

**READ SAFETY DIRECTIONS BEFORE OPENING OR USING**

# ZOLIAR<sup>®</sup> 800 DF

## HERBICIDE

**ACTIVE CONSTITUENT: 800 g/kg NORFLURAZON**

**GROUP 12 HERBICIDE**

*A pre-emergence selective residual herbicide for a programmed approach to nutgrass (Cyperus spp.) and other grass and broadleaf weed control in asparagus, citrus, grapes, nuts, pome fruit and stone fruit as per the Directions for Use.*

**The bag must not be sold separately.  
DO NOT destroy box while product still remains.**

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**Net Contents 5 kg**

**DIRECTIONS FOR USE**

**RESTRAINTS**

**DO NOT** rotate to alternate crops in fields treated with ZOLIAR® 800 DF.

**DO NOT** incorporate in a manner which would place untreated soil on top of treated soil.

**DO NOT** apply to nursery stock.

**DO NOT** use more than 5.0 kg/ha of ZOLIAR 800 DF in any one year.

**DO NOT** apply to trees or vines unless they have been established in the orchard or vineyard for 18 months.

CROP	WEED	STATE	RATE/HA	WHP	CRITICAL COMMENTS
Asparagus	Johnson Grass, Nutgrass	Qld	2.5 kg	14 days	Apply using a boom spray to bare ground prior to weed emergence.
<b>Citrus</b> Grapefruit, Lemons, Mandarins, Oranges (Navel and Valencia)  <b>Grapes</b>  <b>Nuts</b> Almonds only  <b>Pome Fruit</b> Apples, Pears  <b>Stone Fruit</b> Apricots, Cherries, Nectarines, Peaches, Plums	Annual Ryegrass, Barley Grass, Blackberry Nightshade, Brachiaria (Green Summer Grass), Caltrop, Capeweed, Chickweed, Common Sowthistle (Milk Thistle), Dandelion seedlings, Curled Dock seedlings, False Caper seedlings, Fat-Hen <sup>+</sup> , Indian Hedge Mustard, Innocent Weed (Spiny Burgrass), Medic, Hedge Mustards, Paspalum, Plantain seedlings, Pigweed ( <i>Portulaca</i> ), Prairie Grass, Prickly Lettuce, Great Brome (Ripgut Brome), Salvation Jane, Scarlet Pimpernel, Shepherd's Purse, Silver Grass, Skeleton Weed seedlings, Sorrel seedlings, Soursob <sup>+</sup> , Stinkgrass, Stinking Roger, Subterranean Clover, Summer Grass (Crabgrass), Three-cornered Jack (Doublegee, Spiny Emex), Variegated Thistle, Wild Oats, Wild Radish, Wild Turnip, Winter Grass, Wireweed, Witch Grass, Yellow Weed, Yorkshire Fog Grass	All States	2.5 kg	14 days	Apply as a directed spray in 300 to 500 L water/hectare. Avoid contact with foliage or fruit. An application in early autumn will give winter weed control or in early to mid-spring will give full summer weed control.
	Couch Grass <sup>+</sup> , Dandelion, Curled Dock, False Caper, Johnson Grass <sup>+</sup> , Skeleton Weed, Sorrel, Soursob		5.0 kg		<p><b>Note:</b> <i>For asparagus only:</i> Allow newly planted fields (direct seeded, seedlings, or crowns) to become established for one year before application of ZOLIAR 800 DF. DO NOT apply within 14 days of harvest and before fern emerges. DO NOT spray on young ferns. DO NOT apply more than 2 applications per year. ZOLIAR 800 DF should not be applied if crop rotation is expected within 24 months.</p> <p><i>For grapes only:</i> Not recommended for grapes grown in sand or loamy sand soils with less than 1% organic matter and pH greater than 7.5 as veinal chlorosis may occur.</p> <p><i>For almonds and cherries only:</i> DO NOT use on coarse textured soil such as sand, loamy sand, gravelly sand and fine sand as veinal chlorosis may occur.</p>

<sup>+</sup>Suppression Only

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

**WITHHOLDING PERIODS**

**ASPARAGUS – DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION.**

**OTHER CROPS – NOT REQUIRED WHEN USED AS DIRECTED.**

## **GENERAL INSTRUCTIONS**

### **Asparagus**

To avoid crop damage it is advisable to only treat a small number of plants to ascertain their reaction before treating the whole crop.

### **Citrus, grapes, apples, pears, stone fruit and almond orchards**

ZOLIAR 800 DF is a surface applied residual pre-emergence herbicide. Residual weed control can be expected for up to 6 months, dependent on rate applied and soil conditions. The 2.5 kg/ha rate is most effective on coarse or light loamy soils when harder to control weeds are not important. Extended period of weed control can be achieved by using rates higher than 2.5 kg. The period of control will then be determined by soil type, irrigation/rainfall patterns, time of treatment and other soil and management factors.

### **Rainfall or irrigation within 2 or 3 weeks after application is necessary for activation.**

Areas to be treated should be free of weeds and excessive mulch. Where weeds are already growing in the area to be treated, an appropriate "knockdown herbicide" must be applied either before or, if compatible, combined as a tank mix with this product. This product should be applied strategically at mid-spring for full summer weed control, and early autumn when winter control is required. Where strip treatment is applied, the recommended rate per hectare must relate only to the area of the treated strip. If residual or "knockdown herbicides" are added, consider all label recommendations and adhere to the crop recommendations and directions that are most restrictive.

### **Mixing**

Fill the spray or mixing tank to 2/3 full and start agitation. Add required amount of ZOLIAR 800 DF to tank whilst maintaining continuous agitation. Add additional compatible products (if required), then balance of water until tank is full. Maintain agitation throughout mixing, standing and spraying operations.

If tank mixing, products should be added in the following order, after ZOLIAR 800 DF:

1. Wettable powders and water dispersible granules
2. Flowable liquids
3. Emulsifiable concentrates
4. Surfactants

### **Application**

#### **Citrus, grapes, apples, pears, stone fruit and almond orchards:**

Apply ZOLIAR 800 DF as a directed spray, avoiding contact with foliage or fruit using a fixed boom sprayer. Apply 300 to 500 L of spray/ha, have good tank agitation, use 50 mesh nozzle strainers. Shut off spray booms when starting, stopping or slowing down to avoid overdosing. Wash out equipment thoroughly with water after use.

## **RESISTANT WEEDS WARNING**

**GROUP 12 HERBICIDE**

ZOLIAR 800 DF is a member of the pyridazinone group of herbicides. ZOLIAR 800 DF has the inhibitor of carotenoid biosynthesis mode of action. For weed resistance management ZOLIAR 800 DF is a Group 12 herbicide. Some naturally-occurring weed biotypes resistant to ZOLIAR 800 DF and other inhibitors of carotenoid biosynthesis 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 ZOLIAR 800 DF or other Group 12 herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, AgNova Technologies Pty Ltd accepts no liability for any losses that may result from the failure of ZOLIAR 800 DF to control resistant weeds.

## **COMPATIBILITY**

ZOLIAR 800 DF is compatible with most "knockdown" and residual herbicides in situations where appropriate recommendations exist for such herbicides in the crop concerned. Tank mixtures with residual herbicides are primarily made to improve control of particular weed species. Observe mixing instructions.

## **PROTECTION OF LIVESTOCK**

DO NOT graze livestock on treated areas.

## **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 or pastures.

DO NOT drain or flush equipment or spray near desirable trees or other plants or where their roots may extend; or in locations where the product may be washed or moved into such situations.

DO NOT apply while fruit or nuts are on the ground at harvest.

## **PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT**

DO NOT contaminate streams, rivers or waterways with ZOLIAR 800 DF or used container. Avoid rapid flood irrigation which may erode treated soil from the field.

## **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. Single-rinse or shake remainder into spray tank. Do not dispose of undiluted chemicals on site. 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.

## **SAFETY DIRECTIONS**

Avoid contact with skin and eyes. DO NOT inhale dust or spray mist. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

## **FIRST AID**

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

## **SAFETY DATA SHEET**

If additional hazard information is required refer to the Safety Data Sheet. For a copy visit our website at [agnova.com.au](http://agnova.com.au)

## **CONDITIONS OF SALE**

AgNova Technologies Pty Ltd shall not be liable for any consequential or other loss or damage relating to the supply or subsequent handling or use of this product, unless such liability by law cannot be lawfully excluded or limited. All warranties, conditions or rights implied by statute or other law which may be lawfully excluded are so excluded. Where the liability of AgNova Technologies Pty Ltd for breach of any such statutory warranties and conditions cannot be lawfully excluded but may be limited to it resupplying the product or an equivalent product or the cost of a product or an equivalent product, then the liability of AgNova Technologies Pty Ltd for any breach of such statutory warranty or condition is so limited.

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Additional statements as required by Safe Work Australia  
in accordance with the Globally Harmonised System of Classification and Labelling (GHS).

**Harmful if swallowed. Causes eye irritation. Suspected of causing cancer. Very toxic to aquatic life.**

Obtain, read and follow all safety instructions before use. Do not touch eyes. Do not eat, drink, or smoke when using this product. Wear protective gloves/protective clothing/face protection. If exposed or concerned, get medical advice. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical help. IF SWALLOWED: Get medical help. Rinse mouth. Avoid release to the environment not in accordance with this label. Collect spillage. Store locked up.

In a transport emergency dial 000, Police or Fire Brigade.  
For specialist advice in an emergency only, call 1800 033 111 (24 hours).

**APVMA Approval No: 63329/118437**

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