



## DUPLOSAN<sup>®</sup> KV

MAPP 18374

A soluble concentrate containing 600 g/L (48% w/w) optically active isomer mecoprop-P, formulated as potassium salt.

A herbicide for the control of a wide range of broad-leaved weeds in winter and spring cereals, grass seed crops, amenity grassland and managed amenity turf.

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

Pack size 5-10 litres

PROTECT FROM FROST

Nufarm UK Limited  
Wyke Lane  
Wyke  
Bradford  
West Yorkshire BD12 9EJ  
United Kingdom

**Technical Helpline telephone number 01274 694714**  
**24-hour emergency telephone number 01274 696603**

This label is compliant with the CPA Voluntary Initiative Guidance.



## ***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) AND SUITABLE PROTECTIVE GLOVES when handling the concentrate.

WEAR SUITABLE PROTECTIVE GLOVES when handling contaminated surfaces.

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

WASH CONCENTRATE from skin or eyes immediately.

WASH HANDS AND EXPOSED SKIN before meals and after work.

DO NOT EAT, DRINK OR SMOKE when using this product.

IF YOU FEEL UNWELL, seek medical advice (show label where possible).

### **Environmental protection**

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**

DO NOT RE-USE CONTAINER FOR ANY PURPOSE.

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.

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 safely.



## **DANGER**

**Harmful if swallowed**

**Causes skin irritation**

**Causes serious eye damage**

**Very toxic to aquatic life with long lasting effects**

Wear protective gloves/eye protection/face protection.

IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF SWALLOWED: call a poison center or doctor/physician if you feel unwell.

Rinse mouth.

IF ON SKIN: wash with plenty of soap and water.

If skin irritation occurs: get medical advice/attention.

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

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

<b>IMPORTANT INFORMATION</b>			
<b>FOR USE ONLY AS A PROFESSIONAL HERBICIDE</b>			
<b>Crops</b>	<b>Maximum Individual Dose</b>	<b>Maximum Number of Treatments</b>	<b>Latest Time of Application</b>
Winter wheat, winter barley, winter oats	2.0 L/ha	1 per crop	Before 3 <sup>rd</sup> node detectable (see 'Other specific restrictions')
Spring wheat, spring barley, spring oats	2.0 L/ha	1 per crop	Before 1 <sup>st</sup> node detectable (see 'Other specific restrictions')
Amenity grassland	2.4 L/ha	2 per year	-
Grass (seed crops).	2.4 L/ha	1 per year	5 weeks before heading
Managed Amenity Turf	2.4 L/ha	2 per year	-

**Other specific restrictions**  
Treated grass seed crops must not be grazed or cut for fodder.  
Non-returnable containers must not be re-used for any purpose.  
Applications to cereals must not be made between 1<sup>st</sup> October and 1<sup>st</sup> March.  
The total amount of mecoprop-P applied to an individual crop, or in a single year in the case of a perennial crop, must not exceed the maximum total dose of mecoprop-P approved for application to that crop by any single mecoprop-P containing product.

**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.**

## 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.

Duplosan KV is a hormone herbicide which is absorbed by both shoots and roots and rapidly translocated within herbaceous plants.

When herbicides with the same mode of action are used repeatedly over several years in the same field, selection of resistant biotypes can take place. These can propagate and may become dominating. A weed species is considered to be resistant to a herbicide if it survives a correctly-applied treatment at the recommended dose. 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.

### RESTRICTIONS

- Spring cereals and grass seed crops may only be treated once per crop.
- Do not apply Duplosan KV to any crop suffering from herbicide damage or physical stress.
- Do not apply Duplosan KV during cold weather, periods of drought, if rain or frost are expected, nor if the crop is wet.
- If sharp or severe frosts occur within three to four weeks of application to barley under stress or of low vigour on light soils, scorch or stunting may occur and yields may be less than optimum.
- The crop should not be rolled or harrowed within a period of seven days before or after spraying with Duplosan KV.
- Avoid drift onto all broad-leaved plants outside the target area.
- WASH EQUIPMENT thoroughly immediately after use. Rinse with water three times, drain and allow to dry. Traces of herbicide left in the sprayer may damage susceptible crops if these are subsequently sprayed using the same equipment.

### WEEDS CONTROLLED

The best weed control will be achieved if crops are sprayed in conditions when weeds are actively growing, provided the crop is within the correct growth stages, see below.

Identify the weeds present and select the appropriate rate as listed below. Optimum conditions prevail when all the following are true:

1. Soils are warm and moist.
2. Weeds have not been frost-hardened.
3. Warm, moist conditions are expected to persist for several days after application.

This is particularly important when Duplosan KV is used in the spring to control large autumn germinated cleavers, which may have become 'winter hardened'.

Provided weeds are cotyledon to 2 leaves and application conditions meet the requirements listed above, susceptible species will be controlled at the rates recommended below.

If weeds are 3 to 6 leaves or conditions are less than optimum, using a higher rate will still control susceptible species. For optimum suppression of perennial weeds and species classed as moderately susceptible, apply Duplosan KV at 2.0 litres/ha.

## ANNUAL BROAD-LEAVED WEEDS

<b>Very susceptible – 1.5 L/ha Under favourable conditions – Up to 100 mm Across/High</b>		
Common Chickweed	Fat Hen	Field Penny Cress

<b>Susceptible – 2.0 L/ha Up to 100 mm Across/High</b>		
Black Mustard	Common Chickweed <sup>1</sup>	Small Nettle
Charlock	Greater Plantain <sup>3</sup>	Treacle Mustard
Cleavers	Ribwort Plantain <sup>3</sup>	White Mustard
Common Vetch	Shepherd's Purse	Wild Radish
Procumbent Pearlwort <sup>4</sup>		

<b>Moderately Susceptible – 2.0 L/ha Up to 100 mm Across/High</b>		
Corn Buttercup	Common Mouse-Ear	White Campion
Common Orache	Doves Foot Cranesbill	Common Poppy
Common Furmity	Scentless Mayweed	<i>Trifolium spp</i> <sup>3,4</sup>

<b>Moderately Resistant – 2.0 L/ha Up to 2 expanded true leaves</b>		
Black Nightshade	Groundsel	Redshank
Black Bindweed	Common Hemp-Nettle	Scarlet Pimpernel
Knotgrass	Smooth Sow-Thistle <sup>3</sup>	Corn Spurry
Pale Persicaria	Speedwells	Field Scabious

## PERENNIAL BROAD-LEAVED WEEDS

Broad-Leaved Dock <sup>2</sup>	Creeping Buttercup <sup>3</sup>	Cureld Dock <sup>2</sup>
Common Nettle	Creeping Thistle	Daisy <sup>3</sup>

<sup>1</sup> For the control of chickweed in grassland

<sup>2</sup> Dock spp controlled at seedling stage only

<sup>3</sup> Control of these weeds is improved by tank-mixing at maximum rate of 2.4 L of Duplosan KV and up to the maximum approved dose of Depitox

<sup>4</sup> Only in turf. Stated weed growth stages in this situation are not applicable

### CROP SPECIFIC INFORMATION

#### WINTER WHEAT, OATS AND BARLEY

**Rate of Application:** 2.0 L product/ha

**Time of Application:** Duplosan KV may be applied from the leaf sheath erect stage up to before third node detectable stage in the spring.

If sharp or severe frosts occur within three to four weeks of application to barley under stress or of low

vigour on light soils, scorch or stunting may occur and yields may be less than optimum.

## **SPRING WHEAT, OATS AND BARLEY**

**Rate of Application:** 1.5 to 2.0 L product/ha dependant on the target weed species. The 2.0 L product/ha rate may only be used once the crop has reached leaf sheath erect stage.

**Time of Application:** One application of Duplosan KV can be made from the first fully expanded leaf stage until before the first node is detectable (GS31).

## **AMENITY GRASSLAND**

**Rate of Application:** 2.4 L product/ha

**Timing of Application:** The sward should not be topped for at least a week before or after spraying. A maximum of two applications per year are permitted.

### Docks

Allow to flower in July and then cut the flower stalks before seeding to weaken root reserves. Wait two weeks and then apply the recommended rate of Duplosan KV. Docks will be severely checked but may recover, in which case the treatment should be repeated in the following season.

### Common Chickweed

Treat when actively growing and not shielded by grass, usually late summer or autumn.

If appreciable foliage is present there will be top growth suppression of weeds listed as Top Growth Suppressed in the weed susceptibility table.

When using a conventional sprayer apply in 185 - 330 litres of water per hectare.  
When applying through a knapsack sprayer use a minimum of 480 L water/ha.

## **GRASS SEED CROPS**

**Rate of Application** 1.5 to 2.4 L/ha

**Time of Application** One application can be made once grasses have at least 3 fully expanded leaves and have begun to tiller, but at least 5 weeks before the emergence of the seed head in grass seed crops. Treat common chickweed when growing actively and



not shielded by grass, usually late summer or autumn. Any clover present will be severely damaged.

Apply in 185 – 330 L/water/ha

## **MANAGED AMENITY TURF**

**Rate of application:** When using a conventional hydraulic sprayer apply 1.5 to 2.4 litres DUPLOSAN KV in 185 to 400 litres of water per hectare. Use the higher volume on larger weeds or where weeds or crop are dense. When applying through a knapsack sprayer use a minimum of 480 L water/ha.

**Time of application:** Two applications of DUPLOSAN KV can be made to managed amenity turf. For spring and summer sown turf, apply approximately 2 months after sowing. Turf sown or laid later in the year should not be treated until the following spring. For established turf, apply DUPLOSAN KV during the growing season which is normally April to September.

Caution: Do not apply to newly laid turf until it is well established and actively growing. Do not apply to turf under stress, particularly in periods of drought.

## **MIXING AND SPRAYING**

Apply as a MEDIUM spray as defined by BCPC.

### Water Volume

The spray volume for Duplosan KV alone or in mixtures is 185-330 L/water/ha. The lowest volume should only be used in open crops where weeds are small and where recommendations for any tank mix partner allow. As weeds become larger and/or crop cover increases, then the water volume should be increased.

This is particularly important with cleavers. Once cleavers are beyond the two whorl stage up to six whorls, a water volume of 330 litres per hectare is required to ensure good coverage and control.

### Mixing

Half fill the spray tank with clean water and start the agitation. Pour in the required amount of Duplosan KV. Add the remainder of the water and continue agitation until spraying is completed.

When tank mixes are to be used, each product should be added separately to the spray tank, taking due note of any instructions given as to the order of mixing.

## **COMPATIBILITY**

For up to date details of compatible tank mixes and label and safety information please refer to the Nufarm website [www.nufarm.com/uk](http://www.nufarm.com/uk).

Alternatively, ring the Nufarm helpline on 01274 694714, Monday to Friday 9.00—17.00

## **COMPANY ADVISORY INFORMATION**

This section is not part of the Product Label under the Plant Protection Products Regulation (2011). It provides additional advice on product use at the discretion of the applicant.

### **Acknowledgements**

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### **TERMS AND CONDITIONS OF SUPPLY, SALE OR USE**

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**Insert MSDS Prior to Printing**