

CLAYTON ORLEANS

MAPP 14452

An emulsifiable concentrate containing 100 g/l propaquizafop
with *N*-methyl-2-pyrrolidone

For the control of grass weeds in important broad-leaved crops and in farm forestry.



TOXIC

May cause harm to the unborn child
Harmful: may cause lung damage if swallowed
Irritating to eyes and skin



DANGEROUS FOR THE ENVIRONMENT

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Contains propaquizafop. May produce an allergic reaction

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

IMPORTANT INFORMATION

FOR USE ONLY AS AN AGRICULTURAL/HORTICULTURAL/FORESTRY HERBICIDE

Crops: Winter and spring field beans, winter and spring oilseed rape, linseed, sugar beet, fodder beet, maincrop and early potatoes, swede, turnip, combining pea, bulb onion, carrot, parsnip and in farm forestry.

Maximum individual dose of product: see **Directions for Use**

Maximum number of treatments: " "

Latest time of application: " "

Other specific restrictions

To avoid the build-up of resistance do not apply products containing an ACCase inhibitor herbicide more than twice to any crop. In addition, do not use this product in mixture or sequence with any other product containing propaquizafop.

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 AND FACE PROTECTION (FACESHIELD) when handling the concentrate.

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

Wear eye/face protection.

Wear suitable protective clothing and gloves.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

AVOID ALL CONTACT BY MOUTH, WITH SKIN OR EYES.

WASH CONCENTRATE from skin or eyes immediately.

DO NOT APPLY via a knapsack sprayer.

DO NOT BREATHE SPRAY.

WHEN USING, DO NOT EAT, DRINK OR SMOKE.

WASH HANDS AND EXPOSED SKIN before meals and after work.

WASH ALL PROTECTIVE CLOTHING thoroughly after use, especially the insides of gloves.

IF SWALLOWED, DO NOT INDUCE VOMITING. Seek medical advice and show this container or label.

Environmental protection

DO NOT CONTAMINATE SURFACE WATERS OR DITCHES with chemical or used container.

RISK TO NON-TARGET INSECTS OR OTHER ARTHROPODS – see Directions for Use.

Storage and disposal

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

KEEP OUT OF REACH OF CHILDREN.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.

This material and its container must be disposed of in a safe way.

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

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

Safety data sheet available for professional user on request.

This product is approved under the Control of Pesticides Regulations 1986.

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Contents: **5 litres**

**PROTECT FROM FROST
SHAKE THOROUGHLY BEFORE USE**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains propaquizafop, solvent naphtha and *N*-methyl-2-pyrrolidone). UN 3082; Class 9; Packing group III.

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 of the 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 resellers 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.

Batch No:

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.

Crop	Maximum individual dose of product	Maximum number of applications	Latest time of application
Winter field bean Spring field bean	1.5 l/ha	one per crop	before flower buds visible
Winter oilseed rape Linseed	1.5 l/ha	one per crop	before flower buds visible
Spring oilseed rape	1.5 l/ha	one per crop	before 8 fully expanded leaves
Sugar beet Fodder beet Maincrop potato Swede Turnip	1.5 l/ha	one per crop	8 weeks before harvest
Early potato	1.5 l/ha	one per crop	4 weeks before harvest
Combining pea	1.5 l/ha	one per crop	7 weeks before harvest
Bulb onion Carrot Parsnip	1.5 l/ha	one per crop	4 weeks before harvest
Farm forestry	1.5 l/ha	one per year	-

MODE OF ACTION

Clayton Orleans is a leaf-absorbed graminicide. Susceptible grass weeds need to have at least 1-2 fully expanded leaves at application – see RECOMMENDATIONS table for precise conditions. Weeds not emerged at application are not controlled. Growth of susceptible grass weeds is stopped within a few days of application; they are controlled most rapidly when the weather is warm and the soil moist. During cool weather, weed control is slowed. Use the higher rate, if a range is stated, under less favourable weather conditions. Under favourable conditions break down at the growing point is apparent after 2-3 weeks. Vigorous crop competition is an essential requirement for optimum weed control, especially when the grass weeds being treated are at the later growth stages of their treatable range. Some recovery might occur in thin crops offering little competition or if lack of soil moisture is limiting growth.

WEED RESISTANCE

This product contains propaquizafop which is an ACCase inhibitor; also classified by the Herbicide Resistance Action Committee as 'Group A'.

Use only as part of a resistance management strategy that includes cultural methods of control and does not use ACCase inhibitors as the sole chemical method of grass-weed control.

Applying a second product containing an ACCase inhibitor to a crop will increase the risk of resistance development; only use a second ACCase inhibitor to control different weeds at a different timing.

Strains of some annual grasses, e.g. black-grass, wild-oat 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 and copies are available from the HGCA, CPA, your distributor, crop advisor or product manufacturer.

RECOMMENDATIONS - WEEDS

- The lower rate is recommended for use against low weed populations and when the target grass is young and growing in a warm, moist environment.
- The higher rate must be used against moderate to high weed populations and for the more forward growth stages, especially if the grasses are at all hardened, or if the weather is cool or the soil dry.
- Spray before grass weeds or sown covers, e.g. barley protecting sugar beet, become unduly competitive with the crop.
- Cultivations should not be conducted in the period before treatment but may be resumed 14-21 days after application depending upon the intervening growing conditions. Delay any cultivation for at least 21 days when growing conditions have been poorer. Note however that cultivation may induce fresh weed germination.
- The long-term effectiveness of this product on common couch is not known. Maximum efficacy is gained when the underground stems down to plough depth have been chopped or cut by cultivations prior to planting.

Target grass	Dose	Spraying period and remarks
Black-grass Wild-oat Volunteer barley Volunteer wheat	0.7 – 1 l/ha	▶▶ From 2 expanded leaves until stem erect of wild-oat and black-grass and to the end of tillering of volunteer cereals. Application at early tillering usually gives the best results. Ⓢ Established rye-grasses are moderately resistant.
Seedling rye-grasses, Italian and perennial	1.2 l/ha	
Sown barley cover	1 – 1.2 l/ha	▶▶ From 2 expanded leaves to the 2 nd node being visible. Use the higher rate when the barley is beyond the end of tillering, a faster kill is required or the soil is dry or the weather cool. Aim to kill the barley as soon as the risk of wind blow has diminished and before crop growth is greatly affected by competition.
Couch, common	1.5 l/ha	▶▶ From 4 expanded leaves to the end of tillering. ⚠ This treatment can only be successful if all shoots have emerged by the time of application. ⚠ Use against these weeds only as an emergency in-crop treatment as kill of underground stems cannot be assured.
Meadow-grass, annual	0.7 – 1.5 l/ha	Ⓢ Checked to severely checked according to dose at the 1-3 leaves stage; larger plants are resistant.

Metric	0.5 l/ha	0.7 l/ha	1 l/ha	1.2 l/ha	1.5 l/ha
Imperial	7 fl.oz/ac	10 fl.oz/ac	14 fl.oz/ac	17 fl.oz/ac	21 fl.oz/ac

RECOMMENDATIONS – CROPS

Observe the latest statutory time of application if this occurs before the latest time of application given in the following table.

Crop	Spraying period and remarks
Winter oilseed rape Spring oilseed rape	» From one expanded true leaf for applications in the dose range 0.5-1 l/ha until closure of the crop canopy or before the flower buds of winter crops are visible or 8 expanded leaves have developed of spring crops. However for a dose at 1-1.5 l/ha wait until the crop has 5 true-leaves before spraying.
Winter field bean Spring field bean	» From four expanded pairs of true leaves of winter field beans or two expanded pairs of true leaves of spring field beans to before the flower buds become visible.
Sugar beet Fodder beet	» From two expanded true leaves to before the crop shields the weeds.
Early potato Main-crop potato	» Not less than 10 days after final cultivations and other herbicide treatments and the potato shoots being not less than 15 cm (6") high until the leaves meet across the rows. ⊖ Do not treat crops intended for seed.
Combining peas	» Not less than 10 days after final cultivations and other herbicide treatments and at least 3 nodes to before the flower buds become visible. △ A satisfactory crystal violet test for leaf wax must be conducted before treatment.
Linseed	» From the crop having at least 3 pairs of fully expanded leaves to before the flower buds become visible.
Swede Turnip	» From the crop having at least 4 fully expanded leaves to before the crop shields the weeds.
Carrot Parsnip	» From two expanded true leaves to 50% crop cover for applications in the dose range 0.5-1 l/ha. However for a dose at 1-1.5 l/ha wait until the crop has 5 true-leaves.
Bulb onion	» Not less than 10 days after final cultivations and other herbicide treatments and immediately post-crook to 50% crop cover. △ A satisfactory crystal violet test for leaf wax must be conducted before treatment.
Established saplings of ash, beech, oak and sycamore	» During the dormant period or in spring or summer after new leaves have become hardened. △ Avoid undue contact of the spray with the foliage. ⊖ Do not treat container grown or protected stock.

Ⓢ The leaf wax of a crop is satisfactory if less than 5 % of the upper leaf surface and less than 10% of the lower leaf surface of typical leaves retain solution when dipped into 1% crystal violet solution.

CROP, SOIL AND WEATHER FACTORS

☑ Best results are obtained when the weather is warm and the soil is moist, encouraging active growth.

⊖ Do not apply to crops under any growing stress such as drought, waterlogging, physical damage, pesticide toxicity, improper nutrition or other disorder until the stresses have been relieved and normal growth has resumed.

⊖ Do not apply during periods of cold weather, frost or snow or if cold weather has been forecast.

⊖ Do not apply to wet foliage or if rain is forecast within 4 hours.

⊖ Do not apply to crops under stress during hot weather. Some crops may suffer a chlorotic spotting when treated under severe stress.

△ Adverse effects can occur on carrots, parsnips and onions when an upper range dose is applied at one of the earlier growth stages.

APPLICATION

Apply the recommended dose as a FINE or MEDIUM (BCPC) spray in 100-200 l/ha (9-18 gal/ac) water, using the highest spray volume in the most dense crops or when weeds are numerous or large or when spraying over ridges with a prevailing side-drift. Avoid spray drift onto nearby crops, especially onto cereals and grasses that are particularly susceptible to damage. Do not spray in windy weather. Do not overlap spray swaths.

SPRAY MIXING

Half-fill the spray tank with clean water and put under agitation. Mix in the required volume of Clayton Orleans through the top filter or filling device. Top up the tank with water and keep under agitation until sprayed out. Do not mix with extra adjuvant. Spray immediately after mixing.

PROTECTION OF NON-TARGET ORGANISMS

Avoid application within 6m of the field boundary to minimise effects on non-target insects or other arthropods.

PROCESSED CROPS

Consult processors before treating crops being grown for processing.

FOLLOWING CROPS

Should a treated crop subsequently fail for any reason or after a normal harvest, specified intervals must be observed before sowing to the next crop. Peas, field beans and winter oilseed rape may be sown after a recommended application of Clayton Orleans provided that at least 4 weeks have elapsed since last application. Winter wheat and winter barley may normally be sown if at least 2 weeks have elapsed since last application. At least 8 weeks after application must be allowed before the sowing of ryegrasses and 16 weeks after last application before the sowing of oats.

EQUIPMENT MAINTENANCE

Immediately after use wash the spraying machine and all utensils thoroughly with clean water and a wetting agent recommended for the cleaning of application equipment. Traces of herbicide left in the sprayer may result in damage to other crops.

KEY TO SYMBOLS

- ▶▶ = Recommended time or period of application
 - ☑ = Recommended procedure
 - △ = Cautionary note
 - ⊘ = Prohibited use or action
 - Ⓜ = Advisory information
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