blank page



Shaft

HERBICIDE

ACTIVE CONSTITUENTS: 100g/L PINOXADEN

25g/L CLOQUINTOCET- MEXYL

SOLVENTS: 583g/L LIQUID HYDROCARBONS

100g/L N-METHYL-2-PYRROLIDONE

GROUP A HERBICIDE

For the control of key grass weeds and selective spray topping of Wild

Oats in Wheat and Barley

IMPORTANT: Read this booklet before use.

AIRR APPARENT PTY LTD

15/16 Princes Street, Newport NSW 2106 M 0411 227 338 | E enquiries@apparentag.com.au | www.apparentag.com.au

DIRECTIONS FOR USE

Restraints

DO NOT apply if rainfall is expected within 30 minutes.

DO NOT apply to weeds under stress from factors including very dry, waterlogged, cold, frosty conditions,

CROP	WEED/SITUATION	STATE	RATE/HA
Barley, Wheat 2 leaf to first awns visible	Canary Grass (<i>Phalaris minor</i>), Paradoxa Grass (<i>Phalaris paradoxa</i>) (Annual Phalaris) 2 leaf to end of tillering (GS12-29)	ALL STATES	200 to 250mL plus 500mL ADIGOR® Spray Adjuvant/100L water
(GS12-49)	Wild Oats (Black Oats) (Avena spp.) 2 leaf to end of tillering (GS12-29)	Sth NSW, VIC, TAS, SA, WA only	150 to 200mL plus 500mL ADIGOR/100L water
		QLD, Nth NSW only	200mL plus 500mL ADIGOR/100L water
	Selective spray topping of Wild Oats (Black Oats) (Avena spp.) (GS30-47) to reduce panicle numbers and/or weed seed viability	ALL STATES	
	Suppression of Annual Ryegrass (<i>Lolium rigidium</i>) 2 leaf to early tillering (GS12-22)	ALL STATES	250 to 300mL plus 500mL ADIGOR/100L water

		CRI	TICAL	COM	MENTS
--	--	-----	-------	-----	-------

DO NOT apply more than once per crop.

Rate selection: Use the lower rate when weeds are actively growing without stress, small in size and of low density. Use the higher rate when growing conditions are not ideal and weeds are under minor stress. larger in size or in high density. Low level or minor stress can be caused by factors including dry conditions, waterloaging, cold or nutrient deficiency, providing they are not severe or of prolonged duration.

Mixtures: Apply in mixtures for broadleaf weed control only when weeds are actively growing. Mixing with some broadleaf weed herbicides can result in a reduction in grass weed control. Use the higher rate of Apparent Shaft Herbicide when applying mixtures. **Resistance management:** DO NOT make more than 1 application of a Group A herbicide to a crop in

the same season. For suspected Group A resistant populations refer to the Resistant Weeds Warning.

DO NOT apply later than the first awns visible stage (GS49) of the crop.

Application Timing: Apply Apparent Shaft Herbicide when the majority of Wild Oats are at the stem elongation stage, up to and including when the flag leaf sheath is just at opening stage (GS30-47). Applications during early stem elongation will provide good control and are most effective in reducing panicle numbers but are less effective in reducing the viability of any weed seed produced. Applications at and beyond the flag leaf fully emerged stage (GS39) will reduce weed seed viability and contribution of seed to the weed seed bank. Carefully monitor weed growth stage to ensure optimum timing of herbicide application and always consider the range in weed growth stages present at application. Late germinating weeds not present at application, will not be controlled.

Mixtures: Apply in mixtures for broadleaf weed control only when weeds are actively growing. Mixing with some broadleaf weed herbicides can result in a reduction in product efficacy.

Resistance management: For suspected Group A resistant populations refer to Resistant Weeds Warning.

DO NOT apply more than once per crop. To get best results apply only to actively growing Annual Ryegrass until the start of tillering. DO NOT apply under poor growing conditions or to weeds under stress. Rate selection: Use the lower rates when weed density is light and weeds are small in size. Use the

higher rate when weed density is moderate and weed size is large. Preferably apply in a program with a pre-emergent herbicide and avoid applying Group A herbicides to high densities of Annual Ryegrass. Mixtures: Mixing with some broadleaf herbicides may reduce Annual Ryegrass control. Use the higher

rate of Apparent Shaft Herbicide when applying mixtures.

Resistance management: DO NOT make more than 1 application of a Group A herbicide to a crop in the same season. For suspected Group A resistant populations refer to the Resistant Weeds Warning.

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

WITHHOLDING PERIODS:

Barley. Wheat:

Harvest: NOT REQUIRED WHEN USED AS DIRECTED.

Grazing: DO NOT GRAZE OR CUT FOR STOCKFOOD FOR 21 DAYS AFTER APPLICATION.

GENERAL INSTRUCTIONS

APPARENT Shaft Herbicide should be applied to weeds that are actively growing. Weeds under stress are more difficult to control. Under the influence of low level stresses weeds may still be controlled, but a higher rate of APPARENT Shaft Herbicide is required. As stress becomes more severe weed control may fail. Stress can be caused by a range of factors including, dry conditions, waterlogging, cold or nutrient deficiency.

MIXING

Thoroughly clean the sprayer prior to use. For appropriate cleaning instructions, refer to the label of the product sprayed previously. Fill the spray tank to half full with clean water. Start agitation. Add APPARENT Shaft Herbicide by pouring it into the stream of incoming water and continue filling. Add the required amount of ADIGOR just before the tank is full and continue agitation.

Mixing order: Some products may react with other products if they are not mixed in the correct order. The general mixing order of products should be:

- 1. Water conditioners or buffers
- 2. Water dispersable granules (WG)
- 3. Wettable powders (WP)
- 4. Flowable or suspension concentrates (SC)
- 5. Emulsifiable concentrates (EC)
- Water based or soluble concentrates

ADIGOR It is important to ensure that each individual component of the tank mix is fully dissolved and in solution before the next product is added to the tank mix, otherwise mixing problems may occur.

APPLICATION

Ground application: Ensure good spray coverage is obtained. Apply using a minimum of 50L of water/ ha using a nozzle delivering a medium spray quality in accordance with the ASABE S572 Standard or BCPC Guideline. Spray volumes towards the higher end of the recommended range should be used for dense weed populations, where larger droplet sizes are used or when targeting annual ryegrass.

Aerial application: Apply using a minimum of 20L water/ha and spray at 2m to 3m above the crop. Use a nozzle delivering a medium spray quality in accordance with the ASABE S572 guideline or BCPC Guideline. Avoid applying if wind speeds are greater than 18km/hour. For aerial application use ADIGOR at 500mL/ha.

COMPATIBILITY

When APPARENT Shaft Herbicide is applied alone or with other products always use ADIGOR. APPARENT Shaft Herbicide is compatible with most common broadleaf herbicides. As formulations of other manufacturers' products are beyond the control of AIRR APPARENT Pty Ltd, and water quality varies with location, all mixtures should be tested prior to mixing commercial quantities.

Weed control: Some products, including broadleaf herbicides, can result in reduced grass weed control when applied with APPARENT Shaft Herbicide. For the latest information on compatibility of APPARENT Shaft Herbicide with broadleaf herbicides refer to the APPARENT Shaft Herbicide compatibility chart available from your local reseller or AIRR APPARENT representative.

Crop injury: Some products can result in crop yellowing or crop injury when applied with crop oils including ADIGOR. Refer to the label of mixing partners to determine if they can be used with crop oils. For example, Paragon*, Sniper*, Brodal* and Tigrex* may cause crop injury when used with crop oils including ADIGOR. If necessary, to avoid reduced grass weed control or crop injury, apply APPARENT Shaft Herbicide first and then allow at least 10 days between its application and application of other product.

Cleaning Spray Equipment: After using APPARENT Shaft Herbicide, 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.

To decontaminate: Before spraying cereals (except wheat or barley), maize, sorghum 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 (eg SURF*, OMO*, DRIVE*) at 0.5L/100L water and circulate throughout the system for at least 15 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, vegetation and roots.

RESISTANT WEEDS WARNING

GROUP A HERBICIDE

APPARENT Shaft Herbicide has the inhibition of fat (lipid) synthesis, (or inhibitors of acetyl CoA carboxylase) mode of action. For weed resistance management APPARENT Shaft Herbicide is a Group A herbicide. Some naturally occurring weed biotypes resistant to APPARENT Shaft Herbicide 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 APPARENT Shaft Herbicide or other Group A herbicides.

Since the occurrence of resistant weeds is difficult to detect prior to use, AIRR APPARENT Pty Ltd accepts no liability for any losses that may result from the failure of APPARENT Shaft Herbicide to control resistant weeds. Large numbers of healthy surviving weeds can be an indication that resistance is developing. Efforts should be made to prevent seed set of the surviving weeds.

DO NOT make more than 1 application of a Group A herbicide with the inhibition of fat (lipid) synthesis (or inhibitors of acetyl-CoA carboxylase) mode of action to a crop in the same season. If the user suspects that the target weed population is resistant to herbicides with this mode of action, APPARENT Shaft Herbicide or other Group A 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. Consult your farm chemical supplier, consultant, local Department of Agriculture or Primary Industries, or local AIRR APPARENT representative for details.

PRECAUTIONS

DO NOT use human flaggers/markers unless they are protected by engineering controls such as enclosed cabs. **Re-entry Period:** DO NOT allow entry into treated areas until the spray has dried unless wearing cotton overalls (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 to drift onto nearby susceptible plants/crops, cropping lands or pastures.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate streams, rivers or watercourses with the chemical or used containers.

1

STORAGE AND DISPOSAL

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. 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 for appropriate disposal to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500mm 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.

Returnable 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, nose, throat and skin. Do not inhale vapour. Avoid contact with eyes and skin. Repeated exposure may cause allergic disorders. When opening the container and preparing the spray, wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow-length chemical resistant gloves and a face shield or goggles. If clothing becomes contaminated with product, remove clothing immediately. If product on skin, immediately wash the area with soap and water. Wash hands after use. After each day's 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; New Zealand 0800 764 766. If in eyes, wash out immediately with water.

SAFETY DATA SHEET

Additional information is listed in the safety data sheet (SDS). A safety data sheet for APPARENT Shaft Herbicide is available from AIRR APPARENT Ptv Ltd on request.

CONDITIONS OF SALE: AIRR Apparent Pty Ltd 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 Apparent's skill or judgment in purchasing or using the same and every person dealing with this product does so at his own risk absolutely. No representative of AIRR Apparent Pty Ltd has any authority to add to or alter these conditions.

Additional statements required by Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia: May be fatal if swallowed and enters airways. Causes serious eye irritation. May damage the unborn child. Suspected of damaging fertility. Precautionary Statement(s): Keep out of reach of children. Obtain special instructions before use. Wear eye protection/face protection. IF SWALLOWED: Immediately call a POISON CENTRE/doctor. IF exposed or concerned: Get medical advice/ attention. Do NOT induce vomiting. If eye irritation persists: Get medical advice/ attention.