

DISCMAN[®]

Biograde[®]

Non-irritant, pigmented soluble concentrate formulation.

MAPP No. 12856

Contains 216 g/l glyphosate

Systemic weedkiller, ready-for-spraying through controlled droplet applicators (CDA), for the control of most broad-leaved and grass weeds, including common couch, on natural surfaces not intended to bear vegetation, permeable surfaces overlying soil and hard surfaces, around amenity vegetation, in forest areas and near water.

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 CLOTHING (IMPERMEABLE COVERALLS), SUITABLE PROTECTIVE GLOVES AND RUBBER BOOTS during application.
However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.
WASH ANY CONTAMINATION from skin or eyes immediately.
DO NOT BREATHE SPRAY.

WASH ALL PROTECTIVE CLOTHING thoroughly after use, especially the insides of gloves.
WASH HANDS AND EXPOSED SKIN before eating, drinking or smoking 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 from farmyards and roads.

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.

EMPTY CONTAINER COMPLETELY and dispose of safely.

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

Safety data sheet available for professional user on request.

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

STORE IN A COOL, DRY PLACE

PROTECT FROM FROST

IMPORTANT INFORMATION

FOR USE ONLY AS AN HORTICULTURAL/FORESTRY/INDUSTRIAL/AMENITY/AQUATIC HERBICIDE

See Statutory Area on attached leaflet for the following:

Crops or situation, Maximum individual dose of product, Maximum total dose, Latest time of application, Other Specific Restrictions

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.

Manufacturer: Barclay Chemicals Manufacturing Ltd.,

Damastown Way, Damastown Industrial Park,

Mulhuddart, Dublin 15, Ireland.

Tel: 00 353 (0) 1 8112900 Fax: 00 353 (0) 1 8224678

E-mail: info@barclay.ie Website: www.barclay.ie

Approval Holder: Barclay Chemicals R&D Ltd

Contact details as above.

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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.

IMPORTANT INFORMATION

FOR USE ONLY AS AN HORTICULTURAL/FORESTRY/INDUSTRIAL/AMENITY/AQUATIC HERBICIDE			
Crops or situations	Maximum individual dose of product	Maximum total dose	Latest time of application
Forest	8.5 l/ha	-	-
Amenity Vegetation	8.5 l/ha	-	-
Natural surfaces not intended to bear vegetation, permeable surfaces overlying soil or hard surfaces.	10 l/ha	-	-
Land immediately adjacent to aquatic areas	10 l/ha	-	-
Other specific restrictions <ol style="list-style-type: none">1. The spray droplet spectra produced must be of minimum Volume Median Diameter (VMD) of 200 microns.2. Users must consult the appropriate water regulatory body (Environment Agency/Scottish Environment Protection Agency) before using the product near water and must obtain their agreement before using this product to control aquatic weeds.			
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.			

GENERAL INFORMATION

DISCMAN BIOGRADE is a foliar acting weedkiller that controls most annual and perennial broad-leaved weeds and grasses when used as directed. It is particularly important that the weeds have sufficient leaf growth and are actively growing when treated. It is translocated from treated vegetative growth to underground roots, rhizomes or stolons. Leaf symptoms, being a reddening then yellowing of the foliage, are first seen on grass weeds but take longer to appear on broad-leaved weeds.

Perennial grass weeds must have a full emergence of healthy, green leaf that is growing actively at the time of application. Common couch reaches the susceptible stage of growth when tillering and new rhizome growth begins. This usually occurs when plants have 5-6 leaves each with 12-15 cm (5-6") of new growth.

The majority of perennial broad-leaved weeds are most susceptible if treated when they are growing actively and are at or near flowering.

Annual weeds should be growing actively with grasses having at least 5 cm (2") of leaf and broad-leaved weeds at least two expanded true leaves when sprayed.

Weeds become less susceptible to DISCMAN BIOGRADE when their growth is restricted by natural senescence or by drought, frost, high temperature or waterlogging. Reduced control will result if such conditions occur at or immediately after spraying.

Note: DISCMAN BIOGRADE does not give acceptable control of horsetail, *Equisetum arvense*.

WEATHER CONDITIONS

A period of at least 6 hours but preferably 24 hours or more free of rain must follow spraying. Weeds suffering from drought stress may not be adequately controlled. Do not spray in windy conditions as spray droplets blown onto crops or valued amenity plants or grassed areas might damage them or cause their loss. Do not spray during frosty weather that prevents active growth and can induce weed senescence.

NATURAL SURFACES NOT INTENDED TO BEAR VEGETATION, PERMEABLE SURFACES OVERLYING SOIL OR HARD SURFACES.

General use, including use on amenity and industrial areas

<u>Area of use</u>	<u>Dose</u>	<u>Remarks</u>
<ul style="list-style-type: none">• Around buildings• On industrial sites• Firebreaks• Pavements• Verges along public paths and roadways• Around traffic signs and advertising hoardings	<p>General use 7 litres/ha</p> <p>Perennial broad-leaved weeds present 10 litres/ha</p> <p><i>Rotary atomisers: apply in total spray volume of 40 l/ha.</i></p>	Apply at any time of the year when weeds are showing green leaf and are actively growing. Weeds germinating after application will not be controlled. Avoid droplets falling or being blown onto crops, lawns, amenity plants or any desirable species.

DO NOT SPRAY HEDGE BOTTOMS.
DO NOT USE UNDER GLASS OR
POLYTHENE

Important: If poisonous weeds, such as ragwort, had been present before treatment, then grazing animals, such as horses, should be kept clear of treated areas until such time that poisonous weeds have been removed.

FORESTRY/WOODLANDS

<u>Use</u>	<u>Dose</u>	<u>Remarks</u>
<p>Before planting</p> <ul style="list-style-type: none">- to control most broad-leaved and grass weeds.	<p>8.5 litres/ha</p> <p><i>Rotary atomisers: apply in total spray volume of 40 l/ha.</i></p>	If the ground has been disturbed by forestry operations, allow the weeds to recover. Apply when weeds are showing green leaf and are actively growing. Wait at least 7 days before any cultivations or before planting trees.

AQUATIC WEED CONTROL

- Situations:** For weed control near watercourses and lakes in the presence or absence of fish.
Note: provided that use is as directed on this label, water may be used for irrigation or livestock without interruption.
- Important:**
- Consult the appropriate water regulatory body (Environment Agency/Scottish Environment Protection Agency) before using the product near water and obtain their agreement before using this product to control aquatic weeds.
 - Consult and observe DEFRA booklet PB2289 entitled 'Guidelines for the use of herbicides on weeds in or near watercourses and lakes.'

<u>Weed species</u>	<u>Dose</u>	<u>Remarks</u>
Waterside:	Treat as for NAUTRAL SURFACES NOT INTENDED TO BEAR VEGETATION	Treat as for NAUTRAL SURFACES NOT INTENDED TO BEAR VEGETATION

AROUND AMENITY TREES AND SHRUBS

<u>Use</u>	<u>Dose</u>	<u>Method</u>
To control most annual and perennial weeds around established amenity trees and shrubs.	<p>Annual weeds: 2.5 litres/ha</p> <p>Perennial grass weeds: 7 litres/ha</p> <p>Perennial Broad-leaved weeds: 8.5 litres/ha</p> <p><i>Rotary atomisers: apply in total spray volume of 40 litres/ha.</i></p>	<ul style="list-style-type: none">• Spray at any time of the year when active weed vegetation needs to be controlled, taking care to avoid any spray falling or being blown onto any foliage or immature bark.• Do not spray close to any recently planted tree or shrub until these have been fully established for at least 12 months.• Do not spray close to any tree or shrub with basal foliar growth or suckers.• All immature bark and tree or shrub foliage must be fully guarded from the spray if spraying is conducted in their vicinity.• Spraying may be conducted close to mature trees, without basal growth or suckers, provided that droplets of spray do not contact the trunk or any branches. It is imperative that spray does not contact any damaged bark.

APPLICATION

DISCMAN BIOGRADE must be applied by specialist CDA equipment with an approved droplet spectrum (VMD min 200 microns). Shake the container of DISCMAN BIOGRADE thoroughly then attach it directly to the CDA sprayer as per the sprayer instructions handbook.

Take extreme care to avoid spray drift. DO NOT SPRAY in windy weather or near desirable species or amenity plants as drift onto other crops or vegetation can cause severe plant injury or destruction.

Choose a disk for the CDA Sprayer with a spray pattern appropriate to the task in hand.

<u>Disk</u>	<u>Spray characteristics</u>	<u>Typical uses</u>
Spiral disc	<ul style="list-style-type: none">• Spray width up to 30 cm (narrower swaths may give lower level of control).• Coarse droplets with low tendency for droplets to fall out of the target area.• Limited coverage of numerous or small weeds (ensure that given coverage is adequate for purpose).	Narrow or confined areas requiring greater placement accuracy, such as in the environs of desirable non-target plants. Small occasional areas of weeds.
Square disc	<ul style="list-style-type: none">• Spray width 30-60 cm.• Coarse droplets with low tendency for droplets to fall out of the target area (ensure that given coverage is adequate for purpose).	Narrow or confined areas requiring greater placement accuracy, such as in the environs of desirable non-target plants. Small occasional areas of weeds.
Serrated disc	<ul style="list-style-type: none">• Spray width more than 60 cm.• Finer droplets with greater tendency for these to drift out of the target area.• Capable of giving good coverage of numerous or small weeds.	Larger areas distanced from desirable non-target plants.

SOILS

DISCMAN BIOGRADE may be used to control weeds on all mineral or organic soils or surfaces, including ash and gravel. Only weeds showing green leaf at the time of application can be killed. There is no residual activity with DISCMAN BIOGRADE.

FUTURE PLANTING

DISCMAN BIOGRADE has no long-lasting weedkilling ability in soils after application. Suitable soils may be planted up with trees 7 days after application, if required. Other amenity plants and grasses may be planted or sown 14 days after treatment after the treated vegetation has died back or after cultivation. Under normal weather conditions, cultivations may be conducted 7 days after treatment. Under poor growing conditions wait for the characteristic red/yellow leaf symptoms to appear before cultivating. Applications of lime, fertiliser, organic manure and pesticides should be delayed until 5 days after application of Discman Biograde.

WEED RESISTANCE STRATEGY

There is a low risk of weeds developing resistance to DISCMAN BIOGRADE. Users are encouraged to implement a weed resistance strategy based on good horticultural practices and good plant protection practices. Good practice is achieved and enhanced by:

- Following these label recommendations.
- Adopting complementary weed control measures.
- Minimising the spread of weeds and their seeds.
- Implementing good spraying practices to achieve maximum weed control.
- Using the correct nozzles to maximise weed coverage.
- Applying only under appropriate weather conditions.
- Monitoring performance and reporting unexpected results to Barclay Chemicals R&D Ltd.

Strains of some annual weeds, e.g. black-grass, wild-oat 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 advisor or product manufacturer.

CARE OF EQUIPMENT

Clean the sprayer thoroughly after use following the procedure recommended in the handbook of the CDA spraying equipment. Traces of weedkiller left in poorly cleaned equipment might damage valuable plants or crops if the equipment is later used for some other application. Ideally keep a sprayer solely for applying DISCMAN BIOGRADE.

Barclay Crop Protection