

CLAYTON VINDICATE

MAPP 15055

Contains 25 g/l esfenvalerate with xylene in an emulsifiable concentrate

Pyrethroid insecticide for the control of aphids (vectors of BYDV) in wheat and barley; for the control of aphids and certain other insect pests in the listed other crops.



HARMFUL

**Harmful by inhalation and if swallowed
Risk of serious damage to eyes
May cause sensitisation by skin contact**

Flammable



DANGEROUS FOR THE ENVIRONMENT

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

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 INSECTICIDE

Crop	Maximum individual dose of product	Maximum number of treatments	Latest time of application
Winter wheat Winter barley	165 ml/ha	Two per crop	31 March in year of harvest
Winter wheat	200 ml/ha	One per crop	Up to and including late milky ripe stage (GS77 BBCH)
Winter barley	200 ml/ha	One per crop	Up to and including early milky ripe stage (GS73 BBCH)
Spring wheat	165 ml/ha	Two per crop	Up to and including late milky ripe stage (GS77 BBCH)
Spring barley	165 ml/ha	Two per crop	Up to and including early milky ripe stage (GS73 BBCH)
Potato	200 ml/ha	Four per crop	7 days before harvest
Combining pea	200 ml/ha	Three per crop	35 days before harvest
Edible podded pea, vining pea	200 ml/ha	Three per crop	7 days before harvest
Field bean	200 ml/ha	Three per crop	35 days before harvest
Cabbage, Chinese cabbage, kale	200 ml/ha	Three per crop	7 days before harvest
Brussels sprout	200 ml/ha	Four per crop	7 days before harvest
Cauliflower	200 ml/ha	One per crop	7 days before harvest
Broccoli/calabrese	200 ml/ha	One per crop	7 days before harvest
Kohlrabi	200 ml/ha	One per crop	10 days before harvest
Grassland, managed amenity turf	300 ml/ha	One per crop	See Other Specific Restrictions.
Ornamental plant production	See Other Specific Restrictions.	Two per crop	-

Other specific restrictions

1. The maximum individual dose for outdoor or protected bulb production (tulip, hyacinth, iris, gladioli, lily) is 400 ml product/ha.
2. The maximum individual dose for protected ornamental plant production (excluding bulbs) is 50 ml product per 100 litres of spray volume; a maximum 1200 litres of mixed spray may be applied per ha.
3. Treated grass should not be used for grazing or cut for feed within 14 days of treatment.

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 CLOTHING (COVERALLS), 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 suitable gloves and eye/face protection.

Do not breathe fumes, vapour or spray.

Avoid contact with skin.

Use only in well-ventilated areas.

TAKE OFF IMMEDIATELY all contaminated clothing.

WASH CONCENTRATE from skin or eyes immediately.

WHEN USING DO NOT EAT, DRINK OR SMOKE.

DO NOT BREATHE SPRAY.

WASH HANDS AND EXPOSED SKIN before meals and after work.

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

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

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.

TO PROTECT NON-TARGET ARTHROPODS respect an untreated buffer zone of 5m adjacent to non-crop land.

DO NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall within 5m of the top of the bank of a static or flowing waterbody, or within 1m 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 1m of the top of the bank of a static or flowing waterbody. Aim spray away from water. THIS PRODUCT IS NOT ELIGIBLE FOR BUFFER ZONE REDUCTION UNDER THE LERAP HORIZONTAL BOOM SPRAYERS SCHEME.

Storage and disposal

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.

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

KEEP OUT OF REACH OF CHILDREN.

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

DO NOT RE-USE CONTAINER for any purpose.

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 the container safely.

LERAP Category A

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

Safety data sheet available for professional user on request.

**Clayton Plant Protection (UK) Ltd.,
Unit F10, Bracetown Business Park,
CLONEE, Co. Meath, Ireland.**

Tel: (00 353) 1 8210127

Batch No:

Contents: **1 litre**

PROTECT FROM FROST

STORE IN A COOL, DARK, DRY PLACE

KEEP AWAY FROM ALL SOURCES OF IGNITION

KEEP IN A SUITABLE PESTICIDE STORE.

This product is approved under the Plant Protection Products Regulations (as amended).



Conditions of Supply: all goods supplied by us are of high quality and we believe them to be correct but, as we cannot exercise control over their storage, handling, mixing or use, or 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.

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.

Damage may result if all conditions and recommendations of this label are not followed.

WINTER WHEAT AND WINTER BARLEY

Pest	Treatment advice	Dose
Aphids - to control the aphid vectors of barley yellow dwarf virus (BYDV) and thereby reduce the spread of BYDV. <i>Aphids are more easily found on warmer, sunny days.</i>	High BYDV risks (such as recognised BYDV areas; early drilled crops; after grass crops, grassy set-aside or weed grasses) Spray crops drilled before mid-September in mid-October or as soon as aphids are found in the crop. Repeat, if necessary, at end-October to early November at the end of aphid immigration. Spray crops drilled mid-September to mid-October at end-October to early-November. Average BYDV risks Only spray crops proven to be at risk after aphid counts or upon professional advice. Spray crops drilled up to mid-September in mid-October. Spray crops sown after mid-September and those after recently ploughed grassland or stubbles with many weeds or cereal volunteers and in which aphids are present at end-October to early-November. Up to 2 applications may be made per crop up to 31 March in the year of harvest.	165 ml/ha in at least 200 l/ha water
Summer aphids For application between the onset of flowering GS 61 and grain milky ripe of wheat GS 77 or early milk of barley GS 73.	When two-thirds of the heads are infested (with five or more aphids per head) and aphid numbers are increasing or upon professional advice. Do not treat later than 3 weeks before harvest. In the early stages of infestation, aphid colonies may develop in certain areas of a crop, often on the headlands. Early treatment of the limited areas where infestations have occurred is strongly recommended. Do not apply Clayton Vindicate if any product containing either a pyrethroid insecticide or dimethoate has been applied to the crop after the start of ear emergence GS 51. Make only one application per crop at this dose and timing.	200 ml/ha in at least 200 l/ha water

SPRING WHEAT AND SPRING BARLEY

Pest	Treatment advice	Dose
Aphids	Useful reductions of aphids infesting spring sown wheat and barley with a reduction in the spread of BYDV can be gained from an application of Clayton Vindicate made at the time of the aphid influx, from 2 leaves onwards to before the first node is detectable. If the aphid influx is persistent or repeated, a second application may be applied. Overall results may be variable; professional advice should be sought. Up to 2 applications may be made per crop up to the grain milky ripe stage of wheat GS 77 or early milk of barley GS 73.	165 ml/ha in at least 200 l/ha water

POTATOES

Pest	Treatment advice	Dose
Aphids	<p>Seed crops</p> <p>Spray upon professional advice. Normally the first spray is applied at 80% crop emergence. Repeat at 7-14 days as necessary whilst aphids present a risk. Up to four applications per crop of Clayton Vindicate may be made. An alternative insecticide may need to be employed to provide a full protective programme; consult your advisor.</p> <p>Ware crops</p> <p>Spray upon professional advice or immediately threshold levels are reached. Repeat after 7-14 days if necessary. Up to four applications per crop may be made; the pre-harvest interval is 7 days before harvest.</p>	200 ml/ha in 200-600 l/ha water. Employ the 600 l/ha spray volume when the foliage is dense.

FIELD BEANS AND PEAS

Up to three applications in total may be made. Observe the pre-harvest interval appropriate to the crop; for field beans and combining peas – 35 days; for vining and edible podded peas – 7 days.

Pest	Treatment advice	Dose
Pea and bean weevil	Spray in April/May when leaf notching caused by adult weevils is first seen (usually on the headlands). Repeat after 2-3 weeks if fresh leaf notching is occurring.	200 ml/ha in 200-600 l/ha water.
Field thrips in peas	Spray on sight of the thrips on young plants or according to professional advice. Repeat if required after 7-10 days.	200 ml/ha in 200-600 l/ha water.

BRUSSELS SPROUT, CABBAGE, CHINESE CABBAGE, KALE

Up to four applications in total may be made on Brussels sprout.

Up to three applications in total may be made to cabbage, Chinese cabbage and kale.

Pre-harvest interval: 7 days before harvest.

Pest	Treatment advice	Dose
Cabbage white caterpillar Diamond back moth Swede midge	Spray as soon as an attack is apparent or on sight of midge eggs or according to professional advice. Repeat if necessary after 7-10 days.	200 ml/ha in 200-800 l/ha water.

BROCCOLI/CALABRESE, CAULIFLOWER, KOHLRABI

Only one application may be made per crop.

Pre-harvest interval: 7 days before harvest for broccoli/calabrese and cauliflower or 10 days before harvest for kohlrabi.

Pest	Treatment advice	Dose
Cabbage white caterpillar Diamond back moth Swede midge	Spray as soon as an attack is apparent or on sight of midge eggs or according to professional advice.	200 ml/ha in 200-800 l/ha water.

GRASSLAND, GRASS SEED CROPS, MANAGED AMENITY TURF AND TURF PRODUCTION

Only one application may be made per crop or situation. Do not graze or cut for feed for 14 days after treatment.

Keep persons off amenity turf for 5 days after treatment.

Pest	Treatment advice	Dose
Reduction of damage caused by bibionid fly larvae.	Spray according to professional advice. Treat in the autumn. Do not apply FYM or slurry prior to treatment.	300 ml/ha in 600-1000 l/ha water.

ORNAMENTAL PLANT PRODUCTION – BULBS

For the reduction of the spread of aphid transmitted non-persistent viruses

Crop	Treatment advice	Dose
Gladioli Hyacinth Iris Tulip	Spray according to professional advice. Normally treatment is started immediately upon aphid immigration into the crop and continued as necessary at 7-day intervals; for tulips treatment is normally continued until late-June. Gladioli must be free of virus at the outset. Only two of the programme of sprays may be made with Clayton Vindicate.	<u>Outdoor crops</u> 400 ml/ha in 200-400 l/ha water. <u>Protected crops</u> 400 ml/ha in 500-1000 l/ha water.
Lilies	Spray according to professional advice. Normally treatment is started immediately upon aphid immigration into the crop and continued throughout May, June and July at 7-day intervals; in August and September the interval is extended to 10 days. Efficacy may be improved by the addition of an authorised mineral oil adjuvant – see its label for rate of inclusion. Only two of the programme of sprays may be made with Clayton Vindicate.	<u>Outdoor crops</u> 400 ml/ha in 200-400 l/ha water. <u>Protected crops</u> 400 ml/ha in 500-1000 l/ha water.

ORNAMENTAL PLANT PRODUCTION – FLOWERS UNDER PROTECTION

Pest	Treatment advice	Dose
Aphid Caterpillar Leaf miners Leaf rollers Thrips Whitefly	Spray according to professional advice. Normally spray immediately the pest or its damage is observed. Repeat if necessary after 7 days. Ensure thorough coverage of the crop foliage. Avoid the spraying of open blooms. Only two sprays per crop may be made with Clayton Vindicate.	50 ml product per 100 litres of water. For most crops apply 500-1000 litres of mixed spray per ha; for roses apply 800-1200 litres of mixed spray per ha.

RESISTANT STRAINS

Strains of some aphid species are resistant to many aphicides. Where aphids resistant to products containing esfenvalerate occur, Clayton Vindicate is unlikely to give satisfactory control. Repeat treatments are likely to result in lower levels of control.

Glasshouse whitefly strains resistant to one or more groups of insecticides are widespread. Where strains of whitefly resistant to pyrethroid insecticides occur, Clayton Vindicate is unlikely to give satisfactory control.

Note: resistant strains of the tobacco whitefly are also known to occur.

As part of a resistance management strategy, alternating products having a different mode of action, or alternative control methods, should be considered.

MIXING

Fill the spray tank with clean water and put under agitation. Mix in the required volume of Clayton Vindicate through the top filter or filling device. Spray immediately after mixing and keep under agitation until sprayed out. Do not allow mixed spray to stand. When tank-mixing, add each product separately to the spray tank; normally mix Clayton Vindicate in the spray tank firstly unless directed otherwise.

APPLICATION

Apply the recommended dose as a MEDIUM spray (BCPC) in the recommended volume of water using the highest volume in the densest crops. Ensure good cover of the crop leaves.

COMPATIBILITY

Clayton Vindicate is physically compatible in a tank mixture with certain approved formulations. When tank-mixing follow the Directions for Use of the partner product together with those of this label. Spray all tank mixtures immediately after mixing. For further information please contact the Distributor.

PROCESSED CROPS

Consult processors before treating crops being grown for processing.

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.

