

HERBICIDE



CHALLENGE[®] 60

A soluble concentrate formulation
containing 60 g/l glufosinate-ammonium

A **total herbicide/desiccant** used in agriculture and horticulture for the control of annual and perennial broad-leaved weeds and grasses around ornamental trees and shrubs, around fruit trees, canes or bushes and on cultivated land prior to planting.

Product registration number: **MAFF 08236**

Non-selective contact herbicide.

NO HAZARD CLASSIFICATION.

Controls annual and perennial broad-leaved weeds and grasses.

fargro[®]

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ALWAYS READ THE LABEL: USE PESTICIDES SAFELY

CHALLENGE 60

- FORMULATION WITH A UNIQUE SURFACTANT BASE ENSURES EXCEPTIONAL CONTROL
- Active against annual and perennial broad-leaved weeds and grasses.
- For use around ornamental trees and shrubs, fruit trees, canes or bushes and on cultivated land prior to planting.
- NO HAZARD CLASSIFICATION.
- Non-residual, therefore sowing or planting can occur within hours.
- Kills green plant tissue but is harmless to mature bark.
- Rapidly broken down on contact with soil.
- Ideal for local authorities and contractors, provides highly effective weed control at the lowest possible risk to the operator and environment.
- Based on Bayer CropScience's unique glufosinate-ammonium chemistry producing a highly effective and rapid acting non-selective herbicide.
- Controls all annual weeds and most perennial broad-leaved weeds and grasses after a single application. Deep-rooted perennials such as docks and nettles may require a second application.
- Special formulation has a unique mix of surfactants and wetters to ensure excellent absorption and re-distribution throughout the weed's tissue resulting in improved weed control.

The following text is taken from the approved product label:

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

Weed Control

CHALLENGE 60 uses a unique active ingredient that controls most annual and perennial broad-leaved and grass weeds. CHALLENGE 60 is taken in through the green leaves of weeds so be careful not to allow spray to drift or splash wanted plants or lawns. However, it will not affect the brown, woody stems of shrubs or trees and breaks down naturally in the soil.

Do not allow spray to contact dormant or green buds, suckers, damaged or green bark and foliage of wanted plants.

This makes CHALLENGE 60 a versatile type of weedkiller available for use in many situations.

CHALLENGE 60 controls annual and perennial, grass and broad-leaved weeds mainly by contact action after uptake by the leaf and other aerial parts of the plant. The speed of activity is influenced by weather and plant growth conditions. Activity is quickest under warm moist conditions when the target weeds are actively growing. Under optimum growing conditions, initial effects are seen as yellowing within 2-3 days and kill is usually complete within 10-14 days. Although speed of activity may be affected during less favourable growing conditions (cold/dry), efficacy is unaltered.

WHERE TO USE

BETWEEN ORNAMENTAL TREES AND SHRUBS, AROUND FRUIT TREES, BETWEEN FRUIT CANES AND BUSHES AND PRIOR TO PLANTING.

CHALLENGE 60 is quickly absorbed by the weeds so they can usually be dug in the day after treatment and the treated area replanted.

For the best control of creeping perennial grasses, cultivations should be delayed as long as possible. If left weeds normally start changing colour within 2-3 days and die within 10-14 days. However this will take a little longer in cold weather.

DO NOT USE ON LAWNS.

RESTRICTIONS

Timing

Apply only between 1 March and 30 September.

Weather

DO NOT spray if rain is imminent or likely within 6 hours of application and DO NOT apply to wet foliage if run off is likely to occur.

Soils

CHALLENGE 60 is degraded after contact with the soil.

Crops can normally be drilled or planted immediately after spraying with CHALLENGE 60 or sprayed post-drilling but pre-emergence.

Do not apply to sandy soils if seedlings, bulbs or new shoots are expected to emerge within 3 days.

Cultivations

Cultivations may begin 4 hours after application of CHALLENGE 60. For the best control of creeping perennial grasses, cultivations should be delayed as long as possible. CHALLENGE 60 will continue to act on weeds after cultivation giving thorough, lasting control.

DO NOT use on broadcast crops.

WEEDS CONTROLLED

CHALLENGE 60 will control grass and broad-leaved weeds.

Annual Weeds

Annual grasses and broad-leaved weeds are killed by a single application. CHALLENGE 60 has no residual soil activity and will control only weeds which have emerged at the time of application.

Perennial Weeds

Perennial non-rhizomatous grasses (e.g. perennial rye-grass, rough meadow-grass) and broad-leaved weeds are usually well controlled with a single application. Common couch, docks, nettles and other deep-rooted perennials may require two applications of CHALLENGE 60 for control during the growing season.

CROP SPECIFIC INFORMATION

RATES OF USE AND TIMING

For optimum results, apply when weeds have at least 2 expanded leaves and are actively growing.

Use 50 ml in 1 litre of water over 30 sq. metres.

Apply using a sprayer; cover weeds lightly without drenching. Additional wetters should not be used.

Deep rooted weeds may require repeat treatment if new growth appears, unless edible crops are to be grown, when only one treatment must be made.

Do not allow spray to contact dormant or green buds, suckers, damaged or green bark, and foliage of wanted plants.

Do not apply if rain is imminent or likely within 6 hours of application.

RESISTANCE

Certain weeds may develop resistance to Bayer CropScience Ltd.'s products. Since such circumstances are beyond our control, Bayer CropScience will be under no liability for any resulting loss or damage whatsoever.

SAFETY PRECAUTIONS

Precautions marked * are a legal requirement

Operator Protection

*Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment:

*WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES, RUBBER BOOTS AND FACE PROTECTION (FACESHIELD) when handling the concentrate.

*WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION (FACESHIELD) when adjusting and maintaining equipment.

*WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES, RUBBER BOOTS AND FACE PROTECTION (FACESHIELD) when applying by hand held equipment.

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

WASH CONCENTRATE FROM SKIN OR EYES IMMEDIATELY.

WASH HANDS before eating, drinking or smoking and after work.

WASH ALL PROTECTIVE CLOTHING thoroughly after use, especially the inside of gloves.

Consumer Protection

DO NOT APPLY DIRECTLY TO FOOD CROPS.

Environmental Protection

HARMFUL TO FISH OR OTHER AQUATIC LIFE. Do not contaminate surface waters or ditches with chemical or used container.

*KEEP LIVESTOCK OUT of treated areas until foliage of poisonous weeds, such as ragwort have died and become unpalatable.

Storage and Disposal

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.

KEEP OUT OF REACH OF CHILDREN.

KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place.

WASH OUT CONTAINER THOROUGHLY, empty washings into spray tank and dispose of safely.

*DO NOT RE-USE THIS CONTAINER FOR ANY PURPOSE.

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

CHALLENGE 60

Contains 60g/l glufosinate-ammonium

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

COMPLIANCE WITH THE FOLLOWING CONDITIONS OF USE AND ALL SAFETY PRECAUTIONS MARKED* IS A LEGAL REQUIREMENT

FOR USE ONLY AS AN AGRICULTURAL/ HORTICULTURAL HERBICIDE

- Crops:** For use between trees and shrubs (including fruit trees, canes and bushes) and on cultivated land before planting.
- Maximum individual dose:** Up to 50 ml per 30 m²
- Maximum number of treatments:** 2 per year round fruit trees, canes or bushes and no more than 1 per year prior to planting edible crops.
- Latest time of application:** 7 days before harvest, depending on the crop.
- Other specific restrictions:** Apply only between 1 March and 30 September.

READ ALL OTHER SAFETY PRECAUTIONS AND DIRECTIONS FOR USE BEFORE USE.

PROTECT FROM FROST

Pack Size: 5 litres
Outers of: 4 x 5 litres

®CHALLENGE is a Registered Trade Mark of Bayer.

Approval Holder:

Bayer CropScience Ltd.
Hauxton, Cambridge. CB2 5HU
Tel: 01223 870312
For 24 hour emergency information for Challenge 60 contact Bayer CropScience
Telephone: 0800 220876

Safety Data Sheet available on request.
Marketed and distributed in the UK by:
Fargro Limited, Toddington Lane,
Littlehampton, West Sussex. BN17 7PP
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TECHNICAL NOTE FOR CHALLENGE[®] 60

Experience and trials over several years have shown a wide range of weeds are controlled and these are listed in the table below.

Annual broad-leaf weeds at 50 mls per 40 m²

Black-bindweed	Corn Spurry	Knotgrass	Shepherd's Purse
Black Nightshade	Crane's-bill	Milk Thistle	Small Nettle
Charlock	Fat-hen	Pale Periscaria	Smooth Sow-thistle
Common Chickweed	Field Forget-me-not	Parsley Piert	Stinking Chamomile
Common Fumitory	Field Penny Cress	Pineappleweed	Sun Spurge
Common Hemp-nettle	Field Speedwell	Red Deadnettle	Tare species
Common Orache	Gallant Soldier	Redshank	Volunteer Oilseed Rape
Corn Buttercup	Groundsel	Scarlet Pimpernel	Wild Radish
Corn Marigold	Henbit Dead-nettle	Scented Mayweed	
Corn Poppy	Ivy-leaved Speedwell	Scentless Mayweed	

Annual grass weeds at 50 mls per 40 m²

Annual Meadow-grass	Black-grass	Loose Silky-bent	Wild-oats
Barren (Sterile) Brome	Italian Rye Grass		

Perennial broad-leaved weeds at 50 mls per 30 m²

Blackberry	Creeping Buttercup	Field Bindweed	Perennial Nettle
Colt's-foot	Creeping Thistle	Greater Plantain	Perennial Sow-thistle
Corn Mint	Curled Dock	Hoary Cress	Raspberry
Cow Parsley	Dandelion	Meadow Buttercup	White Clover

Perennial grass weeds at 50 mls per 30 m²

Black Bent	Common Couch	Perennial Rye-grass	Rough Meadow-grass
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Other weeds at 50 mls per 30 m²

Bracken	Field Horsetail
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Knapsack Rate

Higher rate: in a 15 litre knapsack add 700 mls to 14 litres of water to treat 420 m².

Lower rate: in a 15 litre knapsack add 540 mls in 14 litres of water to treat 420 m².

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