

Product Name: Sabakem Clethodim 360EC
APVMA Approval No: 93184/138186



Label Name:	Sabakem Clethodim 360EC
Signal Headings:	CAUTION KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
Constituent Statements:	ACTIVE CONSTITUENT: 360 g/L CLETHODIM SOLVENT: 570 g/L LIQUID HYDROCARBON
Mode of Action:	GROUP 1 HERBICIDE
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.
Net Contents:	5 L – 1000 L
Restraints:	<p>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.</p> <p>SPRAY DRIFT RESTRAINTS Specific definitions for terms used in this section of the label can be found at apvma.gov.au/spraydrift DO NOT allow bystanders to come into contact with the spray cloud. DO NOT apply in a manner that may cause an unacceptable impact to native vegetation, agricultural crops, landscaped gardens and aquaculture production, or cause contamination of plant or livestock commodities, outside the application site from spray drift. Wherever possible, correctly use application equipment designed to reduce spray drift and apply when the wind direction is away from these sensitive areas.</p>

	<p>DO NOT apply unless the wind speed is between 3 and 20 kilometres per hour at the application site during the time of application.</p> <p>DO NOT apply if there are hazardous surface temperature inversion conditions present at the application site during the time of application. Surface temperature inversion conditions exist most evenings one to two hours before sunset and persist until one to two hours after sunrise.</p>
--	---

Directions for Use:	This section contains file attachment.
---------------------	--

Other Limitations:	
--------------------	--

Withholding Periods:	<p>WITHHOLDING PERIODS:</p> <p>HARVEST:</p> <p>Pasture legume (lucerne, clover and medic) seed crops and pastures: NOT REQUIRED WHEN USED AS DIRECTED.</p> <p>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.</p> <p>Forestry: NOT REQUIRED WHEN USED AS DIRECTED.</p> <p>Beetroot, Cabbage: DO NOT APPLY LATER THAN 7 DAYS BEFORE HARVEST.</p> <p>Onions: DO NOT APPLY LATER THAN 14 DAYS BEFORE HARVEST.</p> <p>Lettuce, Potatoes: DO NOT APPLY LATER THAN 4 WEEKS BEFORE HARVEST.</p> <p>Celery: DO NOT APPLY LATER THAN 9 WEEKS BEFORE HARVEST.</p> <p>GRAZING:</p> <p>Pasture legume (lucerne, clover and medic) seed crops and Pastures: DO NOT GRAZE OR CUT FOR STOCK FEED FOR 14 DAYS AFTER APPLICATION.</p> <p>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 STOCKFEED FOR 21 DAYS AFTER APPLICATION.</p> <p>Cotton: DO NOT GRAZE OR CUT COTTON FORAGE OR STUBBLE FOR STOCK-FEED.</p>
----------------------	---

Trade Advice:	
---------------	--

General Instructions:	This section contains file attachment.
-----------------------	--

Resistance Warning:	<p>GROUP 1 HERBICIDE</p> <p>Sabakem Clethodim 360EC is a member of the cyclohexanedione group of herbicides. Sabakem Clethodim 360EC has the inhibition of acetyl coA carboxylase mode of action. For weed resistance management, Sabakem Clethodim 360EC is a Group 1 Herbicide. Some naturally-occurring weed biotypes resistant to Sabakem Clethodim 360EC and other Group 1 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 Sabakem Clethodim 360EC or other Group 1 Herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Sabakem Pty Ltd accepts no liability for any losses that may result from the failure of Sabakem Clethodim 360EC to control resistant weeds.</p>
---------------------	---

Precautions:	<p>CAUTION</p> <p>Ornamentals and Trees – While Sabakem Clethodim 360EC 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.</p> <p>DO NOT use on Gymnosperms (pines, conifers, etc) unless a prior test has been conducted to check safety on the relevant species.</p>
Protections:	<p>PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS</p> <p>DO NOT apply Sabakem Clethodim 360EC if wind is likely to cause drift onto susceptible crops/plants, cropping lands or pastures.</p> <p>Sabakem Clethodim 360EC 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.</p> <p>PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT</p> <p>DO NOT contaminate streams, rivers or watercourses with the product or used containers.</p>
Storage and Disposal:	<p>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.</p> <p>For Refillable containers: Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.</p>
Safety Directions:	<p>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.</p>
First Aid Instructions:	<p>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.</p>
First Aid Warnings:	

DIRECTIONS FOR USE

Crop	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 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 INSTRUCTIONS for mixture recommendations with insecticides, fungicides and other herbicides.
		Barley Grass (<i>Hordeum leporinum</i>), Brome Grass (<i>Bromus diandrus</i>), Wild Oats (<i>Avena</i> spp.)	116 to 333			
		Volunteer Wheat (<i>Triticum aestivum</i>), Volunteer Oats (<i>Avena sativa</i>)	133 to 333 (116 to 333 in WA only)			
		Silver Grass (<i>Vulpia bromoides</i>) suppression only	166 to 333	NSW, ACT, VIC, TAS only		
		Paradoxa Grass (<i>Phalaris Paradoxa</i>)	166 to 250 250 - 333	2- to 5-leaf stage 5-leaf to fully tillered	QLD, NSW, ACT on	
Pulse crops (including adzuki beans, broad beans, chickpeas, faba beans, field peas, lentils^ and lupins#). Pasture (1) legume (lucerne, clover and medic) seed crops and pastures (1) (including pastures containing chicory and plantain).	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, 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 INSTRUCTIONS for mixture recommendations with insecticides, fungicides and other herbicides. ^ Application up to 7-node/early branching crop growth stage only. # NOT QLD (1) See use of Sabakem Clethodim 360EC
	Chickpeas, faba beans, broad beans, field peas: DO NOT APPLY beyond full flowering.	Barley Grass (<i>Hordeum leporinum</i>) Brome grass (<i>Bromus diandrus</i>) Wild Oats (<i>Avena</i> spp.)	116 to 333			
		Volunteer Wheat (<i>Triticum aestivum</i>) Volunteer Oats (<i>Avena sativa</i>)	133* to 333* (116 to 333 in WA only)			
		Volunteer Barley (<i>Hordeum vulgare</i>)	333			
	Lentils: Apply up to the 7 node/early branching stage of crop growth.					
	Lupins: DO NOT APPLY after 80% of flowers have opened.	Silver grass (<i>Vulpia bromoides</i>) – suppression only	166 to 333	NSW, ACT, VIC, TAS only		

[^] Application up to 7-node/early branching crop growth stage only.
[#] NOT QLD
(1) See use of Sabakem Clethodim 360EC

Crop	Crop Growth Stage	Weeds Controlled	Rate mL/ha	Stage of Weed Growth	State	Critical Comments
		Paradoxa grass, (<i>Phalaris paradoxa</i>)	166 - 250 250-333	2 to 5 leaf stage 5-leaf to fully tillered	QLD, NSW, ACT only	in pastures under General Instructions.
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).	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.	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>), Red Sprangletop Grass (<i>Leptochloa filiformis</i>), Seedling Johnson Grass (2) (<i>Sorghum halepense</i>), Summer Grass (<i>Digitaria</i> spp.), Volunteer Sorghum (<i>Sorghum</i> spp.)	166 to 250 250-333	2 to 5 leaf stage 5-leaf to fully tillered	QLD, NSW, ACT, VIC, WA, NT 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 INSTRUCTIONS for mixture recommendations with insecticides, fungicides and other herbicides. (1) See use of Sabakem Clethodim 360EC in pastures under General Instructions. (2) 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.

Crop	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 filiformis</i>),Seedling Johnson Grass (1) (<i>Sorghum halepense</i>), Summer Grass (<i>Digitaria</i> spp.), Volunteer Sorghum (<i>Sorghum</i> spp.)	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.
	Annual Ryegrass (<i>Lolium rigidum</i>), Annual Phalaris (<i>Phalaris minor</i>), Barley Grass (<i>Hordeum leporinum</i>), Brome Grass(<i>Bromus diandrus</i>), Wild Oats (<i>Avena</i> spp.)	100 to 333 116 to 333	2 leaf to fully tillered	All states	
	Volunteer Wheat (<i>Triticum aestivum</i>), Volunteer Oats (<i>Avena Sativa</i>)	133 to333 (116 to 333 in WA only			
	Volunteer Barley (<i>Hordeum vulgare</i>)	333			
	Silver grass (<i>Vulpia bromoides</i>) – suppression only (not Qld, WA)	166 to 333			
	Winter grass (<i>Poa annua</i>)	333			
	Forestry, non- bearing fruit trees and ornamentals	Annual Ryegrass (<i>Lolium rigidum</i>), Annual Phalaris (<i>Phalaris minor</i>), Barley Grass (<i>Hordeum leporinum</i>), Barnyard	333	2 leaf to fully tillered	

Crop	Weeds Controlled	Rate mL/ha	Stage of Weed Growth	State	Critical Comments
	Grass(<i>Echinochloa</i> spp.), Blown Grass (<i>Agrostis aveacea</i>), Brome Grass (<i>Bromus diandrus</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 filiformis</i>), Seedling Johnson Grass (1) (<i>Sorghum halepense</i>), Silver Grass (<i>Vulpia bromoides</i>) - suppression only (not QLD, WA), Summer Grass (<i>Digitaria</i> spp.), Volunteer Sorghum (<i>Sorghum</i> spp.), Volunteer Wheat (<i>Triticum aestivum</i>), Volunteer Oats (<i>Avena sativa</i>), Volunteer Barley (<i>Hordeum vulgare</i>), Winter Grass (<i>Poa annua</i>)				conifers, etc) unless a prior test has been conducted to check safety on the relevant species. See COMPATIBILITY AND CAUTIONS in GENERAL INSTRUCTIONS for particular species. (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.

**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 Sabakem Clethodim 360EC

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

After using Sabakem Clethodim 360EC

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 Sabakem Clethodim 360EC. Add spray additive and agitate thoroughly, then add the remainder of the water.

Agitate again before spraying commences.

ADJUVANTS AND SPRAY ADDITIVES Always apply Sabakem Clethodim 360EC with a crop oil. Sabakem Clethodim 360EC 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.) Sabakem Clethodim 360EC may also be applied with D-C-Trate* at 2L/100L water. Sabakem Clethodim 360EC is compatible with ammonium sulphate products such as Spraymate* Liase. When mixing Sabakem Clethodim 360EC 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. Sabakem Clethodim 360EC is not compatible with Hot-Up* Spray Adjuvant or Freeway* Gold Penetrant.

APPLICATION

Ground Application

Sabakem Clethodim 360EC should be applied with calibrated spray equipment. **DO NOT** apply with spray droplets smaller than a **MEDIUM** spray droplet size. Apply in a minimum of 50 litres of water per hectare. Use 150 L/ha when spraying dense populations.

Aerial Application

Sabakem Clethodim 360EC 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. 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 SABAHEM CLETHODIM 360EC ON PASTURE LEGUME (LUCERNE, CLOVER AND MEDIC)

SEED CROPS AND PASTURES AND PASTURE HERBS

Sabakem Clethodim 360EC 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 Sabakem Clethodim 360EC when plants have reached 2-4 trifoliate leaf stage, or after 40 days from sowing. Some pasture varieties may exhibit an initial reduction in crop vigour or biomass, however, these symptoms are transient and crops recover fully with no effect on yield.

COMPATIBILITY

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

Sabakem Clethodim 360EC should not be applied in a tank mix with Bravo* (chlorothalonil), Brodal* (diflufenican), Basagran* (bentazone and MCPA) or Blazer* (acifluorfen). Apply as separate applications. For information on compatibility of products not listed, please refer to Sabakem Pty Ltd.