

CLONARD

A suspension concentrate formulation containing 600 g/L aclonifen.

A pre-emergence herbicide for the control of annual broad-leaved weeds and some grass weeds in potatoes, peas and beans

For use only as a horticultural herbicide

5 Litres e

Safety information.		UFI : WOKY-T1JG-K00... 0F9R	
A suspension concentrate formulation containing 600 g/L aclonifen.			
	Warning Suspected of causing cancer. Contains aclonifen and 1,1-dimethyl-2-thiothiazolidin-3-one. May produce an allergic reaction. Very toxic to aquatic life with long-lasting effects. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. IF exposed or concerned: Get medical advice/attention. Skin locked up. Avoid release to the environment. Collect spillage. 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.		
		To avoid risks to human health and the environment, comply with the instructions for use.	
PCS 06798			

For Professional Use Only

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. In the event of an emergency, call the **National Poisons Information Centre, Beaumont Hospital: 01-8092166 or 01 8379964**

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.
 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) 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) Peas (vining) Beans (French) Beans (navy) Beans (runner) Beans (broad) Field beans	3.0	1 per crop	3.0	After sowing and before germination†

**PROTECT FROM FROST
SHAKE THOROUGHLY BEFORE POURING**

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

UN3082

Batch number:

DIRECTIONS FOR USE OF CLAYTON CLONARD

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 Clonard is a diphenylether pre-emergence herbicide for the control of annual broad-leaved weeds and some grass weeds in potatoes, peas and beans.

Clayton Clonard is used pre-emergence of the crops. The surface of the soil should be evenly covered with the product, where its active substance (aclonifen) forms an even film. Clumps on the surface of the soil significantly reduce the effectiveness of the product. To achieve the greatest effect the soil and furrows must be well prepared and sprayed with the herbicide appropriately.

Clayton Clonard gets into weeds through the cotyledons or the coleoptile (seedlings). **Clayton Clonard** does not stop the germination of weeds, but it affects sprouting weeds to a certain extent, which depends on the internal resources of the seeds, speed of growth of the weeds and volume of absorbed active substance.

Typical symptoms of the **Clayton Clonard** effect are as follows: intensive colours and chlorosis appear on the tissues of young, emerging sprouts and shoots. Later, weeds stop growing and perish. **Clayton Clonard** does not get into plants through their roots, so it is not absolutely dependent on soil moisture and temperature at the time of its use. **Clayton Clonard** remains active for 2-3 months.

After pre-emergence application do not disrupt the herbicide layer. Any form of mechanical cultivation or disruption of the soil surface by any other method will reduce the level of weed control provided. Follow normal drilling/planting and ensure the seed is well covered.

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 distributor, crop adviser or product manufacturer.

WEEDS CONTROLLED
Clayton Clonard is absorbed primarily through the shoot of emerging seedlings as they grow through the layer of herbicide applied pre-emergence to the soil surface. Susceptible weeds can emerge, but these will become chlorotic, their growth will be retarded leading ultimately to death.

After pre-emergence application do not disrupt the herbicide layer. Any form of mechanical cultivation or disruption of the soil surface by any other method will reduce the level of weed control provided.

The following annual weeds will be controlled by a pre-emergence application of **Clayton Clonard**.

	Susceptibility at 2 L/ha	Susceptibility at 3 L/ha
Annual meadow-grass	S	-
Barnyard grass	-	MS
Black bindweed	-	MS
Black nightshade	-	MS
Cleavers	MS	-
Common chickweed	S	-
Fat-hen	-	-
Field pansy	S	-
Shaggy soldier	-	S
Herbit dead-nettle	S	-
Knotgrass	-	S
Pale pasciaria	S	-
Red dead-nettle	S	-
Red-rank	-	-
Spotted rayweed	S	-
Shepherd's purse	S	-
Volunteer oilseed rape	S	-

MS - Moderately susceptible - Susceptible

Established broad-leaved weeds growing from rootstocks will not be controlled by **Clayton Clonard**. As for other residual herbicides, application to a fine, firm seedbed will optimize efficacy. Efficacy will be reduced where application is made to cloddy seedbeds or where there is disruption of the soil surface after application.

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 Clonard may be used on all commercial varieties of potatoes.

Apply **Clayton Clonard** at a rate of 2.0-3.0 litres of product per hectare.

Application must be pre-emergence of the crop and weeds. Ridges should be well rounded with few clods.

Cultivations should produce a soil tith that requires no further improvement after planting.

Cultivation after spraying will encourage weed germination and reduce the residual activity of **Clayton Clonard**.

On mineral soils with a high organic matter content and on peaty or organic soils the residual activity of **Clayton Clonard** may be reduced.

Ensure **Clayton Clonard** is applied evenly overall to both sides of potato ridges. Care must be taken to ensure that application takes place before crop emergence.

Only one application of **Clayton Clonard** should be made to the crop.

Peas and beans

Apply **Clayton Clonard** at a rate of 2.0-3.0 litres of product per hectare.

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

Only one application of **Clayton Clonard** should be made to the crop.

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

MIXING

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

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.

FOLLOWING CROPS and CROP FAILURE

There are no restrictions on following crops in the normal rotation, provided the soil is cultivated to a depth of 10cm before sowing. In the event of crop failure for any reason, 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 may be sown 3 weeks after using **Clayton Clonard**, provided the soil is cultivated to a depth of 10cm before sowing.

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.