

## MAPP N°18749 - HERBICIDE

KALTOR\* is a water soluble granules (SG) preparation containing 600 g/kg (60% w/w) dicamba and 150 g/kg (15% w/w) nicosulfuron for weed control in maize.

#### IMPORTANT INFORMATION

FOR USE ONLY AS AN AGRICULTURAL HERBICIDE

Crops/situations:	Maximum individual dose	Maximum number of applications	Latest time of application:
Forage maize, grain maize	0.25 kg/ha	1 per year	8-leaf stage of maize (BBCH 18)

Application may only be made between 1 May and 30 September

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.

To avoid the build up of resistance do not apply this or any other product containing an ALS inhibitor herbicide with claims for control of grass-weeds more than once to any crop.

See attached leaflet for Directions for Use and Safety precautions

Marketing company : Rotam Europe Limited Hamilton House Mabledon Place London WC1H 9BB - UK

# Net Content : 1 kg

Batch n° and production date: see packing



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#### This leaflet/booklet is part of the authorised Product Label

### SAFETY PRECAUTIONS

#### (a) 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 AND FACE PROTECTION (FACESHIELD) when handling the product.

WEAR SUITABLE PROTECTIVE GLOVES when handling contaminated surfaces

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

WHEN USING DO NOT EAT, DRINK OR SMOKE

WASH SPLASHES from skin immediately

WASH HANDS AND EXPOSED SKIN before meals and after work

#### (b) 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 5m of the top of the bank of a static or flowing water body, unless a Local Environmental Risk Assessment for Pesticides (LERAP) permits a narrower buffer zone, or within 1m 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 Environmental 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.

Extreme care must be taken to avoid spray drift onto non-crop plants outside of the target area.

#### (c) Storage and disposal

KEEPAWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.

KEEP OUT OF REACH OF CHILDREN.

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.

KEEP IN ORIGINAL CONTAINER tightly closed in a safe place.

EMPTY CONTAINER COMPLETELY and dispose of safely.

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.

#### 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.

#### MODE OF ACTION

Nicosulfuron is classified as HRAC group B herbicide. Herbicidal activity rests upon the inhibition of the acetolactate synthase (ALS). ALS is a key enzyme in the biosynthesis of the branched-chain amino acids isoleucine, leucine, and valine. The inhibition of ALS eventually leads to a blockage of DNA synthesis.

Dicamba is classified as HRAC group O herbicide. The specific cellular or molecular binding site relevant to the action of these herbicides has not ben identified. Nevertheless, the primary action of these compounds appears to affect cell wall plasticity and nucleic acid metabolism.

#### RESTRICTIONS

DO NOT ALLOW SPRAY DRIFT into greenhouses or onto other agricultural or horticultural crops, amenity plantings or gardens. Not to be used in glasshouses. Do not allow spray applications to come into contact with desired broad-leaved trees. Beets, all brassicae (including oilseed rape), lettuce peas, tomatoes, potatoes, all crops and ornamentals are particularly susceptible to dicamba and may be damaged by spray drift.

DO NOT apply KALTOR® to crops suffering from herbicide damage or stress caused by pests, nutrition defects or weather.

DO NOT spray when cold or frosty conditions are prevalent.

DO NOT spray maize subjected to substantial day and night temperature fluctuations.

DO NOT spray KALTOR® during periods of high temperature.

Avoid overlapping spray swaths as considerable crop damage may occur which may not grow out and could lead to yield reductions.

Keep container sealed when not in use.

Do not mix with foliar or liquid fertilisers.

In the case of particularly sensitive varieties, e.g. Abraxas, Fjord, Rival and Nancis, some crop damage may be caused from which recovery may not be complete.

Do not apply KALTOR® in sequence or in tank-mixture with a product containing any other sulfonylurea.

Do not mix with adjuvants except as specified on this label.

#### WEED SPECTRUM CONTROLLED IN MAIZE

Use of an adjuvant (Validate or Spartan) is recommended for more difficult to control weeds or to ensure greater consistency of control (see weed control table).

KALTOR <sup>®</sup> (0.25 kg/ha solo)	0.25kg/ha solo	0.25kg/ha + 0.1 % v/v Spartan /or 0.5% v/v Validate
Grass weeds	Susceptibility rating	
Couch grass *	MR (4-6 leaves)	MS (4-6 leaves)
Cockspur grass	MS (2 leaves – early tillering)	S (2 leaves – early tillering)
Annual meadow-grass	S (up to 4 leaves)	
Green foxtail	S (2 leaves – early tillering)	S (2 leaves – early tillering)
Broad-leaved weeds		
Common amaranth	MR (up to 2 side shoots visible)	-
Fat-hen	MS (4-6 leaves)	S (4-6 leaves)
Black bindweed	MS (4-6 leaves)	MS (4-6 leaves)
Redshank	MS (4-6 leaves)	S (4-6 leaves)
Common chickweed	MS (4-6 leaves)	S (4-6 leaves)

\*A useful level of control of top growth will be seen in the year of application. Reduction of growth in the following year has not been investigated.

HS = highly susceptible, S = susceptible, MS = moderately susceptible, MT = moderately tolerant, T = tolerant

#### RECOMMENDATIONS

Apply KALTOR® associated with VALIDATE or SPARTAN.

Apply KALTOR<sup>®</sup> at 0.25 kg product/ha to healthy crops from when maize has 2 true leaves up to 8 true leaves (BBCH 12-18).

Apply KALTOR® in 200-300 litres of water per hectare. Apply on young, actively growing weeds.

#### Crop conditions

Do not treat maize crops under stress caused by drought, water-logging, pest or disease attack etc...

#### Weather conditions

Do not treat under windy conditions to avoid spray drift onto neighbouring crops and water bodies.

#### Mixing

Before use ensure that all spraying equipment is clean. Add half the required volume of water and start agliation, add the required quarity of KALTOR<sup>#</sup>. Fill the tank to the required volume whilst maintaining aglitation. Continuous aglitation must be maintained until spraying is complete.

All application equipment must be thoroughly cleaned with water and liquid detergent prior to storage or use on another crop.

#### Application

KALTOR<sup>®</sup> must be applied using boom sprayer equipment which gives a good foliar spray coverage of weeds (medium spray quality as defined by the BCPC). Apply at a spray pressure of 2-3 bars in 200-300 litres of water per hectare. Avoid spray drift, especially near adjacent sensitive crops.

#### Following crops

In the event of crop failure for any reason or after a normal harvest the following intervals must be observed.

Sowing or planting time	Waiting period	Soil preparation		
teplacement crops (spring/summer)				
Sunflower	0 days	Ploughing		
Maize	0 days	Ploughing		
Succeeding crop (autumn)				
Winter wheat	5months	Harrowing		
Succeeding crop (spring next year)				
Sunflower,barley, wheat, oilseed rape, maize	-	Harrowing		

#### **Compatibility**

Products should only be tank-mixed if each product can be applied within the label recommendations for its use.

Tank-mixtures must be implemented in accordance with local regulations.

Do not apply KALTOR® in sequence or in tank-mix with a product containing any other ALS inhibiting herbicides.

#### Resistance

A strategy for managing weed resistance should be adopted as strains of key grass weeds have developed resistance to herbicides, which may result in poor weed control.

The product should not be used as the only method for grass and broad-leaved weed control in successive maize crops. Use only as part of a resistance strategy that includes cultural methods of control and does not use ALS inhibitors as the sole chemical method for grass-weed control. There is potential for resistance to develop to KALTOR<sup>®</sup> if the product is used alone in monoculture over a number of years. KALTOR<sup>®</sup> should be used in mixture or in sequence with herbicides with other modes of action, particularly in continuous maize, as part of a weed resistance management plan. Crop rotation, in which using herbicides with different mode of action, can be practised as an alternative to reduce risk of development of resistance.

A strategy for preventing and managing resistance should be adopted. The Weed Resistance Action Groups have produced guidelines and copies are available from AHDB, CPA, your distributor, crop adviser or product manufacturer.

#### TANK CLEANING PROCEDURE

#### TO AVOID SUBSEQUENT DAMAGE TO CROPS OTHER THAN MAIZE, IMMEDIATELY AFTER SPRAYING KALTOR" THOROUGHLY CLEAN ALL SPRAY EQUIPMENT, INCLUDING INSIDE AND OUTSIDE OF LID, USING THE FOLLOWING PROCEDURE:

1. Immediately after spraying, drain tank completely. Any contamination on the outside of the spraying equipment should be removed by washing with clean water.

2. Rinse inside of tank with clean water and flush through boom and hoses using at least onetenth of the spray tank volume. Drain tank completely.

3. Half fill tank with clean water and add an appropriate commercial tank cleaner at the recommended rate. Agitate and then flush the boom and hoses with the cleaning solution. Top up with water making sure the tank is completely full and allow to stand for 15 minutes with agitation. Agint flush the boom and hoses and drain tank completely.

 Nozzles and filters should be removed and cleaned separately with an appropriate commercial tank cleaner.

Rinse the tank with clean water and flush through the boom and hoses using at least one-tenth
of the spray tank volume. Drain tank completely.

Dispose of washings safely. Do not spray onto sensitive crop or land intended for cropping with sensitive crop.

NOTE: If it is not possible to drain the tank completely, step 3 must be repeated before going on to step 4

#### NOTICE TO BUYER

All goods supplied by us are of a high grade and we believe them to be suitable for any purpose for which we expressly supply them, but as we cannot exercise control over their mixing or use, 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 for any damage or injury whatsoever arising from their storage, handling, application or use.

# KALTOR<sup>®</sup> - MAPP n° 18749

Contains 600 g/kg (60% w/w) dicamba and 150 g/kg (15% w/w) nicosulfuron Formulation: water soluble granules (SG)

# DANGER

## H318: CAUSES SERIOUS EYE DAMAGE. H410: VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.

P280: Wear eye protection.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing. P310: Call a poison centre or doctor.

P501: 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.

EUH401: To avoid risks to human health and the environment, comply with the instructions for use.

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

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