

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

# Rygel

## Oryzalin 500 Flowable

### Herbicide

Active Constituent: 500 g/L ORYZALIN

For pre-emergent control of certain annual ryegrass and broadleaf weeds in non-bearing fruit and nut orchards, vineyards, nursery stock, ornamentals and amenity plantings.

GROUP	<b>D</b>	HERBICIDE
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APVMA Approval No: 59277/1204

Pack Sizes: 5L, 20L

#### GENERAL INSTRUCTIONS

Rygel Oryzalin 500 Flowable Herbicide is a pre-emergent surface applied herbicide, which will control the specified annual grasses and broadleaved weeds in the crops listed.

**Soil Preparation:** Areas to be treated should be free of established weeds. Remove or thoroughly mix trash (weed residue, prunings etc.) into the soil before applying the product.

**Soil Activation:** Moisture in the form of rain or sprinkler irrigation (12.5mm) is required within 21 days of application to activate the product otherwise efficacy may be reduced. If moisture is not received within the period, incorporate the product into the top 2.5cm of soil.

#### Mixing

The required amount of Rygel Oryzalin 500 Flowable Herbicide should be added to half-full spray tank and agitated well during completion of filling. Do not leave spray solutions to stand over night.

#### Application Method

Apply Rygel Oryzalin 500 Flowable Herbicide in 200 to 450 litres water per hectare. Apply uniformly, especially within the dropline of trees and shrubs, so that application above label rates does not occur. Use a properly calibrated low pressure (170 to 340 kPa) herbicide sprayer.

Provide good by-pass or other agitation of the spray suspension in the tank before and during application. Soil treated with this product may be shallow cultivated without loss of herbicidal activity.

#### COMPATIBILITY

Rygel Oryzalin 500 Flowable Herbicide 500 is compatible with paraquat, glyphosate, oxyfluorfen and simazine.

#### RESISTANT WEEDS WARNING

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Rygel Oryzalin 500 Flowable Herbicide is a member of the dinitroaniline group of herbicides. Rygel Oryzalin 500 Flowable Herbicide has the inhibition of tubulin formation mode of action. For weed resistance management, Rygel Oryzalin 500 Flowable Herbicide is a Group D herbicide. Some

naturally occurring weed biotypes resistant to Rygel Oryzalin 500 Flowable Herbicide and other Group D 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 Rygel Oryzalin 500 Flowable Herbicide or other Group D herbicides.

Since the occurrence of resistant weeds is difficult to detect prior to use, Rygel Australia Pty. Limited accepts no liability for any losses that may result from the failure of Rygel Oryzalin 500 Flowable Herbicide to control resistant weeds.

Strategies to minimise the risk of herbicide resistance are available. Contact your farm chemical supplier, consultant, local Department of Agriculture.

#### PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

When applying spray, avoid contact with leaves and other parts of trees and vines.

Do not apply under weather conditions or from spraying equipment that may result in chemical movement by spray drift or storm run-off drift onto nearby susceptible plants/crops, cropping lands or pastures.

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

Do NOT contaminate dams, rivers, drains or streams with chemical or used container.

#### 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 or preferably pressure rinse containers before 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 bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up

for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should NOT be burnt.

#### **SAFETY DIRECTIONS**

Avoid contact with eyes and skin. Do not inhale spray mist.

#### **FIRST AID**

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

#### **MSDS**

Additional information is listed in the Material Safety Data Sheet that can be obtained from the supplier.

#### **CONDITIONS OF SALE**

The use of Rygel Oryzalin 500 Flowable Herbicide being beyond the control of the manufacturer, no warranty expressed or implied is given by Rygel Australia Pty Ltd regarding its suitability, fitness or efficiency for any purpose for which it is used by the buyer, whether in accordance with the directions or not and Rygel Australia Pty Ltd accepts with no responsibility for any consequences whatsoever resulting from the use of this product.

**In an Emergency Dial 000 Police or Fire Brigade**

**DIRECTIONS FOR USE IN ALL STATES**

Crop Group		Weeds Controlled	Rate L/ha	Critical Comments
Banana <sup>1</sup>		<b>Grasses:</b> Barnyard, Guinea grass, Love grass, Paradoxa grass, Spiny burr grass (gentle Annie / Innocent Weed), Summer grass (Crabgrass <sup>3</sup> )  <b>Broadleaf Weeds:</b> Deadnettle, Fathen, Fumitory, Portulaca (pigweed), Sowthistle, Wireweed (Hogweed)  <b>Brassica species:</b> <sup>4</sup> Blackberry, Nightshade, Caltrop, Paddy melon, Silverleaf Nightshade	Short term control (up to 4 months) 4.5L  Long term control (6-8 months) 6.8L	See GENERAL INSTRUCTIONS  1. DO NOT use as a pre-emergent at the time of planting with tissue culture banana planting material.  2. <b>Western Australia only:</b> Vineyards on medium loam or heavier soil types, heavily infested with crabgrass may be sprayed with up to 9.5L/ha of Rygel Oryzalin 500 and together with pome fruit and all Prunus species on these soils spraying can be immediately after transplanting from nurseries providing buds are still dormant and no functional leaves are present.  3. <b>Western Australia only:</b> Apply early in summer for crabgrass ( <i>Digitaria sanguinalis</i> ) control and incorporation with overhead irrigation.  4. Control of these weeds may range from poor to excellent depending upon soil temperature, time of germination, depth of weed seed in the soil and amount and timing of soil moisture.
Grape <sup>2</sup>				
Pome Fruit	Apple, Pear, (see also non-bearing fruits)			
Stonefruit	Apricot, Cherry, Peach, Plum, Prune & Nectarine			
Citrus	Grapefruit, Orange, (see also non-bearing fruits)			
Nuts	Almonds, Macadamia, Pecan, Walnut			
Non-bearing berryfruits	Blackberry, Blueberry, Boysenberry, Currant, Gooseberry, Loganberry, Raspberry			
Non-bearing – fruits including nursery stock of the following:	Avocado, Custard apple, Feijoa, Guava, Kiwifruit, Lemon, Litchi, Mandarin, Mango, Nashi, Olive, Passionfruit, Pawpaw, Persimmon, Rambutan			
Nursery stock and / or seedling stage conifers including species of the following genus:	<i>Abies</i> (fir trees), <i>Chamaecyparis</i> (Lawson and False Cypress), <i>Cryptomeria cupressus</i> (cypress), <i>Juniperus</i> (Junipers), <i>Picea</i> (Spruces), <i>Pinus</i> (pine), <i>Platyclusus orientalis</i> , (oriental arborvitae), <i>Podocarpus</i> , <i>Pseudotsuga menziessii</i> (Douglas fir or Oregon pine), <i>Sequoia sempervirens</i> (Coastal redwood), <i>Taxus cuspidate</i> (Japanese yew), <i>Thuja</i>			
Nursery stock, ornamentals and amenity plantings comprising of the following:	<b>Australian native species of the genus:</b> <i>Acacia</i> (wattles), <i>Agonis</i> (WA peppermint, Willow (or Honey) myrtle), <i>Allocasuarina</i> , <i>Banksia</i> , <i>Boronia</i> , <i>Callistemon</i> (bottlebrush), <i>Callitris</i> (Cypress pine), <i>Calytrix</i> , <i>Cassia</i> , <i>Casuarina</i> (Oaks and sheoak), <i>Chamelaucium uncinatum</i> (Geraldton wax),	<b>Grasses:</b> Barnyard grass, Guinea grass, Love grass, Paradoxa grass, Spiny burr grass (gentle Annie / Innocent Weed), Summer grass (Crabgrass <sup>3</sup> )  <b>Broadleaf Weeds:</b> Deadnettle, Fathen,	Short term control (up to 4 months) 4.5L  Long term control (6-8 months) 6.8L	See GENERAL INSTRUCTIONS  3. <b>Western Australia only:</b> Apply early in summer for crabgrass ( <i>Digitaria sanguinalis</i> ) control and incorporation with overhead irrigation.  4. Control of these weeds may

Crop Group		Weeds Controlled	Rate L/ha	Critical Comments
	<i>Clematis, Correa, Eriostemon myoporoides</i> (Wax flower), <i>Eucalyptus, Grevillea, Hakea, Hardenbergia</i> (Sarsaparilla), <i>Hibbertia, Kennedia, Lechenaultia, Leptospermum</i> and <i>Melaleuca</i> (Tea trees), <i>Prostanthera</i> (Mintbush), <i>Thryptomene, Westringia</i>	Fumitory, Portulaca (pigweed), Sowthistle, Wireweed (Hogweed)  <b>Brassica species:</b> <sup>4</sup> Blackberry Nightshade, Caltrop, Paddy melon, Silverleaf Nightshade		range from poor to excellent depending upon soil temperature, time of germination, depth of weed seed in the soil and amount and timing of soil moisture.
Nursery stock, ornamentals and amenity plantings comprising of the following:	<b>Exotic species of the genus:</b> <i>Abelia, Acalypha, Acer</i> (maples), <i>Arctostaphylos, Ardisia, Azalea, Baccharis</i> (groundsel bush), <i>Bauhinia, Berberis</i> (barberry), <i>Betula</i> (birch tree), <i>Bignonia, Buxus</i> (box), <i>Calluna, Camellia, Ceanothus, Cistus, Clyostoma, Coleonema, Coprosma, Cotoneaster, Cuphea, Cytisus</i> (broom), <i>Dodonea</i> (hobbrush), <i>Erica</i> (heath), <i>Escallonia, Euonymus, Eutaxia, Fatshedera, Fuschia, Felicia, Gardenia, Gingko, Hibiscus, Ilex, Jasminum, Justicia, Kalmia, Koelreuteria, Lagenaria, Lagerstroemia, Lantana, Lavendula</i> (lavender), <i>Leucodendron, Leucothoe, Ligustrum, Liquidambar, Liriope, Lonicera</i> (honeysuckle), <i>Magnolia, Mahonia, Malus, , Metrosideros, Monstera, Myrtus, Nandina, Nerium</i> (oleander), <i>Osmanthus, Parahebe, Philadelphus, Philodendron, Phoenix, Photinia, Pieris, Pittosporum, Populus</i> (poplar), <i>Prunus, Pseudopanax, Pyracantha, Quercus, Raphiolepis, Rhododendron, Rosa</i> (roses), <i>Rosemarinus</i> (rosemary), <i>Russelia, Spiraea, Syringa, Syzygium, Taxus, Trachelospermum</i> ( <i>Rhymncospermum</i> ), <i>Umbellularia, Viburnum, Washintonia, Weigela, Xylosma, Yucca</i>	<b>Grasses:</b> Barnyard Guinea grass Love grass Paradoxa grass Spiny burr grass (Gentle Annie / Innocent Weed) Summer grass (Crabgrass <sup>3</sup> )  <b>Broadleaf Weeds:</b> Deadnettle Fathen Fumitory Portulaca (pigweed) Sowthistle Wireweed (Hogweed)  <b>Brassica species:</b> <sup>4</sup> Blackberry nightshade Caltrop Paddy melon Silverleaf nightshade	Short term control (up to 4 months) 4.5L  Long term control (6-8 months) 6.8L	See GENERAL INSTRUCTIONS  <b>3. Western Australia only:</b> Apply early in summer for crabgrass ( <i>Digitaria sanguinalis</i> ) control and incorporation with overhead irrigation.  4. Control of these weeds may range from poor to excellent depending upon soil temperature, time of germination, depth of weed seed in the soil and amount and timing of soil moisture.
Tea-Tree Oil plantations <sup>5</sup>	Tea-tree ( <i>Melaleuca alternifolia</i> )			5. Apply at time of planting and soon after harvesting. Apply in 200-450 L/ha water.

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