in the period of active sap flow in the spring/early summer.

Mixing and spraying

Monsanto Amenity Glyphosate mixes readily with water and can be applied in spray volumes ranging from 80-400 l/ha using tractor mounted, knapsack, rotary atomisers and hand-held sprayers. Specialised application equipment such as weed wipers, stem injection and spot gun applicators may be used where indicated.

Correctly calibrate all sprayers under field or use conditions prior to application.

a) Tractor mounted and powered sprayers

These should be capable of applying accurately 80-400 l/ha within a pressure range of 1.5-2.5 bars (20-35 psi).

Half fill the spray tank with clean water, start gentle agitation, and then add the correct amount of Monsanto Amenity Glyphosate. Top up the tank with water to the required level. To avoid foaming do not use top tank agitation. Use of a defoamer may be necessary.

All applications using hydraulic sprayers (including knapsack sprayers) to be as 'MEDIUM' or 'COARSE' spray quality (BCPC definition).

Medium Volume application (150-300 l/ha)

Avoid high water volumes (>300 l/ha) which may lead to run-off from the treated vegetation, resulting in reduced control. Low drift nozzles such as air induction and pre-orifice types producing a medium or coarse spray (BCPC definition) should be used to minimise the risk of drift.

Low Volume Application (minimum 80 l/ha)

Low volume application can be achieved by reducing pressure and the appropriate nozzle selection. Low drift nozzles which produce a medium spray quality (BCPC definition) should be used to minimise the risk of drift.

b) Knapsack sprayers

Recommended delivery range is 80 - 300 l/ha. Half fill the spray tank with clean water, add the correct amount of Monsanto Amenity Glyphosate and top up with water. Fill according to best practice as given on the CPA's Voluntary Initiative website (www.vounaryinitiative.org.uk)

When used at a walking speed of 1 m/sec to apply a swath of 1 m width, most knapsack sprayers fitted with a Hypro AN 0.6-AN2.4 or similar nozzle deliver approximately 200 l/ha spray volume (or 10 l per 500 m²). To apply 5.0 l/ha of MONSANTO AMENITY GLYPHOSATE, therefore, use 50ml of product for each 2 litres of spray liquid required. Similarly, knapsack sprayers fitted with low volume nozzles such as - D/0.23/1- D/0.68/1 typically deliver approximately 100 l/ha spray volume. To apply 5.0 l/ha Monsanto Amenity Glyphosate in this case, use 100ml of product for each 2 litres of spray liquid required.

c) Rotary Atomisers

Tractor-mounted boom sprayers and hand-held machines are suitable for use in some situations to apply a minimum spray volume of 40 l/ha.

When rotary atomisers are used to apply Monsanto Amenity Glyphosate ensure that the droplet diameter falls within the range 200-300 microns for all uses.

Stir the correct amount of Monsanto Amenity Glyphosate to control the particular target species into the sprayer bottle half filled with clean water. Top up with water, close the top and shake gently to ensure good mixing.

Do not tank mix Monsanto Amenity Glyphosate when using rotary atomiser sprayers.

d) Weed Wipers

For ropewick applicators use a concentration of 1 part Monsanto Amenity Glyphosate to 2 parts of water and add a water-soluble dye if required. Care should be taken to avoid dripping onto wanted vegetation.

For new generation weed wipers, use 1 part Monsanto Amenity Glyphosate to 10 or 20 parts of water or as directed by manufacturer's instructions. A list of machines is included in the Company Advisory section at the end of this label.

e) Cut Stump Applicators

For cut stump treatment an Enso attachment to rotary saws may be used.

This technique is specific to scrub clearance in forestry. A suitable water soluble dye may be used.

f) Stem injection

Use a hatchet to cut one notch in trees up to 10cm diameter and two to three notches in trees above 10cm diameter. Use 2.0 ml of undiluted Monsanto Amenity Glyphosate per notch.

g) Spot Gun Applicators

Spot gun applicators are for the treatment of individual weeds. Apply 5 ml of spray to target weed, using a narrow cone TG-3 or TG-5 nozzle.

Spot Diameter (metres)	Amount of Monsanto Amenity Glyphosate (ml) per 5 litres spray solution for targeted dosages of:		
	3.0 l/ha	4.0 l/ha	5.0 l/ha
0.3	20	28	35
0.6	85	110	140

Compatibility

Do not tank mix Monsanto Amenity Glyphosate with adjuvants, pesticides or fertilisers except as advised by Monsanto. For up to date information on compatible products contact Monsanto UK Limited (tel: 01954 717575).

Do not tank-mix Monsanto Amenity Glyphosate when using rotary atomiser sprayers.

For knapsack sprayers: mix thoroughly and use immediately when using Monsanto Amenity Glyphosate in tank mixture.

COMPANY ADVISORY INFORMATION

This section is not part of the Product Label under the Plant Protection Products Regulations 1995 and provides additional advice on the product.

General Information

Monsanto Amenity Glyphosate is taken up by foliage and translocated to underground roots, rhizomes and stolons, providing control of both annual and perennial grasses and broad-leaved weeds. Until degraded, the active ingredient in Monsanto Amenity Glyphosate, glyphosate, is practically immobile in soils and is, therefore, unlikely to contaminate groundwater.

To maximise the intrinsic safety of Monsanto Amenity Glyphosate to operator, consumer and environment, the label recommendations and the DEFRA/HSC/NAW publication "Code of Practice for Using Plant Protection Products" of January 2006, should be adhered to.

Symptoms on the weeds

Symptoms of treatment are generally first seen 7-10 days, or longer (if growth is slow), after spraying. These take the form of leaf reddening followed by yellowing and are usually quicker to appear on grasses than on broad-leaved weeds. Reaction of nettles is slow.

Effects of weather

See Directions for Use (Restrictions).

Monsanto Amenity Glyphosate will remain efficacious at low but not freezing temperatures however the onset of symptoms will be delayed.

A covering of dew may reduce efficacy where run-off occurs. Reduced control is likely where weed growth is impaired by natural senescence, drought, high temperature, a covering of dust, flooding or severe/prolonged frost at, or immediately after, application.

Agronomic Advice

Applications of lime, fertiliser, farmyard manure and pesticides should be delayed until 5 days AFTER application of Monsanto Amenity Glyphosate .

General Cautions

Take extreme care to avoid drift, particularly when using near or alongside hedgerows. The use of low drift nozzles such as 'air induction' and 'pre-orifice' nozzles are recommended.

After application, large concentrations of decaying foliage, stolons, roots or rhizomes should be dispersed or buried by thorough cultivation before crop drilling.

New generation weed wipers

Logic Contact 2000
Carrier Rollmaster
Allman Ecowipe
Rotowiper (UK) Ltd
C-Dax™ Eliminator
Weedswiper™

Disposal

Follow the guidance on the disposal of surplus spray solution, tank washings, concentrate and containers as given in Section 5 of the DEFRA/HSC/NAW publication "Code of Practice for Using Plant Protection Products", January 2006.

Environmental Information Sheet

An Environmental Information Sheet for this product is available from the CPA's Voluntary Initiative website (www.voluntaryinitiative.org.uk)

Material Safety Data Sheet

A Material Safety Data sheet is available from Monsanto, phone 01954 717575 or download from www.monsanto-ag.co.uk/

Trade Mark References

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