

BRACK-N

MAPP 13138

A soluble concentrate containing 400 g/litre (33.6% w/w) asulam as the sodium salt.

BRACK-N is a post-emergence herbicide for control of bracken and docks.



**DANGEROUS FOR
THE ENVIRONMENT**



IRRITANT

VERY TOXIC TO AQUATIC ORGANISMS
MAY CAUSE SENSITISATION BY SKIN
CONTACT

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

IMPORTANT INFORMATION

FOR USE ONLY AS AN AGRICULTURAL HERBICIDE

| Crops/Situations | Maximum individual dose litres product/hectare | Maximum Number of treatments |
|--|---|---------------------------------|
| Rough upland intended for grazing, agricultural grassland and amenity vegetation | 11.0 | One per year |
| Apple, pear, plum, cherry, blackcurrant, hops, amenity grassland | 4.2 | One per year |
| Forest | 10.0 | One per year |
| Aerial Application | | |
| Rough upland intended for grazing, agricultural grassland and amenity vegetation | 11.0 | One per year |
| Forest | 10.0 | One per year |
| Latest time of application | Details are given under Directions for Use | |

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 CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES, RUBBER BOOTS, FACE PROTECTION (FACESHIELD) AND SUITABLE RESPIRATORY PROTECTIVE EQUIPMENT when using the 'Micron ULVA'.

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.

DO NOT BREATHE SPRAY.

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

Environmental Protection

DO NOT CONTAMINATE SURFACE WATERS OR DITCHES with chemical or used container.

Keep all livestock out of treated areas until 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 and dispose of safely.

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

Net Contents : 5 litres e

Batch No.:

PROTECT FROM FROST

SHAKE WELL BEFORE USE

Code: R203/UK/02

Transport Information

UN 3082

Class 9

Packaging Group III

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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.

CROP SPECIFIC INFORMATION

CONTROL OF DOCKS

Application and Timing

One application should be made per crop/situation each year. For best results apply **BRACK-N** when the plants are actively growing and in full leaf but before any signs of emergence of flower stems (normally between April and September). If flower stems have emerged, mow them off and treat the leafy regrowth. If docks have been cut, grazed or poached they must be allowed to recover adequate foliage before treatment.

Do not apply **BRACK-N** within 3 weeks of cutting to give time for the docks to recover and to avoid sward damage. Do not graze or mow for at least one week after application of **BRACK-N**.

One application of **BRACK-N** is sufficient for recent or light infestations.

Two applications, at least 10 months apart, of **BRACK-N** is recommended for heavy or long established infestations. Carry out any second treatment of **BRACK-N** in the season following initial application.

Cautions

1. Grazing livestock should be denied access to treated areas, where ragwort is present, for at least 4 to 6 weeks or until the ragwort has died and become unpalatable.
2. If over-grazing or poaching takes place after treatment, heavy infestations of dock seedlings can occur. These are susceptible to **BRACK-N**.
3. Do not treat docks from October to March inclusive. Do not treat once the flowering stem starts to emerge or at the flowering stage.
4. **BRACK-N** mode of action is relatively slow against docks – yellowing of the leaves and red, distorted regrowth are herbicidal symptoms. Symptoms do not appear until 3 weeks after treatment and the full effect may not become apparent until 6 months later.

Mixing

Half fill the tank with water. Pour in the required amount of **BRACK-N** followed by the remainder of the water. Continue agitation whilst filling and during spraying. Thoroughly wash all spraying equipment immediately before use.

Permanent pasture, established leys, hay fields and silage leys

Do not treat grassland or leys in the year of establishment.

Rate and Method of Application

Standard Crop Sprayer: Apply 2.8 l/ha **BRACK-N** in 200 l/ha water using a MEDIUM or COARSE spray (as defined by BCPC).

Knapsack Sprayer: Use 1 part **BRACK-N** in 200 parts water but avoid spraying to run-off. Apply spray with HC/0.4/3 (BCPC code). Add a red food-stuffs dye to the spray at a concentration of 0.1% to identify treated plants.

Refer to Dilution Rates Guide.

Hay fields

DO NOT USE BRACK-N BEFORE MOWING HAY.

A short term loss of bulk occurs due to control of docks and the presence of sensitive grass species including bents (*Agrostis* spp), meadow-grass (*Poa* spp), Yorkshire-fog, creeping soft-grass (*Holcus* spp) and brome grasses (*Bromus* spp).

Silage Leys

Fields for silage production can be sprayed 7-10 days prior to cutting. If the cutting date cannot be predetermined, spray 3 weeks after the final cut having allowed adequate regrowth of docks but not later than mid-August. If the cutting was delayed until after spraying a loss of bulk of treated grasses would occur. It also avoids sward damage from spraying too soon after cutting silage.

Effect on Grasses and Clovers

BRACK-N can be applied to established rye grasses when used as directed. **BRACK-N** applied to bents, fescues, meadow-grasses and Timothy swards with or without rye-grasses can result in yellowing and a temporary check to growth. Cock's-foot and Yorkshire-fog may be severely checked. Clover seedlings may be damaged by **BRACK-N** but established clovers are unaffected. If **BRACK-N** is used as advised in hayfields and silage leys no loss of bulk will occur.

Amenity Grassland, Roadside Verges, Waste Ground and Amenity Areas (excluding fine turf)

Rate and Method of Application

Standard Crop Sprayer: Apply 4.2 l/ha **BRACK-N** in 200 –400 l/ha water using a MEDIUM or COARSE spray (as defined by BCPC).

Knapsack Sprayer or Standard Crop Sprayer fitted with hand-lance attachment: Use 1 part **BRACK-N** to 200 parts water but avoid spraying to run-off. Apply spray with HC/0.4/3 (BCPC code). Add a red food-stuffs dye to the spray at a concentration of 0.1% to identify treated plants.

***Established Orchards, (Apple, Pear, Plum, Cherry) and Established Blackcurrants, and Hops**

*Do not apply directly to these crops.

Rate and Method of Application

Do not treat blackcurrant cuttings, hop sets or 'weak' hills. Use **BRACK-N** as a directed spray around the base of the plants where treatment adjacent to a crop is required.

Apply 4.2 l/ha **BRACK-N** in 200 –400 l/ha water using a MEDIUM or COARSE spray (as defined by BCPC).

Following Crops

A period of 6 weeks should elapse between applying **BRACK-N** and planting or sowing any subsequent crop.

Dilution Rates Guide

1 part **BRACK-N** to 200 parts water is required for treatment of docks.

Standard Sprayer with Hand Lance

| | | | |
|--|-----|------|-----|
| Sprayer Capacity (L) | 200 | 250 | 300 |
| Amount of BRACK-N per filling (L) | 1.0 | 1.25 | 1.5 |

Knapsack Sprayer

| | | | |
|---|----|----|-----|
| Sprayer Capacity (L) | 5 | 12 | 20 |
| Amount of BRACK-N per filling (ml) | 25 | 60 | 100 |

CONTROL OF BRACKEN

BRACK-N can be used for bracken control. Apply **BRACK-N** on fully expanded fronds before the onset of senescence usually early July to late August (early August in Northern Britain). The onset of senescence begins when the fronds turn a darker green with subsequent bronzing.

Apply **BRACK-N** in water with or without 'Agral' or 'High Trees Non-Ionic Wetter', or in a mixture with mineral oil (Actipron). The addition of additive will increase the uptake of product by the fronds and in doing so improves its reliability under adverse climatic conditions.

Note: Do not use additives in forestry situations.

Mixing

Water based: Invert and shake the container well before opening. Put half the required volume of water into the spray tank and commence agitation. Pour in the required amount of **BRACK-N** followed by the remainder of the water. Add the 'Agral' or 'High Trees Non-Ionic Wetter'. Continue agitation whilst filling and during spraying. Thoroughly wash all spraying equipment immediately before use.

Oil based: When applying **BRACK-N** with 'Actipron' thoroughly mix before filling the spray tank. Addition of water is not required.

Rough Upland Intended for Grazing, Agricultural Grassland and Amenity Vegetation

One application of **BRACK-N** should be made per crop/situation per year.

1. Aerial Application by helicopter

Swath width must be determined before spraying. Use ground markers where possible to aid swath matching.

NOTE: It is recommended not to use fixed wing aircraft when applying BRACK-N to bracken.

Water based: Apply by either conventional or Delavan 'Raindrop' nozzles. 'Raindrop' nozzles give larger droplets which lessen the risk of drift or evaporation. Mix 11 litres of **BRACK-N** in 44 l/ha total water volume with 'Agral' or 'High Trees Non-Ionic Wetter' at a rate of 100 ml/100 L of solution spray.

Low volume oil based system: Delavan 'Raindrop' nozzles are necessary. Mix 11 litres of **BRACK-N** with 7 litres of mineral oil (Actipron) and 2.0 l/ha of water.

2. Tractor mounted sprayer

Use **BRACK-N** at 11 l/ha in 400-500 l/ha of water as a MEDIUM or COARSE spray (as defined by BCPC). To ensure uniform coverage at the top of the bracken fronds adjust boom height appropriately.

3. Hand-operated Knapsack Sprayer

Use **BRACK-N** at 11 l/ha in 50-200 l/ha of water with 'Agral' or 'High Trees Non-Ionic Wetter' at the rate of 1.0 ml/l of spray solution. Apply a MEDIUM or COARSE spray (as defined by BCPC). Coverage and control will be impaired if bracken exists above waste height and this method of application must not be used.

4. Spot treatment with Knapsack or hand-lance

10 parts of **BRACK-N** and 1 part of 'Agral' or 'High Trees Non-Ionic Wetter' in 1000 parts water (refer to Dilution Rates Guide).

Use a HC/0.4/3 nozzle (BCPC code) and apply spray to the point of run-off. Where calibrated spot guns are used apply 2.5ml per frond especially in treatment of re-growth. Mix a red food-stuffs dye with the spray at a concentration of 0.1% to help identify treated fronds.

5. Low volume drift-spraying with 'Micron ULVA'

Use **BRACK-N** at 11 l/ha with 'Actipron' at 7.0 l/ha. Apply a total of 18 l/ha.

Note: When spraying with the 'Micron ULVA' do not spray when the wind is gusty or changeable. Do not use the red feed nozzle for non-forestry application.

When spraying on hillsides spray along the contours – the wind should be blowing up or down the slope. Mark the swaths with brightly coloured canes/flags. If spraying dense bracken, walk along the swath lines to ensure a free path.

When spraying start spraying 3 metres inside the downwind edge, walk through the bracken at right angles to the wind holding the head of the 'Micron Ulva' one metre above the top of the bracken. Always ensure spray head is held downwind and faced away from the operator. Keep the feed bottle in a vertical position. When using the grey feed nozzle the operator should walk 1 metre every 3 seconds. When using the green feed nozzle the operator should walk 1 metre every 1.5 seconds. Upon reaching the furthest edge move 3 metres into the wind and return across the area. Continue spraying in this manner until the area to be sprayed has been covered.

One full 'Micron Ulva' bottle (1L) will treat ~550m². Replace the batteries in the 'Micron Ulva' every 5 hours.

Grey Feed Nozzle

Nominal Flow Rate of Mixture (ml/sec): 2

Required Walking Speed using a 3m swath (metres/minute): 22

Required Walking Speed using a 3m swath (seconds/pace): 3

Time required to spray 1 acre: 1 hour

Time required to spray 1 hectare: 2.5 hours

Green Feed Nozzle

Nominal Flow Rate of Mixture (ml/sec): 4

Required Walking Speed using a 3m swath (metres/minute): 44

Required Walking Speed using a 3m swath (seconds/pace): 1.5

Time required to spray 1 acre: 30 minutes

Time required to spray 1 hectare: 1.25 hours

NOTE:

NO OTHER APPLICATION MACHINERY/METHODS ARE RECOMMENDED FOR THE APPLICATION OF BRACK-N TO BRACKEN.

Follow-Up Treatments

Full control of bracken is rarely achieved due to difficulty of spraying sheltered or uneven ground. Surviving bracken should be sprayed as soon as it recovers to full green frond. Recovery to full green frond may be in the year following initial application but is more likely the second year following initial application. The bracken-free period will be extended if a programme of follow-up sprays is undertaken.

If no follow up treatment or land improvement programme is carried out, respraying may be necessary within 5 years.

Effect on Sward

Damage to some grasses and herbs will occur when a full dose of **BRACK-N** is applied. The bracken canopy protects the sward and a check to these species is only temporary. The most sensitive species include Yorkshire-fog, Timothy, Cock's-foot, bents, annual meadow-grass, daisy, docks, plantains and saxifrage.

Effects on Trees and Shrubs

Most species are unaffected. However, young specimens of the following may exhibit chlorosis and a slight check in growth if directly sprayed whilst actively growing: Beech, Birch, Grand fir, Japanese larch, Scots pine, Bilberry, Corsican pine, Douglas fir, Elm, Norway spruce, Poplar, Sitka spruce, Gorse and Heathers. Mature specimens of the above as well as hawthorn, holly and rowan will be unharmed. Western hemlock and willows are more susceptible and spraying of these species should be avoided.

Control of Bracken in Forestry Areas

Newly Planted areas

Two methods may be used

- 1 Bracken may be 'whipped' or cut early in the season and the **BRACK-N** applied to regrowth later.
- 2 Apply an overall application of **BRACK-N** to the undisturbed canopy.

In either case, due to the relatively insignificant effect of **BRACK-N** on frond growth during the season of application the bracken will have to be cut before the end of the season to prevent collapse on to the young trees.

An interval of at least 14 days should elapse between spraying and cutting.

Areas for new Plantings

Treat during the summer prior to planting and then plant up according to normal practice.

Areas to be replanted

Spray on standing timber before clearing. If clear felling is carried out in spring, the cleared areas can be sprayed in the summer as for new plantings. Damage to emerging bracken from clear felling may lead to variable long-term control. Some regrowth of bracken is likely the following year.

Application Rates for Forestry

The rate of **BRACK-N** applied will depend on the period of protection or release from bracken required.

- 1 Aerial – Apply 5-10 l/ha of **BRACK-N** in a total volume, including water of 55 l/ha. Use either Delavan ‘raindrop’ or conventional nozzles.
Fixed wing aircraft are not recommended.
- 2 Tractor mounted sprayer – Apply 5-10 l/ha of **BRACK-N** in 200-300 l/ha of water as a MEDIUM or COARSE spray (as defined by BCPC).
- 3 Low Volume Drift spraying (‘Micron Ulva’) – Apply **BRACK-N** neat, 5-10 l/ha using red feed nozzle and a walking speed of 1 pace per second. A swath of not more than 3 metres wide must be used.
- 4 Knapsack or Hand lance (Spot Treatment) – mix 1 part **BRACK-N** with 100 parts water (see Dilution Rates Guide).
- 5 Hand operated knapsack or motorised mist blower – Apply 5-10 l/ha of **BRACK-N** in 90-175 l/ha of water. A MEDIUM or COARSE spray (as defined by BCPC) should be applied.

Planting Programmes

- 1 Pre-planting
Do not disturb bracken until it dies back. Then plant up in accordance with normal forestry practice.
- 2 Post-planting
Allow at least 14 days between application and cutting or clearing bracken from small trees. Refer to section on ‘Effects on Trees and Shrubs’.

Restrictions

- 1 At least 6 weeks should elapse between applying **BRACK-N** and sowing or planting any subsequent crop.
- 2 Spray **BRACK-N** at or just before full frond extension (minimum 3 pairs of leaves) and before senescence. Bracken must be actively growing, light green and soft to touch before spraying.
- 3 The use of red feed nozzle for ‘Micron Ulva’ application is restricted to forestry use where bracken suppression only is required.
- 4 Do not apply **BRACK-N** during or immediately after drought periods or in conditions of high temperature and low humidity.
- 5 Bracken fronds must not be damaged by stock, frost or by cutting before treatment. Do not treat bracken affected by late frosts.

DILUTION RATES GUIDE

For application to bracken use 1 part of **BRACK-N** to 100 parts water.

| | Sprayer Capacity (L) | BRACK-N per filling (ml) | BRACK-N per filling (L) |
|--|-------------------------|------------------------------------|-----------------------------------|
| Knapsack Sprayer | 5 | 50 | - |
| | 7 | 70 | - |
| | 12 | 120 | - |
| | 20 | 200 | - |
| Standard Sprayer with Hand Lance | 200 | - | 2 |
| | 250 | - | 2.5 |
| | 400 | - | 4 |
| | 500 | - | 5 |

TANK MIXES

Put nine tenths of the required volume of water into the spray tank. Add partner product as directed on label and commence agitation. Pour in the required amount of **BRACK-N** followed by the remainder of the water. Continue agitation whilst filling and during spraying.

Tank mixing of **BRACK-N** with AGRITOX 50 or MCPA Salt* or TROPOTOX PLUS may be used to control docks, creeping buttercup, creeping thistle and plantain. Tank mixing of **BRACK-N** with COMPITOX EXTRA or mecoprop salt* may be used to control chickweed.

Note: Only TROPOTOX PLUS + BRACK-N is safe for use on grassland with clover.

*Approved formulations

Trademark Acknowledgements

AGRITOX, COMPITOX and TROPOTOX are trademarks of Bayer CropScience

Agral is a trademark of Syngenta Crop Protection

Actipron is a trademark of British Petroleum Company plc

Micron Ulva is manufactured by Micron Sprayer Ltd, Bromyard, Hertfordshire

Delavan Raindrop nozzles is a trademark.

CONDITIONS OF SUPPLY

All goods supplied by us are of high grade and we believe them to be suitable but, as we cannot exercise control over their storage, handling, mixing or use or the weather conditions before, during or after application, which may affect the performance of the goods, all conditions and warranties, statutory or otherwise, as to the quality or fitness for any purpose of our goods are excluded, and no responsibility will be accepted by us or re-sellers for any failure in performance, damage or injury whatsoever arising from their storage, handling, application or use. These conditions cannot be varied by our staff or agents whether or not they supervise or assist in the use of such goods.