

CAUTIONKEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING**MESOSULFURON 30 OD**

Herbicide

ACTIVE CONSTITUENT: 30 g/L MESOSULFURON-METHYL
CROP SAFENER: 90 g/L MEFENPYR-DIETHYL**GROUP B HERBICIDE**

For the post-emergent control of wild oats and annual phalaris, and suppression of brome grass, barley grass and annual ryegrass in wheat.

IMPORTANT: READ THIS LEAFLET BEFORE USING THIS PRODUCT**4 FARMERS AUSTRALIA PTY LTD**

A.B.N. 51 160 092 428

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Batch Number: Date of Manufacture:

APVMA Approval No: 89109/123635

In a Transport Emergency
Dial 000
Police or Fire BrigadeSpecial Poisons Advice:
13 11 26**RESTRAINTS**

DO NOT use if rainfall or irrigation is to occur with 8 hours of application **Undersown Clovers and Medics**

DO NOT apply to crops undersown with legumes.

DO NOT apply to wheat before the 3-leaf stage (Z13),

DO NOT apply without surfactant/wetting agent, as detailed under 'Use of Surfactant/Wetting Agent' in the General Instructions

DO NOT apply to paddocks where there is a high risk of weeds resistant to Group B herbicides.

DO NOT apply to the wheat variety Brockton.

DIRECTIONS FOR USE**Note:** 4Farmers Mesosulfuron 30 OD is a sulfonylurea herbicide.

4Farmers Mesosulfuron 30 OD will substantially reduce the growth of many weeds rather than give complete plant kill

Refer to the critical comments in the Directions for Use Table below, for directions on specific weeds

| CROP | WEED | WEED STAGE | RATE/ha | CRITICAL COMMENTS |
|-------|--|---|---------|--|
| Wheat | Brome grass (great brome, <i>Bromus diandrus</i>) | 1 leaf to 3 leaf, 1 tiller (Z11 to Z13, 21) | 330mL | Suppression of brome grass. Will substantially reduce the growth of brome grass and its ability to compete with the crop and will reduce seed set but may not give a significant reduction in plant numbers. Apply generally within 4 to 7 weeks after sowing. Apply when the majority of brome grass is at the 1 leaf to 3 leaf, 1 tiller stage (Z11 to Z13, 21). Efficacy on larger plants that may have emerged before the crop may be poor. Do not use for suppression of dense brome grass populations (>150 plants/m ²). Suppression of brome grass may be improved with the use of Hasten at 1% v/v. Refer to 'Use of Surfactant/Wetting Agent' under General Instructions. |
| | Annual ryegrass (<i>Lolium rigidum</i>) | 1 leaf to 3 leaf, 1 tiller (Z11 to Z13, 21) | | Suppression of annual ryegrass. Will substantially reduce the growth of annual ryegrass and its ability to compete with the crop and will reduce seed set but may not give a significant reduction in plant numbers. Apply generally within 4 to 7 weeks after sowing. Do not use for control of dense annual ryegrass populations (>200 plants/m ²). |
| | Barley grass (<i>Hordeum leporinum</i>) | 1 to 4 leaf, 2 tillers (Z11 to Z14, 22) | | Suppression of barley grass. Will substantially reduce the growth of barley grass and its ability to compete with the crop and will reduce seed set but may not give a significant reduction in plant numbers. Apply generally within 4 to 7 weeks after sowing. Apply when the majority of barley grass is less than the early tillering stage (Z14, 22). Efficacy on larger plants may be poor. Suppression of barley grass may be improved with the use of Hasten at 1% v/v. Refer to 'Use of Surfactant / Wetting agent' under General Instructions. |
| | Wild oats (<i>Avena</i> spp.) | 1 leaf to 3 leaf, 1 tiller (Z11 to Z13, 21) | | Apply general within 4 to 7 weeks after sowing. Do not use for control of dense wild oat populations (>150 plants/m ²). Application to wild oats at more advanced growth stages or to dense populations will result in suppression of wild oats only. Growth of wild oats and the ability to compete with the crop will be reduced but plants numbers may not be significantly reduced. |
| | Annual phalaris, paradoxa grass (<i>Phalaris paradoxa</i> only) | 1 leaf to 3 leaf, 1 tiller (Z11 to Z13, 21) | | Apply generally within 4 to 7 weeks after sowing. Do not use for control of dense phalaris populations (>300 plants/m ²). Other phalaris species may not be adequately controlled with 4Farmers Mesosulfuron OD. |

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.**WITHHOLDING PERIODS****Harvest: DO NOT HARVEST FOR 8 WEEKS AFTER APPLICATION****Grazing/Stockfood: DO NOT GRAZE OR CUT FOR STOCKFOOD FOR 4 WEEKS AFTER APPLICATION****GENERAL INSTRUCTIONS**

4Farmers Mesosulfuron 30 OD is a selective sulfonylurea herbicide. It is predominantly a foliar herbicide with less activity via the soil. 4Farmers Mesosulfuron 30 OD will not reliably control weeds that emerge after spraying. Results are best under good growing conditions and application to weeds or crop under stress should be avoided.

Use of Surfactant / Wetting Agent

It is recommended that 4Farmers Mesosulfuron 30 OD be applied with the addition of BS1000® bio-degradable surfactant at 0.25% v/v or either of the crop oil concentrates, Hasten or Rocket®, at 1% v/v. When applying 4Farmers Mesosulfuron 30 OD for suppression of brome grass or barley grass, only use Hasten or Rocket. The suitability of other non-ionic wetting agents or crop oil concentrates should be confirmed with 4FARMERS AUSTRALIA prior to mixing with 4Farmers Mesosulfuron 30 OD.

Note: Crop effects (discoloration and slowed development) may be increased with the use of Hasten or Rocket spray adjuvants, however under normal growing conditions this should not result in any yield loss.**Crop Safety**

- Do not apply to any crop other than wheat.
- Do not apply to the wheat variety Brookton.
- Westonia wheat may show reduced tolerance to 4Farmers Mesosulfuron 30 OD in some situations, especially during a dry finish to the season. Ensure adequate crop nutrition and that crop is at least the 3 leaf (Z13) stage at application.
- Wheat should be at the 3 leaf stage (Z13 growth stage), or more advanced, before application of 4Farmers Mesosulfuron 30 OD.
- Do not apply to wheat that is physically damaged (e.g. by hail, wind, insect attack).
- Some crop yellowing and growth retardation may occur within 5 weeks of application. Growth retardation will be increased if the crop is affected by root disease (e.g. cereal cyst nematode, rhizoctonia, take-all (haydie)), nutritional stress, waterlogging, drought stress, excessively cold conditions or previous herbicide treatment.

- Application to very dry sandy soils followed by soaking rainfall may cause significant crop effects.
- Crop damage will be increased in highly alkaline soils (soil pH > 8.5 as determined by soil in water suspension).
- Do not apply to crops not actively growing due to cold and wet conditions or drought stress.
- Do not overlap when spraying or double spray corners.

Crop Rotation Recommendations

Minimum re-cropping intervals apply for all crops following 4Farmers Mesosulfuron 30 OD application.

The application of a Group B herbicide in the crop following 4Farmers Mesosulfuron 30 OD use may result in increased crop effects. Consult the manufacturer of 4Farmers Mesosulfuron 30 OD for advice in these situations.

Rainfall of less than 250mm following 4Farmers Mesosulfuron 30 OD use will result in extended re-cropping intervals for winter crops sown the following season.

Patchy rain, with extended dry periods may also result in extended re-cropping intervals, even when rainfall exceeds 250mm. If in doubt, seek specialist advice.

Rainfall of less than 500mm following 4Farmers Mesosulfuron 30 OD use may result in extended re-cropping intervals for summer crops sown in the following year.

Use on soils with a pH greater than 8.5 (soil in water) has not been extensively tested and is not recommended. For advice on crops not listed below, contact your local reseller or 4Farmers Australia Pty Ltd representative.

| CROP | MINIMUM RECROPPING INTERVAL | NOTES/COMMENTS |
|---------------------|-----------------------------|----------------|
| Winter crops | | |
| wheat | 1 day | |
| barley | 9 months | |

| CROP | MINIMUM RECROPPING INTERVAL | NOTES/COMMENTS |
|---------------------|-----------------------------|--|
| oats | 9 months | |
| triticale | 9 months | |
| faba beans | 11 months | |
| canola | 9 months | |
| chickpeas | 9 months | |
| lentils | 11 months | |
| Lucerne, sub clover | 21 months | In soils of pH > 8.0 (1:5 water suspension) and under low rainfall conditions some slight discoloration may occur, however establishment and growth through the season is generally not affected |
| | 9months | In soils of pH < 8.0 (1:5 water suspension) and under conditions where good seasonal rainfall has occurred between spraying and sowing (i. e more than 250mm) |
| lupins | 9 months | |
| medic | 21 months | |
| peas | 9 months | |
| vetch | 9 months | |
| Summer crops | | |
| cotton | 12months | |
| maize | 12 months | |
| mungbeans | 12 months | |
| sorghum | 12 months | |
| soybeans | 12 months | |
| sunflowers | 12 months | |

Application

Ensure that complete and even spray coverage of all weeds is achieved.

Mixing

Half fill the spray tank with water, and then with agitators in motion, add the correct amount of 4Farmers Mesosulfuron 30 OD directly into the spray tank. Add other relevant compatible herbicides, then wetting agent or crop oil as recommended. Complete filling the tank with agitators in motion. Agitation must continue before and during spraying.

Equipment

Ground Sprayers

Standard boom sprayers only are recommended and must be fitted with by-pass or mechanical agitation. It is recommended that 50 to 80L water/ha is applied with a droplet size of 200 to 300 microns (application as a FINE/MEDIUM spray as defined by ASAE S572 Standard). The use of flat fan nozzles is recommended. Nozzles creating coarse or very coarse spray qualities have not been thoroughly investigated at this time and cannot be recommended. Contact your 4Farmers Australia representative for advice before applying this product through such nozzles.

Aircraft

Compatibility

| MIX PARTNER | GENERAL NOTES/ COMMENTS |
|--|--|
| Zinc--based foliar fertilisers | Must not be mixed with 4Farmers Mesosulfuron 30 OD as a loss of efficacy can occur. |
| Clopyralid 300 | 4Farmers Mesosulfuron 30 OD may be mixed with Clopyralid 300 Use BS1000 at 0.25% v/v or a crop oil concentrate (see surfactant/wetting agent recommendations) at 1% v/v as recommended for the weeds being controlled.. |
| Chlorpyrifos- based formulations | Must not be mixed with 4Farmers Mesosulfuron 30 OD as unacceptable crop effects may occur. |
| Dimethoate (maximum of 500mL/ha) | Use BS1000 at 0.25% v/v or a crop oil concentrate (see surfactant/wetting agent recommendations) at 1% v/v as recommended for the weeds being controlled. |
| 4Farmers LV MCPA/Diflufenican Herbicide (maximum of 500 mL/ha) | BS1000 at 0.25% v/v must be used when mixing 4Farmers LV MCPA/Diflufenican Herbicide Do not apply with a crop oil as excessive crop damage may occur. If spraying brome or barley grass more reliable suppression will be obtained if 4Farmers Mesosulfuron 30 OD is applied alone and a crop oil concentrate (see surfactant/wetting agent recommendations) is used. |
| 4Farmers Bromoxynil Diflufenican Herbicide (maximum of 500mL/ha) | Grass weed control may be adversely affected and the level of chlorosis and slow crop growth may be increased. BS1000 at 0.25% v/v must be used when mixing 4Farmers Bromoxynil Diflufenican Herbicide. Do not apply with a crop oil as excessive crop damage may occur. If spraying brome or barley grass more reliable suppression will be obtained if 4Farmers Mesosulfuron 30 OD is applied alone and a crop oil concentrate (see surfactant/wetting agent recommendations) is used. |
| 4Farmers Bromox MA (maximum of 1.0L/ha) | 4Farmers Mesosulfuron 30 OD may be mixed with 4Farmers Bromox MA herbicide. Use BS1000 at 0.25% v/v or a crop oilconcentrate (see surfactant/wetting agent recommendations) at 1% v/v as recommended for the weeds being controlled. |
| L. V. E. MCPA (maximum of 500 mL/ha) | 4Farmers Mesosulfuron 30 OD may be mixed with L.V.E. MCPA herbicide. Use BS1000 at 0.25% v/v or a crop oil concentrate(See surfactant/wetting agent recommendations) at 1% v/v as recommended for the weeds being controlled. |
| Precept (maximum of 1.0L/ha) | 4Farmers Mesosulfuron 30 OD may be mixed with Precept herbicide. Use a crop oil concentrate as directed on the Precept label. Rates of Precept higher than 1.0L/ha have not been evaluated. Before mixing Precept at rates higher than 1.0L/ha consult 4Farmers Australia Pty Ltd. |
| other insecticide products | For advice on mixing consult 4Farmers Australia Pty Ltd. |

Note:

- **For advice on mixing with other products please contact your local 4Farmers Australia Pty Ltd representative.**
- **Do not mix 4Farmers Mesosulfuron 30 OD with more than one compatible product plus the appropriate adjuvant (BS1000 or a crop oil concentrate).**

RESISTANT WEEDS WARNING

GROUP B HERBICIDE

4Farmers Mesosulfuron 30 OD Selective Herbicide is a member of the Sulfonylurea group of herbicides and has the inhibitor of ALS mode of action. For weed resistance management 4Farmers Mesosulfuron 30 OD is a Group B herbicide. Some naturally-occurring weed biotypes resistant to 4Farmers Mesosulfuron 30 OD, and other Group B herbicides, may exist through normal genetic variability in any weed population. These resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds will not be controlled by 4Farmers Mesosulfuron 30 OD or other Group B herbicides. Do not rely exclusively on 4Farmers Mesosulfuron 30 OD for weed control. Use as part of an integrated weed management program involving herbicides with other modes of action and non- chemical methods of control. 4FARMERS Australia resistance management strategies are available from your local agricultural chemical supplier. Refer to these strategies for details of how to manage he build up of resistant weeds on your farm. Since occurrence of resistant weeds is difficult to detect prior to use 4FARMERS AUSTRALIA Pty. Ltd. accepts no liability for any losses that may result from the failure of 4Farmers Mesosulfuron 30 OD to control resistant weeds.

PRECAUTIONS

Re-entry Period

Do not allow entry into treated areas until the spray has dried. When prior entry is necessary and if exposure to the treated crop is likely, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves. Clothing must be laundered after each day's use.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Very toxic to aquatic plants and algae. DO NOT contaminate streams, rivers or watercourses with the chemical or used container.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

DO NOT apply under weather conditions, or from spraying equipment, that may cause spray to drift onto nearby susceptible plants/crops, cropping lands, pastures, watercourses or wetlands.

DO NOT apply within 3 metres of non-target vegetation or waterbodies.

STORAGE AND DISPOSAL

Store in closed, original container in a dry, cool well-ventilated area. DO NOT store for prolonged periods in direct sunlight.

The method of disposal of the container depends on the container type. Read the 'Storage and disposal' instructions on the label that is attached to the container

Non-recycled containers: 5L, 10L

Triple-rinse container for disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush, or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance

Do not apply 4Farmers Mesosulfuron 30 OD by aircraft.

Sprayer Clean Up

The sprayer must be decontaminated before being used to spray crops other than cereals. Ensure that the following operation is carried out in an area that is clear of waterways, desirable vegetation and tree roots, and preferably in an area where drainings can be contained.

1. Drain sprayer completely and wash out tank, boom and hoses with clean water.
2. Drain again.
3. Fill the tank with clean water and add 300ml of chlorine bleach (containing 4% chlorine) per 100L of water with agitation running.
4. Flush some bleach solution through booms and hoses and allow remainder to agitate in tank for 10 minutes.
5. Remove nozzles and filters and leave to soak in a bleach solution of 500mL per 10L of water while tank cleaning is in progress.
6. Drain tank and repeat the procedure of flushing with bleach solution.
7. Flush the tank, boom and hoses with clean water.