

**Circuit® SYNC<sup>TEC</sup>**

**A capsule suspension formulation containing 300 g/l metazachlor  
and 40 g/l clomazone**

**Product registration number: MAPP n° 17118**

**IMPORTANT INFORMATION  
FOR USE AS AN AGRICULTURAL HERBICIDE**



**Warning**

Contains, Polymeric MDI, may cause an allergic reaction

**Suspected of causing cancer**

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

Use personal protective equipment as required

IF exposed or concerned: Get medical advice/attention

Dispose of contents/container in accordance with local/national regulations

**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.

**24 Hour emergency No. 00 32 14 58 45 45**

10064653-40052734

PEEL BACK FOR DIRECTIONS FOR USE LEAFLET

## SAFETY PRECAUTIONS

### Operator Protection

Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment:

- Operators must 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 that they provide an equal or higher standard of protection.

### Worker Protection

Treated crops should not be re-entered before spray deposits on leaf surfaces have completely dried.

### Environmental Protection

- To protect aquatic organisms respect an unsprayed buffer zone to surface water bodies in line with LERAP requirements.
- 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 road.
- Since there is a risk to aquatic life from use, users not applying the statutory buffer zone must either themselves carry out or ensure that someone else has carried out a Local Environment Risk Assessment for Pesticides (LERAP) on their behalf before each spraying operation from a horizontal boom sprayer. Users must not allow direct spray from such sprayers to fall within 5m of the top of the bank of any static or flowing waterbody or within 1m of a ditch which is dry at the time of application (these distances to be measured as set out in the booklet 'Local Environment Risk Assessment for Pesticides - Horizontal Boom Sprayers' and any amendments that are made to it) unless:
  - (a) The LERAP indicates that a narrower buffer zone will be sufficient; and
  - (b) Any measures indicated by the LERAP as justifying the narrower buffer zone are complied with in full and in accordance with any conditions applicable to them.
- Spray must be aimed away from water.
- The results of the LERAP must be recorded in written form and must be available for a period of three years for inspection to any person entitled to exercise enforcement powers under or in connection with the Plant Protection Products Regulations 2011 or the Plant Protection Products (Sustainable Use) Regulations 2012. (An electronic record will satisfy the requirement for a written record, providing it is similarly available for inspection and can be copied).
- Detailed guidance on LERAPs and how to conduct a LERAP are contained in the booklet 'Local Environment Risk Assessment for Pesticides - Horizontal Boom Sprayers', available from HSE Chemicals Regulation Directorate's website. All LERAPs must be carried out in accordance with this Guidance and any amendments that are made to it.
- 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 the 'Local Environment Risk Assessment for Pesticides Horizontal Boom Sprayers' booklet available from the HSE Chemicals Regulation Directorate's website or the statutory buffer zone must be maintained. The results of the LERAP must be recorded and kept available for three years.
- Applications shall be limited to a total dose of not more than 1.0 kg metazachlor/ha in a three year period on the



same field.

- There is a risk to adjacent crops and non-crop vegetation from the volatilisation of Clomazone. This may result in damage/bleaching to neighbouring vegetation. If effects are seen they must be reported via the stewardship program (see [www.headland-ag.co.uk](http://www.headland-ag.co.uk)).
- The risk emanating from volatilisation has been addressed via a stewardship campaign and a user education program, the details of which have been reviewed and agreed by CRD.
- Extreme care should be taken to avoid drift on to crops and non-target plants outside of the target area.

#### Storage and Disposal

KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place.

KEEP AWAY FROM FOOD AND DRINK AND ANIMAL FEEDING STUFFS.

KEEP OUT OF REACH OF CHILDREN.

WASH CONTAINER THOROUGHLY, empty washings into spray tank and dispose of safely.

#### Medical Advice

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

### 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.**

Circuit SYNC<sup>TEC</sup> is a post-sowing pre-emergence residual herbicide which can be used in all varieties of winter oil seed rape.

Circuit SYNC<sup>TEC</sup> is suitable for use on all soil types except sands and soil containing more than 10% organic matter.

This herbicide is a CS (capsule suspension) co-formulation of two active ingredients:

Metazachlor (chloroacetamide K3) and Clomazone (isoxazolidinones F4).

These two active ingredients confer to Circuit SYNC<sup>TEC</sup> a wide weed spectrum for the control of important grass and broadleaved annual species.

#### RATES OF USE

Crop	Rate	Soil Type	Water volume
Winter Oilseed Rape	2,5 L/ha	In sandy soil or light soil. Do not use on soils with more than 10% organic matter.	200 – 400 L/ha

#### RESTRICTIONS / WARNINGS

Herbicidal activity is dependent upon root and shoot uptake.

When Circuit SYNC<sup>TEC</sup> is applied, it is important for crop safety to ensure a good seed bed has been established and there is physical separation of the herbicide from the seed. Ensure that the seed is well covered with soil to a depth of 20 mm. With direct-drilled crops, harrow across the slits to cover the seed before spraying.

Do not apply to stony soils; i.e. stones, flint or chalk readily visible on surface. On brashy and stony soils, may cause transient crop bleaching and/or reduction in crop vigour or plant stand.

Do not apply Circuit SYNC<sup>TEC</sup> when heavy rain is forecast and do not use on waterlogged soil or soils prone to water logging. Transient crop bleaching and/or crop thinning / reductions in crop vigour can occur if there is very wet weather after application.

Do not apply Circuit SYNC<sup>TEC</sup> to soils with a compaction layer or to poorly drained soils since damage can occur under waterlogged conditions.

Phytotoxic effects in the crop may occur including bleaching, thinning, stunting, loss of vigour, stand reduction, volume reduction and discolouration. These effects are usually transitory and should have no adverse impact on yield.

Possible bleaching of the first leaves of the crop may occur especially when used in light soil or following excessive rainfall. Such symptoms rapidly disappear and will not impact the development of the crop, the yield or the quality of the harvest.

If Circuit SYNC <sup>TEC</sup> is applied onto a dry soil surface, it will only be effective after rainfall has occurred. Weed control is dependent on adequate soil moisture.

Do not overlap spray swaths, particularly on the headlands.

Do not treat crops which are badly seeded.

Avoid spray drift onto any neighbouring crops.

Wash equipment thoroughly and immediately after use. Trace product may cause damage to susceptible crops sprayed later.

## WEED CONTROL

Susceptibility of weeds to Circuit SYNC <sup>TEC</sup>

Weed Name	Susceptibility pre-emergence to 2.5 l/ha CIRCUIT SYNC <sup>TEC</sup>
Chickweed, Common	Susceptible (S)
Cleavers	Susceptible (S)
Cranesbill, Cut-leaved	Resistant (R)
Dead-nettle spp.	Susceptible (S)
Fat-Hen (Autumn germinating)	Susceptible (S)
Flixweed	Susceptible (S)
Silky bent, Loose	Susceptible (S)
Mayweed spp.	Susceptible (S)
Meadowgrass, Annual	Susceptible (S)
Pansy, Field	Resistant (R)
Penny-cress, Field	Susceptible (S)
Poppy, Common	Moderately Susceptible (MS)
Shepherd's-purse	Susceptible (S)
Speedwell, Common field	Susceptible (S)

Under conditions of a heavy infestation of volunteer cereals, specific post-emergence application of a grass herbicide may be needed.

## Resistance

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.

Strains of some annual grasses (e.g., Black-Grass, Wild-Oats, and Italian Ryegrass) 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 and copies are available from the HGCA, CPA, your distributor, crop adviser or product manufacturer.

Populations of Black-Grass and Italian Ryegrass with high levels of enhanced metabolism resistance will not be fully controlled.

Key elements of the resistance management strategy for Circuit SYNC <sup>TEC</sup> include:

- Always follow WRAG guidelines for preventing and managing herbicide resistant weeds.
- Maximize the use of cultural control measures wherever possible (e.g., crop rotation, ploughing, stale seedbeds, delayed drilling, etc.).
- Use tank mixes or sequences of effective herbicides with different modes of action within individual crops, or successive crops.
- Monitor fields regularly and investigate the reasons for any poor control.

## CROPS AND TIMING

### WINTER OILSEED RAPE

Circuit SYNC <sup>TEC</sup> is to be applied directly after sowing or within 3 days of sowing. Application must be before the emergence of any crop plants.

Circuit SYNC <sup>TEC</sup> is to be applied pre-emergence of the weeds.

**Rate of Application:** Apply 2.5 L Circuit SYNC <sup>TEC</sup> per hectare. Do not use on soils with more than 10% organic matter.

**Conditions of Application:** Apply Circuit SYNC <sup>TEC</sup> on a finely, not cloddy, cultivated soil. Take care that seeding is operated at a sufficient and regular depth (20mm).

Maximum efficacy is reached if the product is applied on moist soil allowing a good distribution of Circuit SYNC <sup>TEC</sup> on the superficial soil layer and good root intake by weeds.

Under specific conditions and particularly when application is followed by a drought period and then by heavy rainfall, transitional phytotoxic symptoms may appear.

Low temperature following application may also increase phytotoxicity to the crop.

Do not roll the crop after treatment.

Do not irrigate within 3 weeks following treatment.

If heavy rainfall is anticipated, delay/postpone the treatment until after the rainfall.

Avoid any drift of the product to adjacent crops.

Apply in calm weather with no wind.

### Following Crops

#### Following a normally harvested winter oilseed rape crop

Following normal harvest of winter oilseed rape treated with Circuit SYNC <sup>TEC</sup> alone, cereals, oilseed rape, field beans, combining peas, potatoes, maize, turnip, linseed and sugar beet may be sown. Prior to planting, soil should be ploughed and cultivated to a minimum depth of 15cm.

In the event of a crop failing in the autumn or winter, then only certain crops can be drilled after the use of Circuit SYNC <sup>TEC</sup> alone as follows:

**Redrilling the same autumn following a crop failure:** After ploughing and cultivating to a depth of at least 25cm: winter barley or winter wheat excluding durum wheat may be sown, provided at least 6 weeks have elapsed since

application.

**Redrilling the following spring following a crop failure:** After ploughing and cultivating to a depth of at least 25cm: spring cereals (excluding durum wheat), combining peas, field beans, maize, potatoes and linseed may be sown. Prior to resowing spring cereals, maize and linseed, a period of at least 7 months should have elapsed since application.

### Compatibility

Tank mixes may have to follow local rules or restrictions. Please consult with local retailers.

### Spray Solution Preparation

Before using Circuit SYNC<sup>TEC</sup> ensures that the spray equipment is clean.

1. Half fill the tank with clean water and agitate. Add the required dose to the spray tank and complete filling, continuing agitation until spraying is completed.
2. On emptying the container, RINSE CONTAINER THOROUGHLY by using an integrated pressure rinsing device or manually rinsing three times when empty. Add washings to sprayer at time of filling and dispose of container safely.
3. On preparation of spray solution use immediately. Let the agitation run up until the end of spraying.

### If using an induction system then mixing should be as follows:

1. Half fill the induction bowl with clean water.
2. Slowly pour the required amount of product into the induction bowl, turn on the pump to suck the contents of the induction bowl into the spray tank, at the same time rinsing the bowl.
3. On emptying the container, RINSE CONTAINER THOROUGHLY by using an integrated pressure rinsing device or manually rinsing three times when empty. Add washings to sprayer at time of filling and dispose of container safely.
4. Repeat the procedure of half filling the bowl with water and sucking out the contents until no trace remains on the mesh, filter, drain hole or sides of the bowl.
5. Ensure all contents are sucked out and the bowl is thoroughly rinsed before adding any tank-mix partner.
6. On preparation of spray solution use immediately.
7. Maintain agitation at all times.
8. Spray out as soon as possible after mixing.
9. Do not let the mixture stand.

### After Use

**CLEANING THE EQUIPMENT:** To avoid damage to crops further treated with the same equipment, it is necessary to thoroughly the clean sprayer (including the inside and outside of the lid) using clean water. Completely fill and flush the contents of the spray tank a minimum of three times before any subsequent operations. Spray equipment should not be drained or flushed onto land planted with or intended to be planted other crops such as oilseed rape, beans or peas.

**WARRANTY:** Seller makes no warranty, expressed or implied concerning the use of this product other than that indicated on the label. Buyer and user assume all risk of use and/or handling and/or storage of this material when such use and/or handling and/or storage is contrary to label instructions.

**DAMAGES:** Buyer's or user's exclusive remedy for damages for breach of warranty or negligence shall be limited to direct damage not exceeding the purchase price paid and shall not include incidental or consequential damages.

**MATERIAL SAFETY DATA SHEET:** To Access the Safety Data Sheet for this product scan the QR code or visit <http://msdsviewer.fmc.com> and enter Product ID: **7356-A**  
Alternatively, contact your supplier.

