## **CAUTION**

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

# **ALBAUGH ZIPPER** 200 HERBICIDE

ACTIVE CONSTITUENT: 200 g/L GLUFOSINATE-AMMONIUM

GROUP 10 HERBICIDE

For non-residual control of broadleaf and grass weeds in various situations as specified in the Directions for Use Table. IMPORTANT: READ THE ATTACHED LEAFLET/BOOKLET

ALBAUGH AUSTRALIA PTY LTD Level 1, 530 Little Collins Street, Melbourne VIC 3000 Australia Tel 03 9909 7183 www.albaugh.com/au





### DIRECTIONS FOR USE

Restraints:

**DO NOT** apply by aircraft.

**DO NOT** apply when rain is expected within 6 hours.

**DO NOT** apply to weeds under stress due to, for example, very dry, very wet, frosty or diseased conditions.

**DO NOT** apply under hot dry conditions (temperatures above 33°C with a relative humidity below 50 %).

CROP/SITUATION W	/EEDS	STATE	RATE	WHP	CRITICAL COMMENTS
Loganberry, Raspberry	rimocane and sucker control	NSW, ACT, Vic, Tas only	500 mL/100 L water	Nil	Apply as a directed spray to suckers and primocanes. Contact with flowers, developing fruit or desirable foliage will cause damage. Ensure complete coverage of primocanes/suckers by spraying to the point of runoff, preferably when they are less than 15 cm high. A non-ionic wetting agent (1000 g/L) may be added at a rate of 25 mL/100 L or equivalent.
, ,	ee lists of weeds controlled in ables 1 and 2.	Qld, NSW, ACT, Vic, SA, WA, NT only  All States	1.0 to 5.0 L/ha	Nil  21 days (H)  Nil	Apply as a directed or shielded spray. Refer to the label section Application Equipment for specific information on application methods. Controlled Droplet Application equipment must not be used for application in cherry orchards.  Warnings: Do not allow spray or spray drift to contact desirable foliage or green (uncalloused) bark. To avoid potential crop damage, refer to the label sections on Application Equipment and PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS. Albaugh Zipper 200 Herbicide may be used around trees/vines less than two years old provided they are effectively shielded from spray and spray drift.  The recommended rate of use is determined by the following criteria: WEED SPECIES WEED STAGE OF GROWTH WEED DENSITY CLIMATIC CONDITIONS WEED SPECIES Apply the appropriate rate to control the least susceptible weed present as per the lists of weeds controlled in the accompanying tables.  WEED STAGE OF GROWTH Use the lower rate when weeds are young and succulent (grasses: pre-tillering; broadleaves: cotyledons to 4-leaf) or the population is very sparse. A median rate should be used for medium sized plants (grasses: tillering; broadleaves: a leaf to advanced vegetative) and the high rate should be used when weeds are mature (grasses: noding to flowering; broadleaves: budding to flowering).  WEED DENSITY Use the higher rates when the weed population is dense. Thorough coverage of weeds is essential for good control.  CLIMATIC CONDITIONS Best results are achieved when applied under warm humid conditions. Control will be reduced and/or slower under cold conditions and/or overcast conditions. Good results will be achieved under most other conditions, however poor results may occur under hot, dry conditions (temperatures above 33°C with a relative humidity below 50%). Weeds that have been hardened or stunted in growth due to stressed conditions should be treated at the maximum rate.  COVERAGE Complete coverage of weeds is essential for good control. Poor coverage may result in re-growth.  PERENNIAL

CROP/SITUATION	WEEDS	STATE	RATE	WHP	CRITICAL COMMENTS
Strawberries, Caneberry fruits (inter-row) Tomatoes (inter-row)	See lists of weeds controlled in Tables 1 and 2.	All States	1.0 to 5.0 L/ha	-	Apply as a directed or shielded spray to the inter-row area. Take care not to allow spray or spray drift to contact the crop, including strawberry runners.  Refer to GENERAL INSTRUCTIONS for warnings concerning plastic mulch and fumigated/sterilised soil. Determine the recommended rate of use by considering the criteria WEED SPECIES, WEED STAGE OF GROWTH, WEED DENSITY and CLIMATIC CONDITIONS, as described above.
Commercial & Industrial areas, rights- of-way and other nonagricultural areas			1.0 to 6.0 L/ha		Determine the recommended rate of use by considering the criteria WEED SPECIES, WEED STAGE OF GROWTH, WEED DENSITY and CLIMATIC CONDITIONS as described above.  Warnings: Do not allow spray or spray drift to contact desirable plants.  To avoid potential crop damage, refer to the label sections on Application Equipment and PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS.
Line-marking on sports grounds	Turf grasses and other weeds	All States	250 to 500 mL/100 L water		Refer to GENERAL INSTRUCTIONS. Albaugh Zipper 200 Herbicide is a non-selective, non-residual herbicide with limited translocation potential. It is therefore ideally suited for line-marking on sports fields where precise weed control is required.  Apply at 6 – 8 week intervals depending on growth of turf. Apply using single boom or hand wand.

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

### Withholidng Periods:

Harvest (H)

Avocado, banana, blackberry, boysenberry, citrus fruit, feijoa, grapes, guava, kiwifruit, litchi, loganberry, mango, olives, passionfruit, pawpaw, pineapple, rambutan, raspberry, strawberries, tomatoes, tree nuts: NOT REQUIRED WHEN USED AS DIRECTED.

Pome and stone fruit: DO NOT HARVEST FOR 21 DAYS AFTER APPLICATION.

Grazing (G)

DO NOT GRAZE OR CUTTREATED AREAS FOR STOCK FOOD FOR 8 WEEKS AFTER APPLICATION.

COMMON NAME	SCIENTIFIC NAME	to Table 2).  APPLICATION RATE			
		Boom or directed sprayer L/ha	Handgun mL/100 L	Knapsack mL/15 L	
		ANNUAL WEEDS			
Amaranthus spp.	Amaranthus spp.	2.0 to 5.0	500	75	
Apple of Peru	Nicandra physalodes	1.5 to 3.0	300	45	
Argentine peppercress	Lepidium bonariense	2.0 to 3.0	300	45	
Awnless barnyard grass	Echinochloa colona	2.5 to 3.5	350	53	
Barley grass	Hordeum leporinum	2.0 to 3.0	300	45	
Barnyard grass	Echinochloa crus galli	2.0 to 5.0	500	75	
Billy goat weed	Ageratum conyzoides	2.0 to 5.0	500	75	
Bitter cress	Cardamine hirsuta	2.0 to 5.0	500	75	
Black bindweed (buckwheat) (refer Note 2)	Fallopia convolvulus	1.8 to 5.0	500	75	
Bladder ketmia	Hibiscus trionum	3.0 to 5.0	500	75	
Bordered panic	Entolasia marginata	2.0 to 4.0	400	60	
Brome grasses (refer Note 1)	Bromus spp.	2.0 to 3.0	300	45	
Calopo	Calopogonium mucunoides	2.0 to 5.0	500	75	
Caltrop burr (refer also Table 2)	Tribulus terrestris	3.0 to 5.0	500	75	
Cape weed	Arctotheca calendula	1.5 to 5.0	500	75	
Clover (subterranean)	Trifolium subterraneum	1.8 to 3.0	300	45	
Cobbler's peg	Bidens pilosa	2.0 to 5.0	500	75	
Common storksbill	Erodium cicutarium	1.5 to 4.0	400	60	
Crowsfoot grass	Eleusine indica	3.0 to 5.0	500	75	
Dead nettle (refer also Table 2)	Lamium amplexicaule	2.0 to 5.0	500	75	
Dwarf crumbweed	Chenopodium pumilo	3.0 to 5.0	500	75	
Fat hen	Chenopodium album	3.0 to 5.0	500	75	
Fumitory	Fumaria officinalis	1.8 to 5.0	500	75	
Green crumbweed	Chenopodium carinatum	2.0 to 5.0	500	75	
Lesser canary grass (refer also Table 2)	Phalaris minor	3.0 to 5.0	500	75	
Liverseed grass (refer also Table 2)	Urochloa panicoides	1.5 to 5.0	500	75	
Medics (annual)	Medicago spp.	1.0 to 5.0	500	75	
Milk thistle	Sonchus oleraceus	2.0 to 5.0	500	75	
Mint weed	Salvia reflexa	3.0 to 5.0	500	75	
New Zealand spinach	Tetragonia tetragoniodes	2.0 to 5.0	500	75	
Patterson's curse	Echium plantagineum	1.0 to 3.0	300	45	
Peanuts	Arachis hypogaea	1.5 to 3.0	300	45	
Pigweed	Portulaca oleracea	3.0 to 5.0	500	75	
Pinkburr	Urena lobata	2.0 to 5.0	500	75	
Potato weed	Galinsoga parviflora	2.0 to 5.0	500	75	
Prairie grass (refer Note 1)	Bromus unioloides	4.0 to 5.0	500	75	
Prickly lettuce	Lactuca serriola	3.0 to 5.0	500	75	
Red natal grass	Rhynchelytrum repens	2.0 to 5.0	500	75	
Ryegrass (annual)	Lolium rigidum	2.0 to 5.0	500	75	
Saffron thistle	Carthamus lanatus	1.5 to 5.0	500	75	
St. Barnaby's thistle	Centaurea solstitialis	1.5 to 5.0	500	75	
Sago weed	Plantago cunninghamii	2.0 to 3.0	300	45	
Scarlet pimpernel	Anagallis arvensis	2.0 to 5.0	500	75	
Setaria	Setaria italica	2.0 to 5.0	500	75	
Sheep thistle	Carduus tenuiflorus	2.5 to 5.0	500	75	
Silver grass	Vulpia myuros	2.0 to 5.0	500	75	
Sorghum/sudax	Sorghum bicolor	2.0 to 5.0	500	75	
Square weed	Spermacoce latifolia	2.0 to 5.0	500	75	
Stagger weed	Stachys arvensis	2.0 to 5.0	500	75	
Star of Bethlehem	Ipomoea quamoclit	2.0 to 5.0	500	75	
Summer grass	Digitaria ciliaris	2.0 to 5.0	500	75	
Thickhead	Crassocephalum crepidioides	3.0 to 5.0	500	75	
Three cornered jack	Emex australis	2.0 to 5.0	500	75	
Tomato	Lycopersicon esculentum	2.0 to 5.0	500	75	
Townsville stylo	Stylosanthes humilis	1.0 to 3.0	300	45	
Turnip weed	Rapistrum rugosum	3.0 to 5.0	500	75	

	ontinue
COMMON NAME SCIENTIFIC NAME	

COMMON NAME	SCIENTIFIC NAME	APPLICATION RATE			
		Boom or directed sprayer L/ha	Handgun mL/100 L	Knapsack mL/15 L	
		ANNUAL WEEDS			
Variegated thistle (refer also Table 2)	Silybum marianum	2.5 to 5.0	500	75	
Wheat	Triticum aestivum	4.0 to 5.0	500	75	
Wild carrot	Daucus glochidiatus	2.0 to 5.0	500	75	
Wild gooseberry	Physalis minima	2.0 to 5.0	500	75	
Wild mustard	Sysimbrium orientale	2.0 to 5.0	500	75	
Wild oats (refer also Table 2)	Avena spp.	3.0 to 5.0	500	75	
Wild radish	Raphanus raphanistrum	5.0	500	75	
Wire weed (refer also Table 2)	Polygonum aviculare	1.5 to 5.0	500	75	
		PERENNIAL WEEDS			
Blady grass	Imperata cylindrica	3.0 to 4.0	400	60	
Cape tulip	Homeria spp.	2.0 to 3.0	300	45	
Centro	Centrosema pubescens	1.0 to 5.0	500	75	
Clover glycine	Glycine latrobeana	1.0 to 3.0	300	45	
Couch grass	Cynodon dactylon	2.5 to 5.0	500	75	
Cow pea	Vigna unguiculata	1.0 to 3.0	300	45	
Giant sensitive plant	Mimosa invisa	2.0 to 5.0	500	75	
Greenleaf desmodium	Desmodium intortum	1.0 to 3.0	300	45	
Johnson grass	Sorghum halepense	3.0 to 5.0	500	75	
Panicum spp.	Panicum spp.	2.0 to 5.0	500	75	
Paspalum spp.	Paspalum spp.	3.0 to 5.0	500	75	
Perennial bindweed	Convolvulus arvensis	2.0 to 3.0	300	45	
Shamrock	Oxalis corymbosa	3.0	300	45	
Sida weed (refer also Table 2)	Sida retusa	3.0 to 5.0	500	75	
Silver leaf desmodium	Desmodium uncinatum	4.0 to 5.0	500	75	
Siratro	Macroptilium atropurpureum	1.0 to 3.0	300	45	
Stink grass	Eragrostis cilianensis	3.0 to 5.0	500	75	
White clover	Trifolium repens	3.0 to 5.0	500	75	
White eye	Richardia brasiliensis	3.0 to 5.0	500	75	
Willow herb	Epilobium spp.	4.0 to 5.0	500	75	

#### Notes:

1. Well-established clumps of Prairie grass and Brome grasses may only be suppressed at these rates. Follow-up treatments may be necessary to control regrowth 2. Good control will be achieved on small and medium sized plants only in non-crop situation.

TABLE 2: For control of weeds in commercial and industrial areas, rights of way and other non-agricultural areas (when referred from Table 1)

COMMON NAME	SCIENTIFIC NAME		APPLICATION RATE				
		Boom or directed sprayer L/ha	Handgun mL/100 L	Knapsack mL/15 L			
ANNUAL WEEDS							
Caltrop burr	Tribulus terrestris	4.0 to 5.0	500	75			
Dead nettle	Lamium amplexicaule	6.0	600	90			
Lesser canary grass	Phalaris minor	4.0 to 6.0	600	90			
Liverseed grass	Urochloa panicoides	1.5	150	23			
Variegated thistle	Silybum marianum	6.0	600	90			
Wild oats	Avena spp.	5.0 to 6.0	600	90			
Wire weed	Polygonum aviculare	2.0 to 5.0	500	75			
PERENNIAL WEEDS							
Sida weed	Sida retusa	4.0 to 5.0	500	75			

#### **GENERAL INSTRUCTIONS:**

Albaugh Zipper 200 Herbicide is a non-volatile herbicide with non-selective activity against many annual and perennial broadleaf weeds and grasses. Albaugh Zipper 200 Herbicide is absorbed by plant foliage and green stems. It is not significantly translocated as an active herbicide throughout the plant, and therefore will only kill that part of a green plant that is contacted by spray. Albaugh Zipper 200 Herbicide does not provide residual weed control. Visible symptoms of control appear in 3 to 7 days, but complete desiccation may take 20 to 30 days under cool conditions. Best results are achieved when application is made under good growing conditions. Application to weeds under stress (e.g. due to continuous severe frosts, dry or waterlogged conditions) should be avoided.

Albaugh Zipper 200 Herbicide is metabolised (broken down) by microorganisms in the soil to become inactive. Soil fumigation or sterilisation will reduce the number of microorganisms present, thus slowing the breakdown of Albaugh Zipper 200 Herbicide. As damage to transplants or seedlings may occur, it is not advisable to apply Albaugh Zipper 200 Herbicide in conjunction with soil fumigation or sterilisation.

#### Plastic mulches

Soil fumigation / sterilisation

Albaugh Zipper 200 Herbicide will remain active on inert surfaces such as plastic. Special care should be taken when applying Albaugh Zipper 200 Herbicide over plastic mulches, as plant contact with the mulch after spraying may result in crop damage

#### **Export of Treated Produce**

Growers should note that suitable MRLs or import tolerances may not be established in all markets for produce treated with Albaugh Zipper 200 Herbicide. If you are growing produce for export, please check with Albaugh Australia Pty Ltd for the latest information on MRLs and import tolerances BEFORE using Albaugh Zipper 200 Herbicide.

#### COMPATIBILITY

Albaugh Zipper 200 Herbicide is compatible with most residual herbicides e.g. simazine, diuron, oxyfluorfen (Goal®), norfluazuron (Solicam®) and orvzalin (Surflan®).

The addition of a wetting agent or other adjuvant is generally not considered necessary. However, benefit has been obtained using a wetting agent on hard-towet weeds when using water rates in excess of 500 L/ha

The rate is 25 mL/100 L of a 1000 g/L non-ionic wetting agent, or equivalent.

Albaugh Zipper 200 Herbicide mixes easily with water. Clean water should always be used for mixing with Albaugh Zipper 200 Herbicide. Ensure that the spray tank is free of any residues of previous spray materials. Two-thirds fill the spray tank with clean water, and with agitator operating add the required amount of Albaugh Zipper 200 Herbicide. Add other relevant compatible products. Top the tank up to the required volume with clean water with agitator running.

#### APPLICATION EQUIPMENT

#### **Ground Sprayers**

Aim to apply a thorough and even coverage of spray to the target plant. Dense stands of weeds should be thoroughly wetted with spray. Incomplete coverage may result in poor control.

Equipment should be such that adequate coverage, penetration and volume of spray liquid can be achieved

#### **Boom or Directed Sprayer Equipment**

Albaugh Zipper 200 Herbicide should be applied at label rates (refer to specific column in the lists of weeds controlled) in sufficient water to give thorough coverage of weeds. It has been found that 300 to 500 L/ha has given good results under most weed conditions.

Special care must be taken when using sprayer/slasher combination units not to cause dust and turbulence, which can carry spray into non-target areas.

### Knapsack and Handgun Equipment

Albaugh Zipper 200 Herbicide should be applied at label rates (refer to specific columns in the lists of weeds controlled) in adequate water to thoroughly wet the weeds being sprayed, i.e. 500 to 1000 L/ha. Dense stands will require up to 1000 L/ha of spray mixture, whereas less dense stands will require less water High volume application using hollow-cone nozzles for hand spraying is recommended

### **Controlled Droplet Application (CDA) Equipment**

Albaugh Zipper 200 Herbicide may be applied through CDA row spraying equipment fitted with a solid (impermeable) shroud or skirt, at rates as recommended for boom or directed sprayers (Refer to specific column in the lists of weeds controlled), provided thorough spray coverage of weeds can be achieved. Apply preferably when weeds are less than 15 cm in height, with the equipment set up so that the spray dome only just touches the tops of the weeds. A total spray volume of 20 to 30 L/ha has been found to give good results. Do not mix residual herbicides or any spray adjuvants with Albaugh Zipper 200 Herbicide when using CDA equipment

Warning: Because the spray solution is highly concentrated, particular care must be taken when using Albaugh Zipper 200 Herbicide through CDA equipment to avoid contact of the spray solution with any part of the crop trunk or canopy. DO NOT apply Albaugh Zipper 200 Herbicide through equipment fitted with bristle skirts. Particular care should be taken when using CDA equipment around green or uncalloused bark. Please refer to PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS. CDA equipment must not be used for application in cherry orchards.

### Sprayer cleanup

Clean all equipment after use by thoroughly flushing with water.

### Aircraft

Do not apply by aircraft.

### RESISTANCE WARNING



Albaugh Zipper 200 Herbicide is a member of the glycine group of herbicides. Albaugh Zipper 200 Herbicide is an inhibitor of glutamine synthetase. For weed resistance management Albaugh Zipper 200 Herbicide is a Group 10 herbicide. Some naturally occurring weed biotypes resistant to Albaugh Zipper 200 Herbicide and other Group 10 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 Albaugh Zipper 200 Herbicide or other Group 10 herbicides. Since occurrence of resistant weeds is difficult to detect prior to use. Albaugh Australia Pty Ltd accepts no liability for any losses that may result from the failure of Albaugh Zipper 200 Herbicide to control resistant weeds

#### RE-ENTRY PERIOD

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

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

DO NOT contaminate streams, rivers or waterways with this product or the 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 or pastures. DO NOT apply on desirable foliage or allow spray to drift onto the foliage of plants, trees or vines, as damage will occur. DO NOT allow product to contact green or uncalloused bark (such as on young trees and vines) or cut, cracked, damaged or wounded tissue, where the affected surface is not adequately healed. Albaugh Zipper 200 Herbicide may be used around trees/vines less than two years old provided they are effectively shielded from spray and spray drift. DO NOT allow desirable plant foliage to contact any inert surface, such as plastic mulches, which have been treated with Albaugh Zipper 200 Herbicide. DO NOT apply Albaugh Zipper 200 Herbicide to recently fumigated or sterilised soil

#### STORAGE AND DISPOSAL

Triple-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 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 (1000L): Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage SAFETY DIRECTIONS

Harmful if absorbed by skin contact or swallowed. Will irritate the eyes and skin. Avoid contact with the eyes and skin. When opening the container, preparing spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and a washable hat, elbow length PVC or nitrile gloves and face shield or goggles. If product on skin, immediately wash area with soap and water. If product in eyes, wash out immediately with water. Wash hands after use. After each day's use, wash gloves and face shield or goggles and contaminated clothing.

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

### SAFETY DATA SHEET

Additional information is listed in the safety data sheet (SDS) which is available from the supplier and accessible from the Albaugh website albaugh.com/au

### TERMS AND CONDITIONS OF SUPPLY, SALE AND USE

Many factors can affect or influence the activity of this product, including, but not limited to: weather and soil conditions, crop variety, treatment timing, water volume, application rates, spraying techniques, crop rotation, regional factors, and the occurrence and development of strains resistant to the active ingredient. Under certain circumstances, changes in activity or crop damage can occur. The manufacturer or supplier is unable to accept liability in these circumstances. All goods supplied by us are of a high grade and we believe them to be suitable for the purpose for which we expressly supply them: but we cannot exercise any control over their mixing, use or 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 for any damage or injury whatsoever arising from their storage, handling, application, or use. These conditions cannot be varied by our staff, agents, or the re-sellers of the product whether or not they supervise or assist in the use of such goods

APVMA Approval Number: 81839/141371