# **CAUTION**

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

Farmoz

# Shogun®

### **HERBICIDE**

ACTIVE CONSTITUENT: 100 g/L PROPAQUIZAFOP SOLVENTS: 410 g/L LIQUID HYDROCARBONS 100 g/L N-METHYL-2-PYRROLIDONE



For post-emergence selective weed control of annual grasses in broadleaf crops and legume pastures as specified in the Directions for Use table.

#### www.farmoz.com.au

**DIRECTIONS FOR USE** 

**RESTRAINT:** DO NOT apply SHOGUN when target weeds are stressed by adverse environmental conditions. Such conditions may include high or low temperatures, low humidity, moisture stress, nutrient deficiencies or waterlogging.

#### WINTER CROPS AND LEGUME PASTURES

CROP	WEEDS CONTROLLED	GROWTH STAGE	RATE/ha	CRITICAL COMMENTS
Canola, Chickpeas, Faba beans, Field peas, Legume pastures, Lentils, Linseed, Lucerne, Lupins, Safflower, Vetch	Annual (Wimmera) Ryegrass	3 leaf to mid tillering 3 leaf to early tillering	300 – 450 mL* (WA only) 450 mL (Except WA)	(WA only: Use 300 mL/ha where ryegrass is not the dominant weed.) Ensure maximum weed emergence prior to spraying. Spray when weeds are actively growing. Ryegrass: For best control wait until 75% of ryegrass have begun tillering.
				Legume pastures: Refer to Legume pasture spraying recommendations under General Instructions for complete application instructions.
Canola, Chickpeas, Faba beans, Field peas, Lentils, Linseed, Lupins	Annual (Wimmera) Ryegrass, Barley Grass, Brome Grass, Volunteer Cereals (Barley, Oats, Wheat), Wild Oats	3 leaf to early tillering	200 to 300 mL + Sertin 186 EC 250 to 300 mL	Use this mixture with Sertin¹ 186 EC OR Sertin Plus when Annual Ryegrass occurs in combination with Barley Grass, Brome Grass, Volunteer Cereals and/or Wild Oats Use SHOGUN at the higher rate when Brome Grass and/or Wild Oat populations are high or dominate the weed spectrum.  Use Sertin 186 EC or Sertin Plus at the higher rate when ryegrass populations are high or dominate the weed spectrum.  SHOGUN + Sertin 186 EC tank-mix The total amount of product should not be less than 500 mL/ha.  SHOGUN + Sertin Plus tank-mix The total amount of product should not be less than 600 mL/ha.
			200 to 300 mL + Sertin Plus 300 to 400 mL	
Canola, Chickpeas, Faba beans, Field peas, Legume pastures, Lentils, Linseed, Lucerne, Lupins, Safflower, Vetch	Barley Grass, Volunteer Cereals	3 leaf to mid tillering	200 mL*	Ensure maximum weed emergence prior to spraying. Spray when weeds are actively growing.
	(Barley, Oats, Wheat)			Legume pastures: Refer to Legume pasture spraying recommendations under General Instructions for complete application instructions.
	Brome Grass		300 mL*	
	Wild Oats, Volunteer Triticale		250 mL*	

#### \* IMPORTANT:

USE SHOGUN WITH ONE OF THE FOLLOWING ADJUVANT SYSTEMS FOR WINTER CROPS AND PASTURES: Always add either a non-ionic surfactant such as BS 1000° at 0.2% v/v (200 mL/100 L of water) or Hasten¹ or Kwickin¹ Spray Adjuvant at 0.5% v/v (500 mL/100 L of water). SHOGUN is not compatible with crop oils. DO NOT mix with Synertrol¹ or Codacide¹ oil.



#### WINTER CROPS AND LEGUME PASTURES - continued

CROP	WEEDS CONTROLLED	GROWTH STAGE	RATE/ha	CRITICAL COMMENTS
Cotton, Peanuts, Sunflowers	Volunteer Barley, Volunteer Oats, Volunteer Wheat	3 leaf to mid tillering	200 mL*	Apply when the weeds are actively growing
	Volunteer Triticale		250 mL*	
	Crowsfoot Grass,	2 to 5 leaf stage	300 mL*	
	Volunteer Sorghum	5 leaf stage to the end of tillering	600 mL*	
	Barnyard Grass	2 to 5 leaf stage	450 mL*	
		5 leaf stage to stem elongation	600 mL*	
	Johnson Grass	2 to 5 leaf stage	450 mL*	Apply when the weeds are actively growing. Johnson Grass originating from rhizomes may reshoot after application if conditions are favourable for weed development.
		5 leaf up to commencement of flowering	900 mL*	
	Liverseed Grass	2 to 5 leaf stage	600 mL*	Apply when the weeds are actively growing.  DO NOT apply SHOGUN to Liverseed Grass after the 3 tiller stage as unacceptable control may result.
		5 leaf to 3 tiller stage	900 mL*	

#### \* IMPORTANT:

USE SHOGUN WITH ONE OF THE FOLLOWING ADJUVANT SYSTEMS FOR SUMMER CROPS: Always apply with an adjuvant such as Kwickin' or Hasten' Spray Adjuvant at 0.5% v/v (500 mL/100L of water).

SHOGUN is not compatible with crop oils. DO NOT mix with Synertrol<sup>†</sup> or Codacide<sup>†</sup> oil.

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

#### WITHHOLDING PERIODS

Harvest

**CANOLA, LINSEED:** DO NOT HARVEST FOR 16 WEEKS AFTER APPLICATION. **CHICKPEAS, FIELD PEAS, LENTILS:** DO NOT HARVEST FOR 12 WEEKS AFTER APPLICATION. DO NOT HARVEST FOR 11 WEEKS AFTER APPLICATION. COTTON: **FABA BEANS:** DO NOT HARVEST FOR 7 WEEKS AFTER APPLICATION. LUPINS: DO NOT HARVEST FOR 15 WEEKS AFTER APPLICATION. DO NOT HARVEST FOR 14 WEEKS AFTER APPLICATION. **PEANUTS:** SAFFLOWER: DO NOT HARVEST FOR 20 WEEKS AFTER APPLICATION. SUNFLOWERS: DO NOT HARVEST FOR 14 WEEKS AFTER APPLICATION.

Grazing

COTTON:
LEGUME PASTURE, LUCERNE:
DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 11 WEEKS AFTER APPLICATION.
DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 3 DAYS AFTER APPLICATION.
DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 2 WEEKS AFTER APPLICATION.
SUNFLOWERS:
DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 14 WEEKS AFTER APPLICATION.
DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 3 DAYS AFTER APPLICATION.

Tank Mixture with Sertin 186 EC or Sertin Plus

CANOLA, LINSEED: DO NOT HARVEST FOR 17 WEEKS AFTER APPLICATION.

CHICKPEAS, FABA BEANS: DO NOT HARVEST FOR 14 WEEKS AFTER APPLICATION.

LENTILS: DO HARVEST FOR 20 WEEKS AFTER APPLICATION.

#### **GENERAL INSTRUCTIONS**

FARMOZ SHOGUN® Herbicide is a systemic post-emergence herbicide, rapidly absorbed by foliage and translocated within the plant to the roots.

SHOGUN is rainfast one hour after application. Treated grasses cease growth within 1-2 days after application.

SHOGUN is most effective when grasses are actively growing in the early tillering stage. Allow a 10 day period between the application of SHOGUN and post-emergence broadleaf herbicide.

SHOGUN may be tank-mixed at reduced rates, with Sertin 186 EC OR Sertin Plus for broader spectrum grass weed control as per the Directions for Use table.

#### **LEGUME PASTURE SPRAYING**

Follow guidelines as for Boom Spraying and Aerial Spraying. When pastures are grazed or cut for hay wait for grass weeds to produce fully expanded leaves before applying SHOGUN.

If pasture is to be grazed heavily following application with SHOGUN, allow 7 days to elapse before introducing stock to the treated area.

In dense pastures use water volumes of at least 75 L/ha. Early application is essential in areas where soil moisture is often marginal late in the season.

SHOGUN may have some effect on other desirable pasture grasses. Consult your farm chemical supplier or local FARMOZ representative for advice.

#### RESISTANT WEEDS WARNING

product or other Group A herbicides.

FARMOZ SHOGUN Herbicide is a member of the aryloxyphenoxypropionate ("fop") group of herbicides. For weed resistance management SHOGUN is a Group A herbicide. Some naturally occurring weed biotypes resistant to SHOGUN and other Group A 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 this

Since the occurrence of resistant weeds is difficult to detect prior to use, FARMOZ Pty. Ltd. accepts no liability for any losses that may result from the failure of this product to control resistant weeds.

Large numbers of healthy surviving weeds can be an indication that resistance is developing. Efforts should be taken to prevent seed set of these survivors. If the user suspects that weeds resistant to Group A herbicides are present, SHOGUN or other Group A herbicide should not be used. To help prevent the potential development of resistant weed populations this product should be used as part of an overall Integrated Weeds Management Strategy, which incorporates the use of herbicides with different modes of action and alternate cultural weed control practices.

Advice as to strategies and alternative treatments that can be used should be obtained from your local supplier, consultant, local Department of Agriculture, Primary Industries Department or a FARMOZ representative.



DO NOT make more than one application of a Group A herbicide to a crop in the same season.

#### MIXING

SHOGUN is an emulsifiable concentrate to be mixed with water and applied as a spray. Partially fill the spray tank with water. Add the required amount of SHOGUN to the tank with the agitation system running, then add the adjuvant and the remainder of water.

When tank-mixing SHOGUN with Sertin 186 EC or Sertin Plus, add Sertin first to partially filled spray tank with agitation system running. Continue agitation for 2 to 3 minutes, then add SHOGUN and continue agitating for a further 2 to 3 minutes. Add the required amount of adjuvant, then add the remainder of water.

DO NOT allow the tank mix to sit overnight.

#### **APPLICATION**

**Boom Spraying:** Check height of boom above the target grasses to ensure the spray is evenly distributed and a double overlap pattern is obtained. A droplet spectrum with no less than 50% of the spray volume in the 150-300 micron range is desirable.

Water volumes per hectare will depend on nozzle selection and should be in the range of 30-150 L/ha. 110° fan nozzles are preferred for use with SHOGUN. Use higher volumes of spray to achieve full coverage of dense, vigorous weed infestations.

**Aerial Spraying:** Spray in crosswinds to ensure maximum coverage and crop penetration and use fine droplets to improve coverage. Aim for a droplet size of 150-300 microns. Micronair or hydraulic fan nozzles are both suitable. Apply SHOGUN in a water volume of 20-30 L/ha.

DO NOT spray when winds are light and variable in direction <u>unless</u> smoke indicators or the spray cloud show that the spray is going down into the crop.

DO NOT spray onto inversions or in dead calm conditions.

DO NOT drift SHOGUN onto nearby susceptible crops.

Use large droplets and increase volume of water where limitation of drift is required.

**Cleaning Spray Equipment:** After using SHOGUN, 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.

<u>To rinse:</u> 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.

To decontaminate: Before spraying cereals, maize, sweetcorn, sorghum, ornamental grasses, turf grasses or other sensitive crops, wash the tank and rinse the system as above. Drain and repeat the rinsing procedure. Then quarter fill the tank and add a liquid alkali detergent (e.g., SURF', OMO', DRIVE') at 0.5 L/100 L water and circulate throughout the system for at least fifteen minutes. Drain the whole system. Remove filters and nozzles and clean them separately. Finally flush the system with clean water and allow to drain. Dispose of all water used for cleaning in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots.

#### COMPATIBILITY

SHOGUN is compatible with Le-Mat¹, Select¹ with Hasten¹, Select with Kwickin¹, Sertin 186 EC.

SHOGUN is physically compatible with a wide range of broadleaf herbicides, but such mixtures will usually result in a reduction in grass control

Consult your farm chemical supplier or FARMOZ representative for advice. SHOGUN is not compatible with Sencor<sup>†</sup> 480 SC, 2,4-D, MCPA, 2,4-DB and mineral spray oil.

DO NOT mix concentrates together but add each to the spray tank separately.

As formulations of other manufacturers' products are beyond the control of FARMOZ Pty. Ltd. all mixtures should be tested prior to mixing commercial quantities. As changes in climatic conditions can alter the sensitivity of plants to mixtures of sprays, FARMOZ Pty. Ltd. can not be responsible for the behaviour of such mixtures.

#### **PRECAUTION**

**Re-entry period:** DO NOT enter treated area without protective clothing until spray has dried.

#### 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 (e.g. cereals, maize, sweet corn, sorghum, ornamental grasses and turf grasses) or pastures.

Thoroughly clean all traces of SHOGUN from application equipment after use. A strategy to minimise spray drift should be employed at all times when aerially applying sprays near sensitive areas. Such a strategy is illustrated by the cotton industry's Best Management Practice Manual.

## PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Dangerous to fish. DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

#### STORAGE AND DISPOSAL

Store in the closed, original container in a cool, well-ventilated area as cool as possible, out of direct sunlight. This container can be recycled if it is clean, dry, free of visible residues and has the *drumMUSTER* logo visible. Triple or pressure rinse container for disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on-site. Wash outside of the container and the cap. Store cleaned container in a sheltered place with cap removed. It will then be acceptable for recycling at any *drumMUSTER* collection or similar container management program site. The cap should not be replaced but may be taken separately. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the container 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**

Harmful if swallowed. Will irritate the eyes and skin. Avoid contact with eyes and skin. Avoid inhaling vapour or spray mist. When opening the container, preparing spray and using the product wear cotton overalls buttoned to the neck and wrist, washable hat, elbow-length butyl rubber gloves and face shield or goggles. If product in eyes, wash it out immediately with water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each days use, wash gloves, face shield or goggles and contaminated clothing.

#### **FIRST AID**

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131126. If swallowed, do NOT induce vomiting. Give a glass of water. If in eyes, wash out immediately with water.

#### MSDS

Additional information is listed in the material safety data sheet (MSDS). A material safety data sheet for SHOGUN is available from FARMOZ on request. Call Customer Service on (02) 9431 7800.

**CONDITIONS OF SALE**: The use of FARMOZ SHOGUN Herbicide being beyond the control of the manufacturer, no warranty expressed or implied is given by FARMOZ 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 FARMOZ Pty. Ltd. accepts no responsibility for any consequence whatsoever resulting from the use of this product.

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NOT A DANGEROUS GOOD ACCORDING TO THE AUSTRALIAN DANGEROUS GOODS (ADG) CODE.

