## POISON

KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING



# **PROSULFOCARB**

Herbicide

ACTIVE CONSTITUENT: 800 g/L PROSULFOCARB

GROUP HERBICIDE

For the control of Annual Ryegrass (Lolium rigidum) in Wheat and Barley as per the Directions for Use table.

# IMPORTANT: READ THIS LEAFLET **BEFORE USING THIS PRODUCT**

### **4 FARMERS AUSTRALIA PTY LTD**

A.B.N. 51 160 092 428

1 / 70 MCDOWELL STREET, WELSHPOOL, WA 6106 TEL: (08) 9356 3445 www.4farmers.com.au

Batch Number:

Date of Manufacture:

APVMA Approval No: 82536/124078

#### **DIRECTIONS FOR USE: ALL STATES**

#### **RESTRAINTS**

DO NOT apply more than 2.5 L/ha per single growing season.

DO NOT use in seeding/tillage systems that cannot ensure accurate seed placement and adequate spatial separation of seed and herbicide.

DO NOT apply to soils prone to waterlogging, sodic soils or soils affected by physical compaction.

DO NOT apply if heavy rains or storms that are likely to cause runoff are forecast within 2 days of application.

# **Mandatory No-Spray Zones**

DO NOT apply if there are aquatic and wetland areas including aquacultural ponds, within 20 metres downwind from the application area.

DO NOT apply if there is non-target vegetation within 10 metres downwind from the application area.

D-1-/

DO NOT apply by air.

Crop	Weeds Controlled	Rate/ ha	Critical Comments
Wheat, Barley	Annual Ryegrass (Lolium rigidum)	2.5 L	This product can be applied by the following methods:
			1. Apply pre-emergent and incorporate mechanically by sowing operation (IBS). Application should be made to a moist seedbed up to 7 days prior to sowing and sufficient rain to thoroughly wet the top 3 to 4cm of soil should occur within 10 days after spraying. Avoid soil throw into adjacent seeding rows or sites where furrow walls may collapse. Refer to crop tolerance, incorporation and tillage requirements under General Instructions.  2. Post sowing pre-emergence (PSPE). Apply to a moist seed bed. DO NOT apply to shallow sown crops. DO NOT apply if there is an anticipated heavy rainfall event.

Barley Annual Ryegrass (Lolium rigidum) (1 to 3 leaf growth stage)  The use as part o strategy t reduce ry to sustain Early pose the pryegrass Surviving	Critical Comments
still set s plants of profile ar planting h rainfall w is require weed sup DO NOT DO NOT this produ DO NOT stressed waterlogg conditions conditions conditions do NOT that has t period of logging a may be re DO NOT DO NOT	plants not controlled by a Prosulfocarb may be and uncompetitive but may eed. Apply only to ryegrass where the soil moisture and growing conditions since have been good. A follow-up ithin 14 days of application do achieve a high level of pression.  apply after Z25 (GS25).  apply to crops treated with uct IBS or PSPE.  apply to crops that are by any conditions such as ging, stressed due to dry any control to the scentributing to stress.  apply to Annual Ryegrass seen stressed due to either a marginal moisture or waters the level of weed control

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION

#### WITHHOLDING PERIODS

Wheat, Barley

Harvest: NOT REQUIRED WHEN USED AS DIRECTED

Grazing: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 10 WEEKS

AFTER APPLICATION

### **GENERAL INSTRUCTIONS**

4Farmers Prosulfocarb is a short residual, soil applied, pre-emergent herbicide that is absorbed by the roots and shoots (coleoptile) of germinating seedlings with inhibition of growth in the meristematic region. Foliar uptake is possible but of lower effect. Upstream translocation in the plant occurs but movement in the phloem is very unlikely. Best activity can be expected from applications before or shortly after the germination of target weeds.

Pre-emergent application - the product should be applied to a moist smooth seedbed

free of soil clods and emerged weeds. Product efficacy may be reduced by improper incorporation, high levels of crop or trash residues, stones or foreign matter and in areas of extremely high weed seed density such as header rows. For optimal efficacy and crop safety in barley and wheat avoid shallow seeding and ensure accurate seed placement that avoids placement of seed in the herbicide band. Avoid water repellent soils, soils subject to water logging or where furrow walls are likely to collapse. Duration and effectiveness of weed control will depend on use rate, soil type and rainfall or irrigation after application. Adequate rainfall or irrigation should occur within 10 days of application, as this herbicide requires sufficient available soil moisture to ensure soil movement and uptake by emerging weed seeds.

# Post-emergence application

For early post-emergence application in wheat and barley to suppress annual ryegrass, the product should be applied to a moist soil. Annual ryegrass should be free from stress caused by marginal moisture or from water-logging after sowing between crop planting and application.

This product will be less effective on larger emerged weeds and application to weeds that have commenced to tiller should be avoided.

Follow-up rainfall within 14 days of application will assist herbicide activity by moving the product into the soil around the shoot based and roots where is it most effective. Mild, transient crop effects may occur in wheat and barley after a post-emergent treatment. On sandy soils, heavy rainfall the week after application may cause more pronounced crop phytotoxicity.

A registered post-emergent selective graminicide may be required for the control of later germinating Annual Ryegrass cohorts. 4Farmers Prosulfocarb should be used as part of an integrated weed management program that utilises all available weed control tactics..

#### **Crop Tolerance**

The selectivity of 4Farmers Prosulfocarb is a combination of positional and physiological selectivity. Positional selectivity must be maintained by sowing at an adequate depth below the herbicide band. The physiological selectivity of 4Farmers Prosulfocarb is given by the ability of cereals to metabolise the herbicide to inactive compounds more rapidly than susceptible weed species. Environmental factors such as rainfall events following application and soil type will influence product movement into the seed zone. Crop injury may occur when used in sandy soils with high leaching potential or in all soil types when heavy rainfall is received between sowing and emergence. Crop injury may also result from tank mixes with other herbicides. Shallow seeding is not recommended due to the greater potential for movement of herbicide within close proximity of the emerging crop. Conditions resulting in poor root development or the occurrence of crop stresses including waterlogging, drought, frost, nutrient deficiency or disease can result in unacceptable crop damage and yield loss as a result of root uptake of herbicide. Although crop tolerance has been clearly demonstrated in a wide range of registered crop cultivars, differences in relation to the tolerance of recent and future release cultivars may exist. Risk of crop damage may be exacerbated where varieties with short coleoptile length are planted in conjunction with the use of some fungicide seed treatments.

#### **Tillage System**

IBS with knife or blade points: Working speed should ensure adequate incorporation of product but avoid soil throw into the adjacent seeding row. Use of press wheels will minimise potential for herbicide to be dragged back into seeding rows. Weed control may be reduced in seeding rows as a result of concentration of herbicide in crop inter-rows. A knife or blade point is defined as being <12 mm in width, having no wings, inverted T or blade and is generally on a minimum 200 mm row spacing.

Full disturbance or conventional cultivation, including trailing harrows/prickle chain: Care should be taken to ensure seed placement below the herbicide band as crop damage may result where seed is sown too shallow. Consult trifluralin label for tank mix rate selection. PRODUCT MUST BE INCORPORATED INTO THE SOIL WITHIN 7 DAYS OF APPLICATION

#### Mixing

4Farmers Prosulfocarb is an emulsifiable concentrate that mixes readily with water. Fill the spray tank to one quarter full. Add 4Farmers Prosulfocarb and continue adding water to make up to the final spray volume. Agitate while mixing and spraying. When tank mixing wettable powder or water dispersible granule formulations should be added to the tank first followed by suspension concentrates (flowables), water soluble salts then 4Farmers Prosulfocarb or other emulsifiable concentrate formulations. Maintain thorough agitation during mixing and application. Agitate tank mixes vigorously if allowed to stand. Note: Tank mix spray solutions should NOT be left standing in the vat overnight.

#### **Sprayer Clean Up**

After using 4Farmers Prosulfocarb, empty the tank completely and drain the whole system. Thoroughly wash inside the tank using a pressure hose, drain the tank and clean any filters in the tank, pump, line and nozzles.

To rinse: After cleaning the tank as above, quarter fill the tank with clean water and circulate through the pump, lines, hoses and nozzles. Drain and repeat the rinsing procedure twice.

#### Compatibility

Always refer to registered plant back restrictions on the label of the tank mix partner. Refer to your local 4Farmers representative for more information relating to the compatibility and crop safety of herbicide tank mixtures.

4Farmers Prosulfocarb is compatible with any 1 of the following insecticides: alpha cypermethrin, bifenthrin, chlorpyriphos, dimethoate and Karate Zeon® Insecticide. 4Farmers Prosulfocarb is compatible with liquid Urea Ammonium Nitrate (UAN) fertilisers provided the spray solution is under constant high agitation.

4Farmers Prosulfocarb is compatible with the following herbicides: 4Farmers Trifluralin 480, 4Farmers Tri-allate 500.

As formulations of other manufacturers' products are beyond the control of 4Farmers and water quality varies with location, all mixtures should be tested prior to mixing commercial quantities.

# Application

Wheat: Apply by ground rig only in a minimum of 50L water/ha. Water rate selection should be based on soil type and stubble load. Stubble loads above 40 to 50% ground coverage can reduce weed control below acceptable levels. Water volumes greater than 70L/ha are recommended in order to reduce the impact of stubble in direct drill or minimum tillage systems. Use a nozzle delivering spray quality in the coarse spray range.

## **RESISTANT WEEDS WARNING**

GROUP J HERBICIDE

4Farmers Prosulfocarb Herbicide is a member of the thiocarbamates group of herbicides. Its mode of action is through inhibitors of fat synthesis. For weed resistant management 4Farmers Prosulfocarb Herbicide is a Group J herbicide.

Some naturally occurring weed biotypes resistant to 4Farmers Prosulfocarb Herbicide and other Group J Herbicides may exist through normal genetic variability in any weed population. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds will not be controlled by 4Farmers Prosulfocarb Herbicide or any other Group J herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, 4Famers Pty Ltd accepts no liability for any losses that may result from the failure of 4Farmers Prosulfocarb 800 Herbicide to control resistant weeds.

## **Resistance Management**

Large numbers of healthy surviving weeds can be an indication that resistance is developing. Efforts should be made to prevent seed set of surviving weds. DO NOT make more than one application of a Group J Herbicide with the inhibition of fat synthesis mode of action to a crop in the same season,

excluding use of a split application at planting as per the directions for use. If the user suspects that the target weed population is resistant to herbicides with this mode of action, 4Farmers Prosulfocarb 800 EC Herbicide or other Group J Herbicides should not be used. Strategies to minimise the risk of herbicide resistance are available. The above recommendations should be incorporated into an Integrated Weed Management (IWM) Program that used a diverse range of option to manage grass weeds and avoids over reliance on any 1 method of control. Consult your farm chemical supplier, consultant or 4Farmers.

## **RE-ENTRY OR RE-HANDLING**

Do not allow entry into treated areas until the spray has dried, unless wearing 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 CROPS, NATIVE AND OTHER NON-TARGET PLANTS

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

DO NOT allow spray drift onto adjacent fallow land.

DO NOT apply on or near shrubs, trees, lawns or crops other than barley and wheat.

DO NOT drain or flush equipment on or near desirable trees or other plants, where their roots may extend, or in situations where by movement of soil or by seepage absorption of herbicide may occur.

DO NOT sow susceptible crops within 9 months of herbicide application.

# PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Highly toxic to aquatic organisms. DO NOT contaminate streams, rivers or waterways with the chemical or used container.

DO NOT apply under meteorological conditions or from spraying equipment which could be expected to cause spray to drift onto adjacent areas, particularly wetlands, water bodies or water courses.

# STORAGE AND DISPOSAL

Keep out of reach of children. Store in the closed, original container in a cool well-ventilated area. Do not store for prolonged periods in direct sunlight.

Triple-rinse containers before disposal. Dispose of rinsate or any undiluted chemical according to state/territory legislative requirements.

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 500 mm 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 with relevant local, state or territory government regulations. Do not burn empty containers or product

For refillable containers: Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

## **SAFETY DIRECTIONS**

Will irritate the eyes and skin. Repeated exposure may cause allergic disorders. Sensitive workers should use protective clothing. Avoid contact with eyes and skin. When opening the container and preparing the product for use and using the product, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and elbow-length chemical-resistant gloves and face shield or goggles. In addition, when opening the container and mixing and loading, wear a disposable mist face mask covering mouth and nose. If product on skin, immediately wash area with soap and water. If product in eyes, wash it out immediately with water. Wash hands after use. After each day's use wash gloves and face shield or goggles and contaminated clothing.

### **FIRST AID**

If poisoning occurs contact a doctor or Poisons Information Centre. Phone Australia 13 11 26.

## **SAFETY DATA SHEET**

For further information please refer to the Safety Data Sheet. For a copy visit our website at www.4farmers.com.au

## **EXCLUSION OF LIABILITY**

4 Farmers Australia Pty Ltd and/or its affiliates ("4Farmers) shall not be liable for any loss, injury, damage or death whether consequential or otherwise whatsoever or howsoever arising whether through negligence or otherwise in connection with the sale supply, use or application of this product. The supply of this product is on the express condition that the purchaser does not rely on 4Farmer's skill or judgement in purchasing or using the same and every person dealing with this product does so at his own risk absolutely. No representative of 4Farmers Australia Pty Ltd has any authority to add to or alter these conditions.

In a Transport Emergency Dial **000** Police or Fire Brigade

Special Poisons Advice: 13 11 26