



# CLAYTON KLONDIKE

A suspension concentrate formulation containing 600 g/L aclonifen for use only as a horticultural herbicide. A pre-emergence herbicide for the control of annual broad-leaved weeds and some grass weeds in potatoes, peas and beans. **For professional use only.**

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| <br>  | <p><b>Safety information</b><br/><b>CLAYTON KLONDIKE</b><br/>A suspension concentrate formulation containing 600 g/L aclonifen.</p> <p><b>Warning</b><br/><b>Contains aclonifen and 1,2-benzisothiazol-3-(2H)-one. May produce an allergic reaction.</b><br/><b>Suspected of causing cancer.</b><br/><b>Very toxic to aquatic life with long lasting effects.</b><br/><b>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).</b></p> <p>Obtain special instructions before use.<br/>Do not handle until all safety precautions have been read and understood. Avoid release to the environment.<br/>Collect spillage.<br/>Use personal protective equipment as required.<br/>IF exposed or concerned: Get medical advice/attention.<br/>Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site, except for triple rinsed empty containers which can be disposed of as non-hazardous waste.</p> <p><b>To avoid risks to human health and the environment, comply with the instructions for use.</b></p> <p style="text-align: right;"><b>PCS 06807</b></p> |
| <p><b>Approval Holder: -</b><br/>Clayton Plant Protection Ltd.,<br/>Bracetown Business Park, Clonee, Dublin 15. Ireland.<br/>Tel: (00 353) 1 8210127<br/>Email: <a href="mailto:info@claytonpp.com">info@claytonpp.com</a><br/><a href="http://www.claytonpp.com">www.claytonpp.com</a></p> | <p>Contents: <b>5 L e</b></p> <p>Batch No:</p> <p>PROTECT FROM FROST<br/>SHAKE THOROUGHLY BEFORE USE</p> <p>UN 3082</p>   |

**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.

In the event of emergency, call the National Poisons Information Centre, Beaumont Hospital at 01 809 2166 or 01 837 9964

## 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 when handling the product, when applying the product and when handling contaminated surfaces.

WHEN USING DO NOT EAT, DRINK OR SMOKE.

AVOID CONTACT WITH SKIN

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

IF YOU FEEL UNWELL, 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 aquatic organisms, respect an unsprayed buffer zone of 10 metres to surface water bodies.  
Extreme care must be taken to avoid spray drift onto non-crop plants outside of the target area.

### Storage and Disposal

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.

KEEP OUT OF REACH OF CHILDREN.

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

STORE LOCKED UP.

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

### READ ALL INSTRUCTIONS CAREFULLY BEFORE USE

| Crop  | Max. single dose (L/ha) | Max. no. of applications | Max. total dose (L/ha) | Latest time of application   |
|---|-------------------------|--------------------------|------------------------|--|
| Potatoes (ware crops)<br>Potatoes (seed crops)  | 3.0                     | 1 per crop               | 3.0                    | After furrow formation, no later than one week pre-appearance of potato sprout |
| Peas (combining)<br>Peas (vining)<br>Beans (French)<br>Beans (navy)<br>Beans (runner)<br>Beans (broad)<br>Field beans | 3.0                     | 1 per crop               | 3.0                    | After sowing and before germination <i>See note.</i>                           |

*Note* : If Clayton Klondike is used more than one week after germination of the crop, and environmental conditions are unfavourable (high humidity, low temperature), crop damage may occur.

### 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.**

Clayton Klondike is a pre-emergence herbicide containing aclonifen which is a diphenylether group herbicide for the control of annual broad-leaved weeds and some grass weeds in potatoes, peas, and beans.

Following normal drilling / planting, it is important to ensure the seed is well covered. The soil surface should be evenly covered with the product as the effectiveness of Clayton Klondike will be reduced if there is an uneven spread on the soil surface. Ensure that the seedbed is well prepared and sprayed appropriately.

Clayton Klondike enters weeds through the cotyledons or the coleoptile (seedlings). Whilst it does not stop the weed seed germination, it can affect sprouting weeds to a certain extent depending on weed seed health and speed of growth as well as exposure to this herbicide.

Typical symptoms of Clayton Klondike effectiveness are intensive colours and chlorosis in the tissues of young, emerging sprouts and shoots. Weeds will then stop growing.

Soil moisture and temperature at the time of use of Clayton Klondike is not important as it does not enter weed plants through their roots. Clayton Klondike remains active for 2-3 months.

### RESTRICTIONS

DO NOT disrupt the soil surface after application as this will reduce the level weed control provided.

To prevent damage, extreme care must be taken to avoid spray drift onto neighbouring crops.

### HERBICIDE RESISTANCE MANAGEMENT

When herbicides with the same mode of action are used repeatedly over several years in the same field, selection of resistant biotypes can take place. These can propagate and may become dominating. A weed species is considered to be resistant to a herbicide if it survives a correctly applied treatment at the recommended dose.

A strategy for preventing and managing such resistance should be adopted. This should include integrating herbicides with a programme of cultural control measures.

Guidelines have been produced by the Weed Resistance Action Group and copies are available from Teagasc, your supplier or crop adviser.

## WEEDS CONTROLLED

Clayton Klondike is absorbed primarily through the shoots of emerging seedlings growing through the herbicide layer applied pre-emergence. Susceptible weeds will become chlorotic leading ultimately to death.

| Weed Susceptibility    | 2L/ha | 3L/ha |
|------------------------|-------|-------|
| Annual meadow-grass    | S     | S     |
| Barnyard grass         | -     | MS    |
| Black bindweed         | -     | MS    |
| Black nightshade       | -     | MS    |
| Cleavers               | MS    | S     |
| Common chickweed       | S     | S     |
| Fat-hen                | S     | S     |
| Field pansy            | S     | S     |
| Henbit deadnettle      | S     | S     |
| Knot grass             | -     | S     |
| Pale persicaria        | S     | S     |
| Red deadnettle         | S     | S     |
| Redshank               | -     | S     |
| Scented mayweed        | S     | S     |
| Shaggy soldier         | -     | S     |
| Shepherd's purse       | S     | S     |
| Volunteer oilseed rape | S     | S     |

MS - Moderately susceptible S - Susceptible

Broad-leaved weeds growing from established rootstocks will not be controlled by Clayton Klondike. Application to a fine, firm seedbed will optimise efficacy. Efficacy will be lowered if Clayton Klondike is made to cloddy seedbeds.

After pre-emergence application do not disrupt the herbicide layer as any form of disruption of the soil surface will reduce the level of weed control obtained.

## CROP SPECIFIC INFORMATION

Apply via a horizontal boom sprayer, in 200 to 300 litres of water per hectare as a **MEDIUM** spray (BCPC category).

### Potatoes

Clayton Klondike may be used on all commercial varieties of potatoes.

**Rate of Use.** Apply Clayton Klondike at a rate of 2.0 to 3.0 L/ha of product.

**Timing.** Application must be pre-emergence of the crop and weeds.

Cultivations should produce a soil tilth that requires no further improvement after planting. Ridges should be well rounded with few clods.

Apply Clayton Klondike evenly overall to both sides of potato ridges. Ensure that application is made before crop emergence. Cultivation after spraying will encourage weed germination and reduce the residual activity of Clayton Klondike. The residual activity of Clayton Klondike may be reduced in mineral soils with a high organic matter content or in peaty / organic soils

Only one application of Clayton Klondike is permitted per crop.

### Peas and beans

**Rate of Use.** Apply Clayton Klondike at a rate of 2.0 to 3.0 L/ha of product.

**Timing.** Application should be made immediately after sowing and before germination of the peas or beans.

**Note:** Crop damage may occur if Clayton Klondike is used more than one week after germination of the crop, and environmental conditions are unfavourable (high humidity, low temperature).

Only one application of Clayton Klondike is permitted per crop.

## FOLLOWING CROPS and CROP FAILURE

In the event of crop failure for any reason, if the soil is cultivated to a depth of 10cm then the following crops may be sown 3 weeks after using Clayton Klondike :-spring and winter oilseed rape, spring and winter barley, spring and winter wheat, spring and winter triticale, rye, sugar beet, white mustard, sunflower, maize, peas, beans or soya beans.

There are no restrictions on following crops in the normal rotation, provided the soil is cultivated to a depth of 10cm before sowing

**MIXING**

Shake the container well before use. Half fill the spray tank with clean water, begin agitation and add the required amount of Clayton Klondike.

Wash out the container and add the washings to the spray solution, before topping up with clean water.

Continue agitation until spraying is completed.

Do not leave the sprayer filled with the spray solution standing for long periods.

Wash out the sprayer thoroughly after use, using a wetting agent or proprietary tank cleaner.

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