### **Crescent**<sup>®</sup> **MAPP 17589**



#### This product is an emulsifiable concentrate containing 200g/l (20.4% w/w) fluroxypyr (acid equivalent) present as 288g/L of the 1-methyl heptyl ester, and aromatic naphtha.

Crescent is a post-emergence herbicide for the control of a range of annual and perennial weeds in Winter and Spring Cereals, forage maize and grassland.

	ng to Art. 18 of Reg. (EC) No 1272/2008 [CLP]: fluroxypyr-meptyl, aromatic rganic sulphonate surfactants.					
DANGER						
Flammable liquid and vapo May be fatal if swallowed a Causes skin irritation. May cause an allergic skin Causes serious eye damag May cause drowsiness or o Very toxic to aquatic life wi	nd enters airways. reaction. e. Iizziness.					
Wear protective gloves/prote IF SWALLOWED: Immediate Do NOT induce vomiting. IF ON SKIN: Wash with plent IF INHALED: Remove victim or doctor. IF IN EYES: Immediately call contact lenses, if present and	IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison centre					
	r to a licensed hazardous-waster disposal contractor or collection site except for empty e disposed of as non-hazardous waste.					
To avoid risks to human he	ealth and the environment, comply with the instructions for use.					
TRANSPORT INFORMATION: U	JN No: 1993 CLASS: 3 PACKAGING GROUP: III					
THE CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH (COSHH) REGULATIONS MAY APPLY TO THE USE OF THIS PRODUCT AT WORK (UK only).						
Net Contents: X Litres e PROTECT FROM FROST	SHAKE WELL BEFORE USE					
APPROVAL HOLDER:	Molesworth House, 1-2 South Frederick Street, Dublin, DO2 N820, Ireland					
MARKETING COMPANY: Certis, Suite 5, 3 Riverside, Granta Park, Great Abington, Cambridgeshire, CB21 6AD Tel: 0044 (0)845 373 0305 Fax: 0044 (0)1223891210 Email: certis@certiseurope.co.uk						

® = Crescent<sup>®</sup> is a registered trademark of Mitsui AgriScience International SA/NV

### 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 AND FACE

PROTECTION (FACESHIELD) when handling the concentrate. WEAR SUITABLE PROTECTIVE GLOVES when applying by hand-held equipment.

#### AVOID CONTACT WITH SKIN.

IN CASE OF CONTACT WITH EYES, rinse immediately with plenty of water and seek medical advice. WASH CONCENTRATE from skin or eyes immediately.

WASH HANDS AND EXPOSED SKIN before eating and drinking and after work.

#### DO NOT BREATHE SPRAY.

#### WHEN USING DO NOT EAT DRINK OR SMOKE.

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

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

#### **Environmental Protection**

**DO NOT CONTAMINATE WATER** with product or its container. Do not clean application equipment near surface water. Avoid contamination from farmyards and roads.

Livestock must be kept out of treated areas for at least 3 days following treatment. IF RAGWORT IS PRESENT, FOLLOW THE GUIDANCE IN THE 'DIRECTIONS FOR USE'.

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. [DO NOT ALLOW DIRECT SPRAY from hand-held sprayers to fall within 1 m of the top of the bank of a static or flowing water body]. 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.

#### Storage and Disposal

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

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

DO NOT RE-USE CONTAINER for any purpose.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.

KEEP OUT OF REACH OF CHILDREN.

USE APPROPRIATE CONTAINMENT TO AVOID ENVIRONMENTAL CONTAMINATION.

#### IMPORTANT INFORMATION FOR USE ONLY AS AN AGRICULTURAL HERBICIDE

CROPS	MAXIMUM INDIVIDUAL DOSE (LITRES PRODUCT/HA)	MAXIMUM NUMBER OF TREATMENTS	LATEST TIME OF APPLICATION
Wheat (winter), barley (winter)	1.0	1 per crop	Before GS 39 (flag leaf sheath extending stage)
Oats (winter), rye, triticale, durum wheat	1.0	1 per crop	Before GS 31 (second node detectable stage)
Wheat (spring, barley (spring)	0.75	1 per crop	Before GS 39 (flag leaf sheath extending stage)
Oats (spring)	0.75	1 per crop	Before GS 31 (second node detectable stage)
Forage maize	1.0	1 per crop	Before GS 17 (seven leaves unfolded stage)
Grassland	0.75	1 per annum (see 'other specific restrictions')	-

#### OTHER SPECIFIC RESTRICTIONS:

 A maximum total dose of 0.75 litres per hectare must be observed for applications made to cereals between crop emergence in the year of planting and 1<sup>st</sup> February in the year of harvest.

 Livestock must be kept out of treated areas for at least 3 days following treatment. IF RAGWORT IS PRESENT, FOLLOW THE GUIDANCE IN THE 'DIRECTIONS FOR USE'

3. Root and tuber crops must not be planted as a following crop after harvest of crops treated with fluroxypyr

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.

**CRESCENT** is a selective post-emergence herbicide for the control of a range of annual and perennial weeds in cereals, forage maize and newly-sown grass leys.

#### Crop failure

In the event of a cereal crop failure the following crops can be sown: Spring cereals, spring oilseed rape, maize, onion, cultivated poppies and new leys. A minimum interval of 5 weeks is required and there are no cultivation restrictions.

#### **Rotational crops**

All crops can be sown following an application of CRESCENT.

### RESTRICTIONS

Where ragwort is present users should consult the Code of Practice on How to Prevent the Spread of Ragwort. Ragwort plants sprayed with this herbicide are more palatable with higher levels of toxins. Animals should be excluded from treated areas until any ragwort has completely recovered or died and there is no visual sign of the dead weed. Do not include treated ragwort in hay or silage crops.

Do not spray CRESCENT to crops undersown with clover or other legume-containing mixtures.

Do not treat crops that are or have been under stress from any cause, including poor soil or cultural conditions, adverse climatic conditions, waterlogging or drought, pest or disease attack, nutrient deficiency, or any other cause.

For optimum results, apply **CRESCENT** when the weeds are small and actively growing. The crop should be growing strongly to provide good competition with the weeds. This is particularly important with cleavers especially where HBN's are not included in the tank mix. HBN's are products containing ioxynil and/or bromoxynil (refer to Compatibility section).

Crops which are undersown with grass may be sprayed provided the grasses are tillering.

Avoid spray drift onto other crops or areas.

Do not spray if frost is likely to occur soon after spraying, during periods of frosty weather, or during periods of low night temperatures.

Do not roll or harrow 1 week before or after application.

Apply to dry foliage, when rain is not imminent.

Contract agents should be consulted before using on crops grown for seed.

**CRESCENT** will not control weeds that emerge after application.

**ONLY** one application of **CRESCENT** may be made per crop or year (see statutory conditions of approval).

When the product is applied as a spot treatment to newly sown grass leys the maximum concentration must not exceed 30ml product per 10 litres water.

A maximum total dose of 0.75 litres per hectare must be observed for applications made to cereals between crop emergence in the year of planting and 1<sup>st</sup> February in the year of harvest.

# **CROP SPECIFIC INFORMATION**

### A. OVERALL APPLICATION (Newly Sown Leys)

Do not treat crops where clover or other legumes are an important part of the sward.

#### Newly-sown grass leys (Autumn and Spring application):

**CRESCENT** is applied at 0.75 litres/ha on newly sown grass leys (in 200-400 litres water/ha). Always use the higher volume of water recommended when the grass growth is thick, or weeds are at the maximum recommended growth stage for treatment. Always use a water volume that will ensure good spray coverage of the weeds.

**CRESCENT** is recommended for the control of Common Chickweed in newly-sown grass leys. The grass must have at least 3 fully expanded leaves at the time of treatment. Common Chickweed will be controlled at up to 5 cm.

Apply 0.75 litres per hectare of **CRESCENT** in 200 – 400 litres of water per hectare. Apply in the autumn or spring when the weeds are actively growing. Do not apply more than a total maximum dose of 0.75 litres of **CRESCENT** per hectare per year.

# B. <u>SPOT APPLICATION (Grassland including newly</u> sown leys)

Where weed populations are too low to justify overall spraying, **CRESCENT** may be applied as a spot treatment to established grassland and newly sown grass leys, using a spray concentration of 30ml **CRESCENT** in 10 litres of water. Spray to evenly wet the foliage, to just before the point of run-off.

Keep livestock out of treated areas until the foliage of any poisonous weeds such as Ragwort has died and become unpalatable; under certain conditions, this may take several weeks. The grazing / cutting management regime must be planned in advance to allow sufficient time for this to occur.

Weed species	Timing and notes
Curled dock Broad-leaved dock	After cutting or grazing, ensure that sufficient weed foliage is present and that the docks are actively growing before spraying. Delay spraying for 2-3 weeks after cutting or grazing. Apply in spring when the docks are at the rosette stage, and between 15-20cm. Additional treatment in the spring of the following year may be required where dock populations are dense or well established.
Dandelion	Apply in the spring when actively growing, but prior to flowering
Common nettle	For a reduction in top growth, apply in the spring when growing actively, but prior to flowering (normally up to mid June)
Bramble, broom	Spray when the plant is actively growing in June-August but before growth begins to slow in the autumn. Incomplete eradication

may result if the foliage is inadequately
wetted.

### Forage Maize

**CRESCENT** is recommended for the control of Black Nightshade from cotyledons up to 6 leaves stage.

**CRESCENT** will not control Black Nightshade which has not emerged at the time of application.

The maize must be between the 3 - 6 leaf stage and must not be over 20 cm in height. Do not apply CRESCENT if the side roots have started to develop on the first node.

Apply 1.0 litre per hectare of **CRESCENT** in 200 – 300 litres of water per hectare. Do not apply more than a total maximum dose of 1.0 litre of **CRESCENT** per hectare per year.

Do not apply **CRESCENT** in a tank mix with any other product or if the crop is beyond the recommended growth stage. Boom overlap must be avoided.

### **Cereals**

### A. Spring Application to Winter and Spring Cereals

**CRESCENT** may be applied in the Spring according to the Crops, Timing and Rates listed in the table below.

The recommended spray volume is 200-400 litres of water per hectare. Only use low rate on small weeds in very open crops. Increase the volume to 400 litres of water per hectare in thick crops and where weed cover is thick.

Сгор	Timing of Application	Rate L/ha	Weeds Controlled & Maximum Growth Stage for Control
Winter Wheat Winter Barley	Apply from the 2 leaf stage (GS 12) until before flag leaf sheath opening stage (GS 39)	1.0	Cleavers (flowering) Common Chickweed (flowering) Common hemp-nettle (flowering) Field forget-me-not (flowering) Black Bindweed (6 leaves) Henbit dead nettle (4 leaves) Red dead-nettle (4 leaves)
Winter Oats Winter Rye Durum Wheat Triticale	Apply from the 2 leaf stage (GS 12) until before the second node detectable stage (GS 31)	1.0	Knotgrass (2 leaves) Common Fumitory (2 leaves) Groundsel (checked at 2 leaves) Mayweeds (checked at 2 leaves) Redshank (checked at 2 leaves) Common field-speedwell (checked at 2 leaves) Ivy-leaved Speedwell (checked at 2 leaves) Pale persicaria (checked at 2 leaves)

Spring Wheat Spring Barley	Apply from the 2 leaf stage (GS 12) up to and including the flag leaf ligule just visible stage (GS 39).	0.75	Cleavers (10 cm) Common Chickweed (10 cm) Common hemp-nettle (10 cm) Field forget-me-not (5 cm) Black Bindweed (4 leaves) Knotgrass (2 leaves) Common Fumitory (2 leaves)
Spring Oats	Apply from the 2 leaf stage (GS 12) until before second node detectable stage (GS 31).	0.75	Corn spurrey (2 leaves) Groundsel (checked at 2 leaves) Mayweeds (checked at 2 leaves) Redshank (checked at 2 leaves) Common field-speedwell (checked at 2 leaves Ivy-leaved Speedwell (checked at 2 leaves) Pale persicaria (checked at 2 leaves)

Cereal crops undersown with grass may be treated if the grass has reached the tillering stage. Do not treat crops undersown with clover or other legumes.

### **B. Spring Application in Tank Mix with HBNs\***

**CRESCENT** can be tank mixed with HBNs for use in crops of winter and spring cereals in the Spring according to the Crops, Timing and Rates listed in the tables below.

**Do not spray if frost is imminent.** Application to winter oats should be delayed until risk of frost is over.

#### LOW RATE MIXTURE

(recommended where cleavers, chickweed, hemp-nettle and forget-me-not are relatively small; see maximum growth stages below)

Сгор	Timing of Application	Rate L/ha	Weeds Controlled & Maximum Growth Stage for Control
Winter Wheat Winter Barley	Apply from the 2 leaf stage (GS 12) until before the second node detectable stage (GS 31)	0.75 + recommended rate of HBN	Cleavers (25 cm) Common Chickweed (flowering) Common Hemp-nettle (15 cm) Field Forget-me-not (10 cm) Black Bindweed (10 cm) Henbit Dead-nettle (10 cm) Red Dead-nettle (10 cm) Knotgrass (10 cm) Common Fumitory (10 cm)

Winter Oats Winter Rye Durum Wheat	Apply from the 2 leaf stage (GS 12) until before the second node detectable stage (GS 31)	0.75 + recommended rate of HBN	
Spring Wheat Spring Barley Spring Oats	Apply from the 2 leaf stage (GS 12) until before second node detectable stage (GS31).	0.5 + recommended rate of HBN	

\* HBNs are products containing ioxynil and/or bromoxynil (refer to Compatibility section). HBN tank mix partners recommended are MAFF/MAPP 14511, 14696 and 14697.

Use tank mix partners in accordance with the manufacturer's instructions.

### FULL RATE MIXTURE

(recommended where cleavers, chickweed, hemp-nettle and forget-me-not are more advanced; see maximum growth stages below)

Сгор	Timing of Application	Rate L/ha	Weeds Controlled & Maximum Growth Stage for Control
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Winter Wheat Winter Barley	Apply from the 2 leaf stage (GS 12) until before the second node detectable stage (GS 31)	1.0 + recommended rate of HBN	Cleavers (flowering) Common Chickweed (flowering) Common Hemp-nettle (flowering) Field Forget-me-not (flowering) Black Bindweed (10 cm) Henbit Dead-nettle (10 cm) Red Dead-nettle (10 cm) Knotgrass (10 cm) Common Fumitory (10 cm)
Winter Oats Winter Rye Durum Wheat	Apply from the 2 leaf stage (GS 12) until before the second node detectable stage (GS 31)	1.0 + recommended rate of HBN	Groundsel (Up to 5 cm)}Mayweeds (Up to 5 cm)}Redshank (Up to 5 cm)}Redshank (Up to 5 cm)}Ivy-leaved Speedwell (Up to 5 cm)}Pale Persicaria (Up to 5 cm)}Bugloss (Up to 6 true leaves)}Charlock (Up to 6 true leaves)}Common Poppy (Up to 6 true leaves)}Corn Marigold (Up to 6 true leaves)}Fat-hen (Up to 6 true leaves)}Field penny-cress (Up to 6 true leaves)}Scarlet Pimpernel (Up to 6 true leaves)}Shepherd's Purse (Up to 6 true leaves)}Small Nettle (Up to 6 true leaves)}Volunteer Rape (Up to 6 true leaves)}Wild Radish (Up to 6 true leaves)}
Spring Wheat Spring Barley Spring Oats	Apply from the 2 leaf stage (GS 12) until before second node detectable stage (GS31).	0.75 + recommended rate of HBN	Cleavers (15 cm) Common Chickweed (flowering) Common Hemp-nettle (15 cm) Field Forget-me-not (10 cm) Black Bindweed (10 cm) Knotgrass (10 cm) Common Fumitory (10 cm) Corn Spurrey (Up to 6 true leaves) } Groundsel (Up to 6 true leaves) } Mayweeds (Up to 6 true leaves) } depends on type and Redshank (Up to 6 true leaves) } trate of HBN used* Common Field-speedwell (Up to 6 true leaves) } Ivy-leaved Speedwell (Up to 6 true leaves) } Pale Persicaria (Up to 6 true leaves) } Fat-hen (Up to 6 true leaves) } Common Orache (Up to 6 true leaves) } Common Poppy (Up to 6 true leaves) } Shepherd's Purse (Up to 6 true leaves) }

\* HBNs are products containing ioxynil and/or bromoxynil (refer to Compatibility section). HBN tank mix partners recommended are MAFF/MAPP 14511, 14696 and 14697. Use tank mix partners in accordance with the manufacturer's instructions.

**Note:** In spring cereals the full rate mixture will also give control of black bindweed, knotgrass and fumitory at later growth stages than with the low rate mixture (see tables for details of maximum growth stages controlled).

### C. Autumn Application to Winter Wheat and Winter Barley

**CRESCENT** may be applied in the Autumn to winter wheat and winter barley only according to the Crops, Timing and Rates listed in the table below. Weeds which germinate after spraying will not be controlled by an Autumn application of **CRESCENT**.

For optimum results, weeds must be actively growing and the crop competitive. This is particularly important with cleavers.

#### Do not spray if frost is imminent.

Сгор	Timing of Application	Rate* L/ha	Weeds Controlled & Maximum Growth Stage for Control
Winter Wheat Winter Barley	Apply from the 2 leaf stage (GS 12) up until the end of February, or first node detectable stage (GS 31), whichever is sooner. Spring Application recommendations apply from March onwards	0.5-0.75 + recommended rate of HBN	Cleavers (5 cm) Common Chickweed (5 cm) Field Forget-me-not (5 cm) Henbit Dead-nettle (6 true leaves) Red Dead-nettle (6 true leaves) Charlock (6 true leaves) Charlock (6 true leaves) Common Poppy (6 true leaves) Groundsel (6 true leaves) Mayweeds (6 true leaves) Shepherd's Purse (6 true leaves) Shepherd's Purse (6 true leaves) Common Field-speedwell (6 true leaves) Volunteer rape (6 true leaves) Volunteer rape (6 true leaves) Shepherd's Purse (6 true leaves) Volunteer rape (6 true leaves) Common Field-speedwell (6 true leaves) Volunteer rape (6 true leaves) Common Field-speedwell (6 true leaves) Volunteer rape (6 true leaves) Common Field-speedwell (6 true

\* The 0.75I/ha rate of **CRESCENT** generally gives more consistent results particularly if growing conditions are not ideal. This rate is essential for the control of cleavers.

HBN's are products containing ioxynil and/or bromoxynil (refer to Compatibility section). HBN tank mix partners recommended are MAFF/MAPP 14511, 14696 and 14697. Use in accordance with the manufacturer's instructions.

## **GENERAL INFORMATION**

### **Mixing Instructions**

Shake the container before use. Place half the required amount of clean water in the spray tank and commence agitation. Add the required amount of **CRESCENT**. Rinse all used containers thoroughly and add the washings to the spray tank. The use of sprayer mounted pressure rinsing equipment is advised. If not available, containers should be manually rinsed three times. Add the remaining water requirement and continue agitation. The spray mix must be used immediately, maintaining continuous agitation until spraying is completed. Do not allow the spray mixture to stand. Immediately after use wash sprayer and other equipment thoroughly with water and detergent. Traces of **CRESCENT** in the spray tank could damage susceptible crops when the sprayer is used subsequently. Dispose of empty rinsed containers according to the MAFF/HSE Code of Practice for the Safe Use of Pesticides on Farms and Holdings.

### **Method of Application**

Apply by means of a conventional hydraulic nozzle tractor-mounted or trailed sprayer (with or without air-assistance). Ensure that the sprayer is correctly calibrated to apply the

recommended water volume and spray quality and the boom height and nozzles are adjusted to give even coverage of the target weeds.

In grassland, small areas may be treated by knapsack or other hand-operated sprayer. Spray individual weeds to the point just prior to run-off. Ensure that the sprayer is correctly calibrated to apply the recommended dose and water volume.

### Water Volume

Use a volume of water within the recommended range of 200 - 400 l/ha that will give a good even cover of the weed foliage. See recommendations under Crop Specific Information. The minimum recommended pressure is 2 to 3 bars.

The lowest volume of water should only be used in very open crops on small weeds. On later applications where the crop is dense, the spray volume should be increased to 400 litres of water per hectare.

### Spray Quality

Apply as a MEDIUM spray (as defined by BCPC).

### **Tank Mixes**

To broaden the range of weeds controlled, **CRESCENT** can be tank mixed with a number of herbicides. If using tank mixes, unless directed otherwise the preferred order of addition of products to the tank is: water dispersible granules, wettable powders, suspension concentrates (flowables), emulsifiable concentrates, solution concentrates. Each product must be added to a half-full sprayer and be fully dispersed before the addition of the next product.

Tank mixes must only be applied within the label recommendations of every product in the mix.

### Compatibility

**CRESCENT** is compatible with a wide range of products. The weed spectrum can be broadened by tank-mixing with a range of different herbicides.

CRESCENT is compatible with a number of HBN products. HBNs are products containing ioxynil and/or bromoxynil (refer to Compatibility section). HBN tank mix partners recommended are MAFF/MAPP 14511, 14696 and 14697. Use tank mix partners in accordance with the manufacturer's instructions. Ensure that all crop and timing restrictions required for 'Crescent' **and** the partner HBN product are adhered to (e.g. M09470 and M10005 are not recommended on durum wheat).

Contact Certis for compatibility information on specific tank mixes.

# **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.