FIRESTARTER

MAPP 18422



CONTAINS 400 G/L FLUFENACET AND 100 G/L DIFLUFENICAN AS A SUSPENSION CONCENTRATE. FIRESTARTER IS A HERBICIDE MIXTURE FOR CONTROL OF ANNUAL GRASS AND BROAD ICA 'SD WEEDS PRE AND POST-EMERGENCE IN WINTER WHEAT AND WINTER BARLEY.



0.6 L/ha

HARMFUL IF SWALLOWED.

MAY CAUSE DAMAGE TO ORGANS (NERVOUS SYSTEM) THROUGH PROLONGED OR REPEATED EXPOSURE IF SWALLOWED.

VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING **EFFECTS**

Wear protective eye protection / face protection.

f exposed or concerned, please call a POISON CENTRE or doctor/physician.

Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site except for empty, clean containers which can be disposed of as non-hazardous waste.

Contains flufenacet. May produce an allergic reaction.

Do not contaminate water with the product of its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads). Contains flufenacet. May produce an allergic reaction

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

IMPORTANT INFORMATION: FOR PROFESSIONAL USE ONLY AS AN AGRICULTURAL HERBICIDE Crops and situations: Maximum individual dose Maximum number of treatments Latest timing of application

Litres Product/ha)

Wheat (winter)

ne per crop

Before 3rd tiller stage (GS23) and before

Barley (winter)

One per crop

31st December in year of planting Before 4th tiller stage (GS24) and before 31st December in year of planting

READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTANT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS



This product label is compliant with the CPA Voluntary Initiative (VI) guidance

APPROVAL HOLDER AND MARKETING COMPANY: Life Scientific Ltd, Block 4, Belfield Office Park, Beech Hill Road, Dublin 4, Ireland, Tel: +353 1 2832024 TRANSPORT INFORMATION: UN No.: 3082 Class: 9 Packaging Group: ||| Marine Pollutant

THE CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH (COSHH) REGULATIONS MAY APPLY TO THE USE OF THIS PRODUCT AT WORK. FOR 24 HOUR EMERGENCY INFORMATION CONTACT NHS 11

LARFI VERSION FIRESTA/UK/V1

MADE IN FU BATCH NO: SEE PACKAGING **NET CONTENTS: 5 LITRES**



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(Litres Product/ha)

reatments

Wheat (winter)

0.61/ha

One per crop

Before 3rd tiller stage (GS23) and before 31st December in year of planting

Barley (winter)

0.6 L/ha

One per crop

Before 4th tiller stage (GS24) and before 31st December in year of planting

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LABEL VERSION FIRESTA/LIK/V1

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MADE IN FU BATCH NO: SEE PACKAGING NET CONTENTS: 5 LITRES

SAFETY PRECAUTIONS

Operator Protection

Engineering control of operator exposure must be used where reasonably practical in addition to the following personal protective equipment

WEAR SUITABLE PROTECTIVE GLOVES when handling the concentrate or handling contaminated surfaces

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

WHEN LISING DO NOT EAT DRINK OR SMOKE

IF YOU FEEL UNWELL, seek medical advice immediately and show this container or label where possible.

Environmental Protection

DO NOT CONTAMINATE SURFACE WATER OR DITCHES with 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 to surface ater bodies in line with LERAP requirement

Extreme care must be taken to avoid spray drift on to non-crop plants outside the target area



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, unless a Local Environment Risk Assessment for Pesticides (LERAP) permits a narrower buffer zone, or within 1m of the top of a ditch which is dry at the time of application. Aim spray away from water

This product qualifies for inclusion with the Local Environment Risk assessment for Pesticides Scheme (LERAPS). Before each application from a horizontal boom sprayer, either a LERAP must be carried out in accordance with the CRD's published guidance or the statutory buffer zone must be maintained. The results of the LERAP must be recorded and kept available for inspection for three years

Storage and Disposal KEEP OUT OF REACH OF CHILDREN

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS

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

DIRECTIONS FOR USE

NOTE: These Directions for Use form part of the Approved Product label and must be read before using the product.

FIRESTARTER is a contact and residual herbicide mixture for broad-leaved and annual grass weed control in winter wheat and winter barley. It may be used on all varieties of winter wheat and winter barley and can be applied pre or post-emergence of weeds and crop. Effective weed

control requires that all surface trash and straw is buried during seedbed preparation and when applied pre-emergence of the crop the seed must be covered by at least 32mm of settled soil. After application the soil surface should remain undisturbed so do not harrow or roll and do not incorporate the herbicide. Loose or cloddy seedbeds must be consolidated otherwise crop damage may result due to inadequate seed cover. Other points to consider for safe and effective use include:

- Avoid treatment of crops suffering from stress caused by pest or disease. attack, drought or water-logging, grazing, nutrient deficiency, compacted soils or any other factor that reduces crop growth.
- . Do not treat crops grown on waterlogged soils or on soil prone to waterlogging
- . Do not treat undersown crops or those that will be undersown.
- Do not use on sands, very light soils (ADAS 85 classification) or on very stony or gravelly soils due to the risk of crop injury.
- . Do not use on soils with more than 10% organic matter content
- . Do not treat broadcast seed or shallow drilled crops since the seed may be damaged

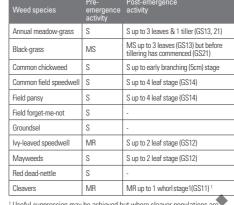
If very wet weather or sharp frosts occur before or after application, some crops may suffer from a loss of vigour or colour, particularly on light free draining soils or where soils become waterloaged. These effects are usually transitory in nature and the final yield of the crop is not normally

Timing: One application of FIRESTARTER should be applied to winter wheat or winter barley before 31st December in the year of drilling and wheat should be treated before the 3rd tiller stage (GS23) while winter barley should be treated before the 4th tiller stage (GS24).

Application: A dose of 0.6 L/ha FIRESTARTER should be applied as a MEDIUM spray as defined by BCPC in a water volume of 200 - 400 L/ha Avoid overlapping spray swaths. To prevent damage, care must be taken to avoid drift onto neighbouring crops

Weed Control: The speed of activity is dependent upon the prevailing conditions in the treated field. Some soil moisture is required to activate the herbicide and light rain within 7 days of application gives the best control. If the soil is dry then the residual activity will be limited and cold weather will delay the appearance of herbicide effects. In the presence of adequate soil moisture FIRESTARTER will control the following weeds

(See following page):



Useful suppression may be achieved but where cleaver populations are significant a cleaver-specific follow-up treatment is likely to be ne

S = Susceptible; MS = Moderately Susceptible; MR = Moderately

NOTE: broad-leaved weeds growing from rootstocks and pe isses will not be controlled

FIRESTARTER is classified as having the HRAC m K3'. Weeds which are subject to repeated expo of action are at risk of developing resistance devising an herbicide programme, ind modes of action within crop programme and, where possible, include physical meth trol. Strains of annual grasses (e.g. black-gra talian rye-grass) have developed resistance to herbic which may o poor control. Strains nd Italian rye-grass) have of annual grass (e.g. black-gr ance to herbi developed re lead to poor control. A strategy for ging such resistance should be adopted the Weed Resistance Action Group and Guidelines h roduced copies are available from the H A, CPA, your distributor, crop adv product manufacturer. To redu the risk of the development of resis

- Do not use as a stand-alone treatment for black-grass contr nce or tank-mix with other herbicides that ss and which work by a different mode
- and if n nvestigate any pa apparent, consid

Resistant; R = Resistant; - = no information.

RESISTANCE MANAGEMENT

- r strategy across the whole rotation on FIRESTARTER for grass or <u>bro</u>ad e crops. Use effective he of action
- on surviving plants

Shake the container well before use. Before spraying it is important to check all hoses, filters and nozzles, and to ensure that the sprayer is clean and correctly set to give an even application at the correct volume. Half fill the spray tank with clean water. Begin agitation and add the required quantity of FIRESTARTER. Add the remainder of the water and agitate the mixture thoroughly before and during spraying. A water volume of 200-400 l/ha is recommended with the higher volumes within this range used where weed and crop cover is dense to ensure good coverage of the target weeds. Do not overlap spray swaths. Do not leave the sprayer standing for long periods when filled with the spray solution. After use, wash out the sprayer thoroughly with a minimum of two rinses using a wetting agent or a proprietary tank cleaner.

FOLLOWING CROPS after normal harvest or crop failureFollowing a cereal crop treated with FIRESTARTER the soil should be to at least 15 cm before planting oilseed rape, field s sugar beet, peas or edible Brassicae to disperse any beans, carrots ut the soil. Wheat, barley and potatoes can be planted ultivations

the even nt of crop failure, the soil should be ploughed or cultivated to at n and only wheat, barley and potatoes can be sown. A period of 2 weeks should elapse after application before wheat or barley

products containing diflufenican are applied to successive cereal crops, the level of diflufenican can build up in the soil. Ploughing with complete inversion in the furrow is essential before any non-cereal on other than potatoes is planted. Particularly sensitive crops such as onions, leeks, other alliums and clover may still suffer some damage from diffusenican residues. Where the land is to be rented out to growers of these crops it is advisable to avoid use of diffufenican for a few years before the field is hired out.

CONDITIONS OF SUPPLY

All goods supplied by the company are of good quality and we believe them to be fit for purpose. However, 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.

SAFETY PRECAUTIONS

Operator Protection

standard of protection.

Engineering control of operator exposure must be used where reasonably practical in addition to the following personal protective equipment: WEAR SUITABLE PROTECTIVE GLOVES when handling the concentrate or

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

WHEN USING DO NOT EAT, DRINK OR SMOKE.

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Environmental Protection

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Storage and Disposal

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- ng from stress caused by pe attack ht or water-loc grazing, nutrient deficiency, co ces crop growth. factor that re
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Weed Control: The speed of activity is dependent upon the prevailing conditions in the treated field. Some soil moisture is required to activate the herbicide and light rain within 7 days of application gives the best control. If the soil is dry then the residual activity will be limited and cold weather will delay the appearance of herbicide effects. In the presence of adequate soil moisture FIRESTARTER will control the following weeds

(See following page):

| Weed species | Pre- emergence activity | Post-emergence activity |
|------------------------|--|---|
| Annual meadow-grass | S | S up to 3 leaves & 1 tiller (GS13, 21) |
| Black-grass | MS | MS up to 3 leaves (GS13) but before tillering has commenced (GS21) |
| Common chickweed | S | S up to early branching (5cm) stage |
| Common field speedwell | S | S up to 4 leaf stage (GS14) |
| Field pansy | S | S up to 4 leaf stage (GS14) |
| Field forget-me-not | S | - |
| Groundsel | S | - |
| lvy-leaved speedwell | MR | S up to 2 leaf stage (GS12) |
| Mayweeds | S | S up to 2 leaf stage (GS12) |
| Red dead-nettle | S | - |
| Cleavers | MR | MR up to 1 whorl stage1(GS11) 1 |
| | Annual meadow-grass Blackgress Common chickweed Common field speedwell Field pansy Field forget-me-not Groundsel Ivy-leaved speedwell Mayweeds Red dead-nettle | Manual needow-grass S Backgress MS Common chickweed S Common field speedwell S Field pansy S Field forget-me-not S Groundsel S Ivy-leaved speedwell MR Mayweeds S Red dead-nettle S |

1 Useful suppression may be achieved but where cleaver populations are significant a cleaver-specific follow-up treatment is likely to be necessary.

S = Susceptible: MS = Moderately Susceptible: MR = Moderately Resistant; R = Resistant; - = no information.

NOTE: broad-leaved weeds growing from rootstocks and perennial grasses will not be controlled

RESISTANCE MANAGEMENT

FIRESTARTER is classified as having the HRAC mode of action code 'F1 + K3'. Weeds which are subject to repeated exposure to the same modes of action are at risk of developing resistance to these herbicides. When devising an herbicide programme, incorporate herbicides with different modes of action within crop programmes and throughout crop rotations and, where possible, include physical methods of weed control. Strains of annual grasses (e.g., black-grass, wild oats and Italian rye-grass) have developed resistance to herbicides which may lead to poor control. Strains of annual grasses (e.g., black-grass, wild oats 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 adviser or product manufacturer. To reduce the risk of the development of resistance

- Do not use as a stand-alone treatment for black-grass control but use in sequence or tank-mix with other herbicides that are effective against black-grass and which work by a different mode of action.
- · Consider your strategy across the whole rotation in treated fields and do not rely on FIRESTARTER for grass or broad-leaved weed control in successive crops. Use effective herbicides with an alternative mode
- . Investigate any patches of poor control and if no obvious cause is apparent, consider appropriate resistance testing on surviving plants.

MIXING and SPRAYING

Shake the container well before use. Before spraying it is important to check all hoses, filters and nozzles, and to ensure that the sprayer is clean and correctly set to give an even application at the correct volume. Half fill the spray tank with clean water. Begin agitation and add the required quantity of FIRESTARTER. Add the remainder of the water and agitate the mixture thoroughly before and during spraying. A water volume of 200-400 l/ha is recommended with the higher volumes within this range used where weed and crop cover is dense to ensure good coverage of the target weeds. Do not overlap spray swaths. Do not leave the sprayer standing for long periods when filled with the spray solution. After use, wash out the sprayer thoroughly with a minimum of two rinses using a wetting agent or a proprietary tank cleaner.

FOLLOWING CROPS after normal harvest or crop failure

Following a cereal crop treated with FIRESTARTER the soil should be ploughed or cultivated to at least 15 cm before planting oilseed rape, field beans, carrots, onions sugar beet, peas or edible Brassicae to disperse any residues throughout the soil. Wheat, barley and potatoes can be planted with no special cultivations

In the event of crop failure, the soil should be ploughed or cultivated to at least 15cm and only wheat, barley and potatoes can be sown. A period of at least 12 weeks should elapse after application before wheat or barley

Where products containing diffusenican are applied to successive cereal crops, the level of diflufenican can build up in the soil. Ploughing with complete inversion in the furrow is essential before any non-cereal crop other than potatoes is planted. Particularly sensitive crops such as onions, leeks, other alliums and clover may still suffer some damage from diflufenican residues. Where the land is to be rented out to growers of these crops it is advisable to avoid use of diflufenican for a few years before the field is hired out

CONDITIONS OF SUPPLY

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