



DEVVRINOL[®]

HERBICIDE

MAPP 17853

A suspension concentrate (SC) formulation containing 450 g/litre of napropamide (40.9% w/w) for the control of annual grass and broad-leaved weed in certain brassicas (broccoli, Brussels sprouts, cabbage, calabrese, cauliflower and kale) and winter oilseed rape.



Warning

Very toxic to aquatic life with long-lasting effects.

Collect spillage.

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

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

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

IMPORTANT INFORMATION

FOR USE ONLY AS A PROFESSIONAL HERBICIDE

Crops/situations	Maximum individual dose (L product/ha)	Maximum number of treatments (per crop)	Latest time of application	Aquatic buffer zone distance (metres)
Brassicac (broccoli, Brussels sprouts, cabbage, calabrese, cauliflower and kale)	2.8	1	Prior to drilling or transplanting	5
Winter oilseed rape	2.5	1	Pre-emergence of the crop	5

OTHER SPECIFIC RESTRICTION

Do not apply via hand-held equipment.

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 when handling the concentrate or 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 and exposed skin before eating and drinking and after work.

When using do not eat, drink or smoke.

ENVIRONMENTAL PROTECTION

To protect aquatic organisms respect an unsprayed buffer zone to surface water bodies in line with LERAP requirements.

DO NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall within 5 m of the top of the bank of a static or flowing water body, unless a Local Environment Risk Assessment for Pesticides (LERAP) permits a narrower buffer zone, or within 1 m of the top of a ditch which is dry at the time of application. Aim spray away from water.

This product qualifies for inclusion within the Local Environment Risk Assessment for Pesticides (LERAP) scheme. Before each spraying operation from a horizontal boom sprayer, either a LERAP must be carried out in accordance with CRD's published guidance or the statutory buffer zone must be maintained. The results of the LERAP must be recorded and kept available for three years.

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.

STORAGE AND DISPOSAL

Keep out of reach of children.

Keep away from food, drink and animal feeding stuffs.

Do not re-use container for any purpose.

Keep in original container tightly closed in a safe place.

Rinse container thoroughly by using an integrated pressure rinsing device or manually rinsing three times.

Add washings to sprayer at time of filling and dispose of container safely.

DIRECTIONS FOR USE

IMPORTANT: This information is authorised 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.

RESTRICTIONS/WARNINGS

1. Weed control may be reduced where the spray is mixed too deeply into the soil.
2. Do not treat crops adversely affected by poor soil, adverse weather or cultural conditions.
3. Avoid spray overlap, particularly on headlands.
4. Incorporation under wet conditions is not satisfactory.
5. Surface manure, straw, moss or other organic detritus may reduce weed control. Soil cultivations after spraying should be avoided.
6. DEVRINOL can be used on a wide range of soils but should not be applied to Sands (as defined by the ADAS '85 System) or to soils with more than 10% organic matter.
7. It is important to ensure that the seedbed is free from clods and weeds and is in good tilth.

CROP SPECIFIC INFORMATION

BRASSICAS

- DEVRINOL may be sprayed prior to transplanting broccoli, Brussels sprouts, cabbage, calabrese, cauliflower, or kale.
- Apply DEVRINOL at 2.8 litres/ha as a MEDIUM or COARSE spray in 200-400 litres water/ha.
- To maximise efficacy, DEVRINOL should be incorporated to a depth of 50 mm prior to transplanting. Incorporation MUST OCCUR within 30 minutes of application.
- DEVRINOL is not recommended for use in plant raising beds.
- Spring Planted Brassicas: Spring tine harrows (triple-K type), tandem disc harrows, power driven reciprocating harrows, the Lely Roterra and rotary cultivator with L-shaped blades are all suitable for incorporation. Make one pass with a rotary cultivator, but two passes, with the second at an angle to the first, are recommended for any other type of harrow. When non-powered harrows are used, a high forward speed of at least 8 kph (5 mph)

is required to obtain thorough incorporation.

- A slow forward speed of 5 kph (3 mph) is recommended for the Lely Roterra and for rotary cultivators in combination with a high rotor speed.
- Summer Planted Brassicas: i.e. those usually planted during July and August, e.g. winter broccoli: Application should be made during the later stages of seedbed preparation and using a light set of harrows to blend the spray into the top 25 mm of soil. With this implement a high forward speed of at least 8 kph (5 mph) is required and two passes are recommended to obtain thorough mixing, the second pass being at an angle to the first.

Sequential Programme

DEVRINOL should be sprayed and incorporated into the soil prior to drilling or transplanting a brassica crop. Incorporation MUST OCCUR on the SAME DAY as application.

A follow up treatment of an approved formulation of an alternative product may be applied after drilling or transplanting according to the manufacturers recommended rate.

DEVIRINOL Alone, Weeds Controlled

Susceptible (S)	Moderately Susceptible (MS)	Moderately Resistant (MR)	Resistant (R)
Amaranth species	Annual nettle	Field pennycress	Corn speedwell
Annual meadow grass	Black bindweed		Common fumitory
Common barnyard grass	Cleavers		Redshank
Common chickweed	Common field speedwell		
Common purslane	Common groundsel		
Mayweed species	Fat hen		
	Knotgrass		
	Shepherd's-purse		

Timing

DEVIRINOL may be applied pre-drilling and incorporated in a tank mixture with approved formulations or alone as a pre-emergent spray.

WINTER OILSEED RAPE

- Apply DEVIRINOL at 2.5 litres/ha.
- Use a medium-coarse spray (as defined by BCPC) in 200-550 litres of water/ha at a spray pressure of 2-3 bar.
- DEVIRINOL may be applied and incorporated into the soil before drilling the crop (incorporation MUST OCCUR within 30 minutes of application) or post-drilling, pre-emergence of the crop.
- Where volunteer cereals are a problem, an additional post-emergence spray of an alternative product may be made according to the manufacturer's recommendations.
- Conventional seedbed preparation: Apply during the later stages of seedbed preparation. Use only a light set of harrows to incorporate the herbicides in the top 25 mm of soil.
- With this implement a high forward speed of at least 8 km/h (5 mph) is required and two passes are recommended, with the second at an angle to the first. Drilling may be carried out immediately or within 14 days of application. Alternatively, a drill fitted with light harrows will provide a second pass during drilling. In this case the direction of sowing should be at an angle to the first pass and should be completed within 48 hours of application.

- Minimum cultivation: May be sprayed directly onto the stubble and incorporated into the top 25 mm of soil as part of the surface cultivations. Tandem discs, spring tine harrows or similar non-powered harrows are suitable implements. Where surface cultivations have been completed before application, use only light tine harrows to incorporate the herbicides.
- In dry conditions better weed control may be achieved where the product is incorporated into the soil. Ideally the soil should be moist at application and there should be rainfall afterwards.

DEVRIOL Alone, Weeds Controlled

Susceptible (S)

Common poppy
Prickly poppy

Moderately Susceptible (MS)

Annual meadow grass
Common field speedwell
Fat hen
Ivy-leaf speedwell

Moderately Resistant (MR)

Common chickweed
Mayweed species

Resistant (R)

Black-grass
Common fumitory
Forget-me-not
Pale persicaria
Redshank
Field pansy

WEED RESISTANCE

Strains of some annual grasses (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. Guidelines have been produced by the Weed Resistance Action Group (WRAG) and copies are available from the HGCA, CPA, your distributor, crop adviser or product manufacturer.

Repeated use of herbicides with the same mode of action can increase the risk of strains of weeds developing resistance to these compounds, leading to poor control. In order to minimise the risk, a strategy for preventing and managing such resistance should be adopted. Use products with different modes of action and from different chemical groups in sequence or tank-mix, in conjunction with effective cropping rotation and cultivation techniques. In all cases the recommended rate of use should be adhered to. Follow WRAG guidelines.

SUCCESSING CROPS

- Before planting any following crop, the soil should be mould-board ploughed to a depth of 20 cm.
- Do not use DEVRIOL in the same season as replanting/drilling is planned.
- No crop, other than supported uses including brassica crops (leaf, flower), root crops, fodder crops and oilseed rape, can be drilled within 7 months following application of DEVRIOL.

- Maize may be grown providing a period of 9 months has elapsed since DEVRIOL was applied. Autumn sown wheat and grass or any other crop may be planted/drilled providing a period of 12 months has elapsed since DEVRIOL was applied.

MIXING

Half fill the tank with water and begin agitation. Add the required quantity of DEVRIOL to the sprayer using a filling device (e.g. induction bowl, probe etc) or otherwise by direct addition to the spray tank. Wash out container thoroughly, adding washings to the sprayer, preferably using an integrated pressure-rinsing device where available, otherwise manually rinse at least three times.

For all tank mixes, follow the procedure above except add DEVRIOL to the tank first. Continue agitation during spraying.

Wash out sprayer thoroughly after use.

COMPATIBILITY

Please refer to the UPL Europe Limited website for further information - www.ulpeurope.com.

CONDITIONS OF SUPPLY

All goods supplied by UPL Europe Limited are of high grade and we believe them to be suitable; however, as we cannot exercise control over their storage, handling, mixing, use or weather conditions before, during and 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. Our staff or agents cannot vary these conditions whether or not they supervise or assist in the use of such goods. DEVRINOL is a registered Trade Mark of UPL Europe Limited.

To access the Safety Data Sheet for DEVRINOL please use the link below or scan the code.



<http://www.upleurope.com/product-list.html>

Alternatively, contact your local supplier.

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ENVIRONMENTAL PROTECTION

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SHAKE WELL BEFORE USE PROTECT FROM FROST

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Aim spray away from water. This product qualifies for inclusion within the Local Environment Risk Assessment for Pesticides (LERAP) scheme. Before each spraying operation from a horizontal boom sprayer, either a LERAP must be carried out in accordance with CRD's published guidance or the statutory buffer zone must be maintained. The results of the LERAP must be recorded and kept available for three years. Do not contaminate water with the product or its container. Do not clean application equipment near surface water.

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STORAGE AND DISPOSAL

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For Batch Number and Manufacturing Date see container.

UPL Europe Ltd
The Centre, 1st Floor, Birchwood Park, Warrington, WA3 6YN
Telephone: 01925 819999 Fax: 01925 817425

For 24 hour emergency information contact:
CARECHEM24 : +44 (0) 1235 239670

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