

Product Name: APVMA Approval No: RAINBOW CLETHODIM 360 HERBICIDE 68469/113236

Label Name:	RAINBOW CLETHODIM 360 HERBICIDE
Signal Headings:	CAUTION
	KEEP OUT OF REACH OF CHILDREN
	READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Constituent	ACTIVE CONSTITUENT: 360 g/L CLETHODIM
Statements:	SOLVENT: 570 g/L LIQUID HYDROCARBON
otatomonto.	

Statement of Claims:	For the control of certain grass weeds in beetroot, cabbage, canola, celery, cotton, forestry, lettuce, non-bearing fruit trees, onions, ornamentals, peanuts, pulses (including adzuki beans, broad beans, chickpeas, faba beans, field peas, lentils, lupins and mung beans), potatoes, soybeans and pasture legume (lucerne, clover and medic) seed crops (and pastures) according to the Directions for Use table.
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Net Contents:
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Restraints:	RESTRAINTS: DO NOT apply without the addition of an oil (see GENERAL INSTRUCTIONS). DO NOT apply to plants that are stressed by moisture or temperature extremes. DO NOT apply if rain is expected within one hour of application. DO NOT apply more than once to any one crop.	
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Directions for Use:	

Other Limitations:		

Withholding Periods:	WITHHOLDING PERIODS
withholding r chous.	HARVEST
	PASTURE LEGUME (LUCERNE, CLOVER AND MEDIC) SEED CROPS AND
	PASTURES: NOT REQUIRED WHEN USED AS DIRECTED.
	CANOLA, COTTON, PEANUTS, PULSES (ADZUKI BEANS, BROAD BEANS,
	CHICKPEAS, FABA BEANS, FIELD PEAS, LENTILS, LUPINS, AND MUNG BEANS) AND
	SOYBEANS: NOT REQUIRED WHEN USED AS DIRECTED.
	FORESTRY: NOT REQUIRED WHEN USED AS DIRECTED.
	BEETROOT, CABBAGE: DO NOT APPLY LATER THAN 7 DAYS BEFORE HARVEST.
	ONIONS: DO NOT APPLY LATER THAN 14 DAYS BEFORE HARVEST.
	LETTUCE, POTATOES: DO NOT APPLY LATER THAN 4 WEEKS BEFORE HARVEST.
	CELERY: DO NOT APPLY LATER THAN 9 WEEKS BEFORE HARVEST.
	GRAZING
	PASTURE LEGUME (LUCERNE, CLOVER AND MEDIC) SEED CROPS AND
	PASTURES: DO NOT GRAZE OR CUT FOR STOCK FEED FOR 14 DAYS AFTER
	APPLICATION.
	CANOLA, PEANUTS, PULSES (ADZUKI BEANS, BROAD BEANS, CHICKPEAS, FABA
	BEANS, FIELD PEAS, LENTILS, LUPINS, AND MUNG BEANS) AND SOYBEANS: DO
	NOT GRAZE OR CUT FOR STOCK FEED FOR 21 DAYS AFTER APPLICATION. COTTON: DO NOT GRAZE OR CUT COTTON FORAGE OR STUBBLE FOR STOCK
	FEED.

Trade Advice:
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General Instructions:			

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Resistance Warning:	Rainbow Clethodim 360 Herbicide is a member of the cyclohexanedione group of herbicides. Rainbow Clethodim 360 Herbicide has the inhibition of acetyl coA carboxylase mode of action. For weed resistance management, Rainbow Clethodim 360 Herbicide is a Group A Herbicide. Some naturally-occurring weed biotypes resistant to Rainbow Clethodim 360 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 Rainbow Clethodim 360 Herbicide or other Group A Herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Shandong Rainbow International Co., Ltd accepts no liability for any losses that may result from the failure of Rainbow Clethodim 360 Herbicide to control resistant weeds.

Precautions:	CAUTION Ornamentals and Trees – While Rainbow Clethodim 360 Herbicide is generally selective to broadleaved plants (i.e. it is active against grasses), tests should always be made on a small number of plants not previously tested. DO NOT use on Gymnosperms (pines, conifers, etc) unless a prior test has been conducted to check safety on the relevant species.
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DO NOT apply Rainbow Clethodim 360 Herbicide if wind is likely to cause drift onto susceptible crops/plants, cropping lands or pastures. Rainbow Clethodim 360 Herbicide should not be applied through misting equipment or any other method likely to cause excessive drift. Care should be taken to avoid damage to adjoining native grasses or grass crops.
PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT DO NOT contaminate streams, rivers or waterways with the product or used containers.

Storage and Disposal:	Store in the closed, original container in a dry, cool well-ventilated area out of direct sunlight. Protect from frost. 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 authority is not available, bury the empty packaging 500mm 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: Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.
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Safety Directions:	Harmful if swallowed. Will irritate the eyes and skin. When preparing spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist, washable hat, elbow-length chemical resistant 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 day's use, wash gloves, face shield or goggles and contaminated clothing.
	shield or goggles and contaminated clothing.

First Aid Instructions:	If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26; New Zealand 0800 764 766. If swallowed, DO NOT induce vomiting. Give a glass of water.
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First Aid Warnings:	
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## DIRECTIONS FOR USE

Сгор	Crop Growth Stage	Weeds Controlled	Rate mL/ha	Stage of Weed Growth	State	Critical Comments
Canola	DO NOT apply after flower buds become visible (green buds)	Annual Ryegrass ( <i>Lolium</i> <i>rigidum</i> ), Annual Phalaris ( <i>Phalaris minor</i> )	100 to 333	2-leaf to fully tillered	QLD, NSW, ACT, VIC, TAS, SA, WA only	Always apply with a crop oil. See Adjuvants and Spray Additives for specific instructions. The lower doses will provide effective control if applied under ideal conditions to weeds that are smaller, actively growing and free from temperature or water stress. See COMPATIBILITY AND CAUTIONS in GENERAL
		Barley Grass (Hordeum leporinum), Brome Grass (Bromus diandrus), Wild Oats (Avena spp.)	116 to 333			
		Volunteer Wheat ( <i>Triticum</i> <i>aestivum</i> ), Volunteer Oats ( <i>Avena sativa</i> )	133 to 333 (116 to 333 in WA only			INSTRUCTIONS for mixture recommendations with insecticides, fungicides and other herbicides.
		Silver Grass ( <i>Vulpia bromoides</i> ) suppression only	166 to 333		NSW, ACT, VIC, TAS only	
		Paradoxa Grass (Phalaris Paradoxa)	166 to 250 250 - 333	2- to 5-leaf stage 5-leaf to fully tillered	QLD, NSW, ACT on	
Pulse crops (including adzuki beans,	Adzuki beans: DO NOT APPLY after first flower buds are visible.	Annual Ryegrass ( <i>Lolium rigidum</i> ) Annual Phalaris ( <i>Phalaris minor</i> )	100 to 333	2 leaf to fully tillered	QLD, NSW, ACT, VIC,	Always apply with a crop oil. See Adjuvants and Spray Additives for specific instructions.
broad beans, chickpeas, faba beans, field peas, lentils^ and lupins#). Pasture (1) legume (lucerne, clover and medic) seed crops and stage of crop pastures (1) clover and clover and pastures (1) peas: DO NOT APPLY beyond full flowering. Lentils: Apply up to the 7 node/ early branching stage of crop pastures (1) clover and clover	beans, broad beans, field peas: DO NOT APPLY beyond full	Barley Grass (Hordeum leporinum) Brome grass (Bromus diandrus) Wild Oats (Avena spp.)	116 to 333		TAS, SA, WA only	The lower doses will provide effective control if applied under ideal conditions to weeds that are smaller, actively growing and free from temperature or water stress. See COMPATIBILITY AND CAUTIONS in GENERAL INSTRUCTIONS for mixture recommendations with
	Lentils: Apply up to the 7 node/ early branching stage of crop	Volunteer Wheat ( <i>Triticum aestivum</i> ) Volunteer Oats ( <i>Avena sativa</i> ) Volunteer Barley	133* to 333* (116 to 333 in WA only) 333			
(including pastures containing chicory and plantain).	Lupins: DO NOT APPLY after 80% of flowers have opened.	Volunteer Barley (Hordeum vulgare) Silver grass (Vulpia bromoides) – suppression only	333 166 to 333		NSW, ACT, VIC, TAS only	insecticides, fungicides and other herbicides. ^ Application up to 7- node/early branching crop growth stage only. # NOT QLD (1) See use of Rainbow

te Critical Comments	State	Stage of Weed Growth	Rate mL/ha	Weeds Controlled	Crop Growth Stage	Сгор
	QLD, NSW, ACT	2 to 5 leaf stage 5-leaf to	166 - 250	Paradoxa grass, ( <i>Phalaris paradoxa</i> )		
	only	fully tillered	250-333			
, crop oil. See Adjuvants and Spray Additives for specific instructions.	QLD, NSW, ACT, VIC, WA, NT only		250-333 166 to 250 250-333	Barnyard Grass ( <i>Echinochloa</i> spp.), Blown Grass ( <i>Agrostis aveacea</i> ), Crowsfoot Grass ( <i>Eleusine indica</i> ), Feathertop Rhodes Grass ( <i>Chloris</i> <i>virgata</i> ), Liverseed Grass ( <i>Urochloa</i> <i>panicoides</i> ), Red Sprangletop Grass ( <i>Leptochloa</i> <i>filiformis</i> ), Seedling Johnson Grass (2) ( <i>Sorghum</i> <i>halepense</i> ), Summer Grass ( <i>Digitaria</i> spp.), Volunteer Sorghum ( <i>Sorghum</i> spp.)	Cotton: DO NOT APPLY after full flowering (mid bloom). Peanuts: DO NOT APPLY after the pod fill stage of crop development. Mung beans, soybeans: DO NOT APPLY after first flower buds are visible.	Cotton (Qld, NSW and NT only) Peanuts, Mung beans, Soybeans Pasture legume (lucerne, clover and medic) seed crops and pastures (including pastures containing chicory and plantain).
				Seedling Johnson Grass (2) ( <i>Sorghum</i> <i>halepense</i> ), Summer Grass ( <i>Digitaria</i> spp.), Volunteer Sorghum		pastures (including pastures containing chicory and

Сгор	Weeds Controlled	Rate mL/ha	Stage of Weed Growth	State	Critical Comments
Beetroot, Cabbage, Celery, Lettuce, Potatoes, Onions	Barnyard Grass ( <i>Echinochloa</i> spp.), Blown Grass ( <i>Agrostis aveacea</i> ), Crowsfoot Grass ( <i>Eleusine indica</i> ), Feathertop Rhodes Grass ( <i>Chloris virgata</i> ), Liverseed Grass ( <i>Urochloa panicoides</i> ), Paradoxa Grass ( <i>Phalaris paradoxa</i> ), Red Sprangletop Grass ( <i>Leptochloa</i> <i>filiformis</i> ),Seedling Johnson Grass (1)	166 to 250 250-333	2 to 5 leaf stage 5-leaf to fully tillered	All states	The lower doses will provide effective control if applied under ideal conditions to weeds that are smaller, actively growing and free from temperature or water stress. Use a spray volume of 150L/ha when spraying dense grass populations. (1) Only Johnson Grass seedlings germinating from seed will be controlled. Seedlings that appear later as shoots from underground stems will not be controlled, and more than one application may be required to control emerging shoots. Always apply with a crop oil. See Adjuvants and Spray Additives for specific instructions.
	(Sorghum halepense), Summer Grass ( <i>Digitaria</i> spp.), Volunteer Sorghum ( <i>Sorghum</i> spp.) Annual Ryegrass ( <i>Lolium rigidum</i> ), Annual Phalaris ( <i>Phalaris minor</i> ),	100 to 333 116 to 333	2 leaf to fully tillered	All states	
	Barley Grass (Hordeum leporinum), Brome Grass(Bromus diandrus), Wild Oats (Avena spp.) Volunteer Wheat (Triticum aestivum), Volunteer Oats (Avena Sativa)	133 to333 (116 to 333 in WA only			
	Volunteer Barley ( <i>Hordeum vulgare</i> ) Silver grass ( <i>Vulpia bromoides</i> ) – suppression only (not Qld, WA) Winter grass ( <i>Poa</i> <i>annua</i> )	333 166 to 333 333			
Forestry, non- bearing fruit trees and ornamentals	Annual Ryegrass (Lolium rigidum), Annual Phalaris ( <i>Phalaris minor</i> ), Barley Grass ( <i>Hordeum</i> <i>leporinum</i> ), Barnyard	333	2 leaf to fully tillered	All states	Apply after plants have recovered from transplant shock and are showing signs of active growth. Always apply with a crop oil. See Adjuvants and Spray Additives for specific instructions. Use a spray volume of 150L/ha when spraying dense grass populations. DO NOT use on Gymnosperms (pines,

Сгор	Weeds Controlled	Rate mL/ha	Stage of Weed Growth	State	Critical Comments
	Grass(Echinochloa				conifers, etc) unless a prior test has
	spp.), Blown				been conducted to check safety on the relevant species.
	Grass (Agrostis				See COMPATIBILITY AND
	aveacea),				CAUTIONS in GENERAL
	Brome Grass (Bromus				INSTRUCTIONS for particular
	diandrus), Crowsfoot				species.
	Grass ( <i>Eleusine</i>				(1) Only Johnson Grass seedlings germinating from seed will be
	indica),Feathertop				controlled. Seedlings that appear
	Rhodes Grass				later as shoots from underground
	(Chloris virgata),				stems will not be controlled, and
	Liverseed				more than one application may be required to control emerging
	Grass(Urochloa				shoots.
	panicoides),				
	Paradoxa Grass				
	(Phalaris				
	paradoxa),				
	Red Sprangletop				
	Grass (Leptochloa				
	filiformis), Seedling				
	Johnson Grass (1)				
	(Sorghum halepense),				
	Silver Grass				
	(Vulpia bromoides)				
	<ul> <li>suppression</li> </ul>				
	only (not QLD, WA),				
	Summer Grass				
	( <i>Digitaria</i> spp.),				
	Volunteer Sorghum				
	(Sorghum spp.),				
	Volunteer Wheat				
	(Triticum aestivum),				
	Volunteer Oats (Avena				
	sativa),Volunteer				
	Barley (Hordeum				
	vulgare), Winter Grass				
	(Poa annua)				

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

# **GENERAL INSTRUCTIONS**

## **CLEANING SPRAY EQUIPMENT**

#### Before using Rainbow Clethodim 360

Ensure that the recommended clean–out procedures for the previous product (particularly sulfonylurea herbicides) sprayed with the equipment was done properly.

#### After using Rainbow Clethodim 360

Empty the tank and drain the whole system.

Thoroughly wash inside the tank using a pressure hose, drain the tank and clean filters in the tank, pump line and nozzles.

Use of a household detergent will aid in the cleaning the equipment. Add detergent to the part-filled spray tank and thoroughly circulate through pumps, hoses and nozzles. Drain the system and thoroughly rinse twice with clean water.

Rinse water should be discharged onto a designated disposal area, or if this is unavailable, onto unused land away from desirable plants and water sources.

## MIXING

To ensure even mixing, half-fill the spray tank with clean water, add the required amount of Rainbow Clethodim 360. Add spray additive and agitate thoroughly, then add the remainder of the water. Agitate again before spraying commences.

ADJUVANTS AND SPRAY ADDITIVES Always apply Rainbow Clethodim 360 Herbicide with a crop oil. RAINBOW Clethodim 360 Herbicide may be applied with Hasten\*, Kwickin\*, Activoil\*, D-C-Trate Advance or Rocket\* at 1L/100L water or with Uptake\* or Enhance\* at 0.5-1L/100L water. (Use the higher rate of oil when weeds are large or if spraying conditions are less than optimal.) RAINBOW Clethodim 360 Herbicide may also be applied with D-C-Trate\* at 2L/100L water. RAINBOW Clethodim 360 Herbicide is compatible with ammonium sulphate products such as Spraymate\* Liase. When mixing Rainbow Clethodim 360 Herbicide with atrazine use Uptake or Enhance at 1L/100L as the adjuvant. The addition of ammonium sulphate is recommended to improve performance of this tank mix. Rainbow Clethodim 360 Herbicide is not compatible with Hot-Up\* Spray Adjuvant or Freeway\* Gold Penetrant.

# APPLICATION

#### **Ground Application**

Rainbow Clethodim 360 Herbicide should be applied with calibrated spray equipment. **DO NOT** apply with spray droplets smaller than a **MEDIUM** spray droplet size category according to nozzle manufacturer specifications that refer to the ASAE S572 Standard or the BCPC Guideline. Apply in a minimum of 50 litres of water per hectare. Use 150 L/ha when spraying dense populations.

#### **Aerial Application**

Rainbow Clethodim 360 Herbicide can be applied through aircraft fitted with boom or Micronair equipment. **DO NOT** apply with spray droplets smaller than a **MEDIUM** spray droplet size category according to nozzle manufacturer specifications that refer to the ASAE S572 Standard or the BCPC Guideline. A spray volume of 20 to 30 L/ha is recommended.

Best results will be obtained when aerial applications are made in a light crosswind. Applications should not be made during temperature inversions or in conditions of very low relative humidity. Care should be taken to avoid drift damage to adjoining grass crops.

# USE OF RAINBOW CLETHODIM 360 ON PASTURE LEGUME (LUCERNE, CLOVER AND MEDIC) SEED CROPS AND PASTURES AND PASTURE HERBS

Rainbow Clethodim 360 Herbicide has been demonstrated to be safe when applied to the following cultivars during early establishment.

- Pasture legumes
- Clover (Trifolium spp.)
- Annual: Subterranean Clover (Dalkeith, Dalsa, Goulburn, Koala, Nungarrin, Riverina, Seaton Park and York A), Arrowleaf Clover (Zulu II), Balansa Clover (Enduromax, Frontier, Paradana), Berseem Clover (Elite II), Gland Clover (Prima), Persian Clover (Prolific, Leeton), Rose Clover (Hykon).
- Perennial: Strawberry Clover (Palestine), White clover (NuSiral).
- Lucerne and Medics (Medicago spp.) Lucerne (Aurora, Field, Genesis, Hunterfield, Multileaf, Salado,

- Sardi SEVEN, Sceptre and Venus), Barrel Medic (Sephi, Jester Paraggio, Caliph), Burr Medic (Scimitar, Santiago), Snail Medic (Silver).
- Serradella (Ornithopus spp.) French or Pink Serradella (Cadiz), Yellow Serradella (Charano, Santorini).
- Pasture herbs: Chicory (Puna II) and Plantain (Tonic) Apply Rainbow Clethodim 360 Herbicide whenplants have reached 2-4 trifoliate leaf stage, or after 40 days from sowing. Some pasture varietiesmay exhibit an initial reduction in crop vigour or biomass, however, these symptoms are transientand crops recover fully with no effect on yield.

# COMPATIBILITY

**Grass Herbicides:** Rainbow Clethodim 360 Herbicide is compatible with the following grass herbicides: Targa\*, Fusilade\*, Verdict\*, Sertin\* and Correct\* (refer to the Bayer Correct label for detail on adjuvant recommendations for that product.

NOTE: In all situations where Rainbow Clethodim 360 Herbicide is mixed with another grass herbicide, Rainbow Clethodim 360 Herbicide should be used at the full label rate specified for the target weed species.

RAINBOW Clethodim 360 Herbicide may also be applied in tank mixtures with one of the following products: Fastac\* 100, Le-Mat\*, Lontrel\*, Spin Flo\*, Sumi-Alpha\* Flex\*, Sumisclex\* Broadacre and Dithane\* M45.

RAINBOW Clethodim 360 Herbicide is compatible with atrazine. Avoid using this tank mix when crops are stressed by environmental factors. When mixing RAINBOW Clethodim 360 Herbicide with atrazine use Uptake\* or Enhance\* at 1L/100L as the adjuvant. The addition of an ammonium sulphate product such as Spraymate\* Liase is recommended to improve performance of this tank mix.

RAINBOW Clethodim 360 Herbicide should not be applied in a tank mix with Bravo\* (chlorothalonil), Brodal\* (diflufenican), Basagran\* (bentazone and MCPA) or Blazer\* (aciflurofen). Apply as separate applications. For information on compatibility of products not listed, please refer to Shandong Rainbow International Co Ltd.