

# Smart Clethodim 240EC

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

40  
HERBICIDE

## HERBICIDE

ACTIVE CONSTITUENT: 240 g/L CLETHODIM  
SOLVENT: 663 g/L LIQUID HYDROCARBONS  
630 g/L LIQUID HYDROCARBONS

Group **A** Herbicide

For the control of certain grass weeds in beetroot, cabbage, canola, celery, chickpeas, cotton, faba beans, field peas, forestry, lentils, lettuce, lupins, mung beans, non-bearing fruit trees, onions, ornamentals, peanuts, potatoes and soy beans as per the Directions for Use Table



**IMPORTANT:**  
READ THIS BOOKLET  
BEFORE USING THIS PRODUCT

**Crop Smart**  
better crop protection

Contents: 1L – 1000L

APVMA Approval No: 62564/118515

Distributed by:  
Crop Smart Pty Ltd  
ABN 28 093 927 961  
2409/4 Daydream Street,  
Warriewood, NSW 2102.  
Tel: 1300 783 481  
Fax: 1300 783 491

## **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 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: Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

## **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 PVC gloves, 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.

## **FIRST AID**

If poisoning occurs, contact a doctor, or Poisons Information Centre (Phone Australia 131126).  
If swallowed, do NOT induce vomiting.

## **SAFETY DATA SHEET**

Additional information is listed in the Safety Data Sheet, which is available from the supplier.

## **CONDITION OF SALE**

Crop Smart Australia Limited ("Crop Smart") shall not be liable for any loss, injury, damage or death whether consequential or otherwise whatsoever, or howsoever arising 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 conditions that the purchaser does not rely on Crop Smart's skill or judgement in purchasing or using the same and every person dealing with this product does so at his own risk absolutely. No representative of Crop Smart has any authority to alter these conditions.

**DIRECTIONS FOR USE:**

**Restraints:** DO NOT apply without the addition of an adjuvant.  
 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 Smart Clethodim 240 Herbicide more than once to any one crop.

CROP	CROP GROWTH STAGE	WEEDS CONTROLLED	RATE (mL/ha)	STAGE OF WEED GROWTH	STATE	CRITICAL COMMENTS
Canola, Chickpeas, Faba beans, Field peas, Lentils <sup>(1)</sup> , Lupins <sup>#</sup>	<b>Canola:</b> DO NOT APPLY after flower buds become visible (green buds)	Annual ryegrass ( <i>Lolium rigidum</i> ) Annual phalaris ( <i>Phalaris minor</i> )	150 to 250	2-leaf to fully tillered	Qld, NSW, ACT, Vic, Tas, SA, WA only	Always apply with D-C-Trate* at 2 L/100 L or Hasten* at 1 L/100 L or Kwickin* at 1 L/100 L or Uptake* at 500 mL/100 L spray volume. 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.  <sup>(1)</sup> Application up to 7-node/early –branching crop growth stage only  <sup>#</sup> Not Queensland
		Barley grass ( <i>Hordeum leporinum</i> ), Brome grass ( <i>Bromus diandrus</i> ), Wild Oats ( <i>Avena</i> spp.)	175 to 250			
	<b>Chickpeas:</b> DO NOT APPLY beyond full flowering	Volunteer wheat ( <i>Triticum aestivum</i> ), Volunteer oats ( <i>Avena sativa</i> )	200* to 250 *(175 to 250 in WA only)			
		Volunteer barley ( <i>Hordeum vulgare</i> )	250			
	<b>Faba beans:</b> DO NOT APPLY beyond full flowering	Silver grass ( <i>Vulpia bromoides</i> ) – suppression only	250 to 500	2 to 5 leaf stage 5 leaf to fully tillered	NSW, ACT, Vic, Tas only	
		Paradoxa grass ( <i>Phalaris paradoxa</i> )	250 to 375 375			
	<b>Field Peas:</b> DO NOT APPLY beyond full flowering					
<b>Lentils:</b> Apply up to the 7 node/early branching stage of crop growth.						
<b>Lupins:</b> DO NOT APPLY after 80% of flowers have opened						

CROP	CROP GROWTH STAGE	WEEDS CONTROLLED	RATE (mL/ha)	STAGE OF WEED GROWTH	STATE	CRITICAL COMMENTS
Cotton (Qld, NSW and NT only) Peanuts, Mung beans, Soybeans	<p><b>Cotton:</b> DO NOT APPLY after full flowering (mid bloom)</p> <p><b>Peanuts:</b> DO NOT APPLY after the pod fill stage of crop development</p> <p><b>Mung beans:</b> DO NOT APPLY after the first flower buds are visible.</p> <p><b>Soybeans:</b> DO NOT APPLY after the first flower buds are visible.</p>	<p>Barnyard grass (<i>Echinochloa</i> spp.)</p> <p>Blown grass (<i>Agrostis aveacea</i>),</p> <p>Crowsfoot grass (<i>Eleusine indica</i>)</p> <p>Feathertop</p> <p>Rhodes grass (<i>Chloris virgata</i>),</p> <p>Liverseed grass (<i>Urochloa panicoides</i>),</p> <p>Red sprangletop grass (<i>Leptochloa filiformis</i>),</p> <p>Seedling Johnson grass (<i>Sorghum halepense</i>),</p> <p>Summer grass (<i>Digitaria</i> spp),</p> <p>Volunteer sorghum (<i>Sorghum</i> spp).</p>	<p>250 to 375</p> <p>375</p>	<p>2 to 5 leaf stage</p> <p>5 leaf to fully tillered</p>	Qld, NSW, ACT, Vic, WA, NT only	<p>Always apply with D-C-Trate at 2 L/100 L or Hasten at 1 L/100 L or Kwickin at 1 L/100 L or Uptake at 500 mL/100 L spray volume.</p> <p>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.</p> <p>See COMPATIBILITY AND CAUTIONS in GENERAL INSTRUCTIONS for mixture recommendations with insecticides, fungicides and other herbicides.</p>

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 ( <i>Sorghum halepense</i> ), Summer grass ( <i>Digitaria</i> spp), Volunteer sorghum ( <i>Sorghum</i> spp).	250 to 375  375	2 to 5 leaf stage  5 leaf to fully tillered	All States	Always apply with D-C-Trate at 2 L/100 L or Hasten at 1 L/100 L or Kwickin at 1 L/100 L or Uptake at 500 mL/100 L spray volume.  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 150 L/ha when spraying dense grass populations.

CROP	WEEDS CONTROLLED	RATE (mL/ha)	STAGE OF WEED GROWTH	STATE	CRITICAL COMMENTS
Beetroot, Cabbage, Celery, Lettuce, Potatoes Onions (cont)	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.)  Volunteer wheat ( <i>Triticum aestivum</i> ), Volunteer oats ( <i>Avena sativa</i> )  Volunteer barley ( <i>Hordeum vulgare</i> )  Silver grass ( <i>Vulpia bromoides</i> ) – suppression only (not Qld, WA)  Winter grass ( <i>Poa annua</i> )	150 to 250  175 to 250  200* to 250 *(175 to 250 in WA only) 250  250 to 500  500	2-leaf to fully tillered	All States	Always apply with D-C-Trate at 2 L/100 L or Hasten at 1 L/100 L or Kwickin at 1 L/100 L or Uptake at 500 mL/100 L spray volume.  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 150 L/ha when spraying dense grass populations.

CROP	WEEDS CONTROLLED	RATE (mL/ha)	STAGE OF WEED GROWTH	STATE	CRITICAL COMMENTS
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 grass ( <i>Echinochloa spp.</i> ), 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 ( <i>Sorghum halepense</i> ) Silver grass ( <i>Vulpia bromoides</i> ) – suppression only (not Qld, WA), Summer grass ( <i>Digitaria spp.</i> ), Volunteer sorghum ( <i>Sorghum spp.</i> ) Volunteer wheat ( <i>Triticum aestivum</i> ), Volunteer oats ( <i>Avena sativa</i> ) Volunteer barley ( <i>Hordeum vulgare</i> ) Winter grass ( <i>Poa annua</i> )	500	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 D-C-Trate at 2 L/100 L or Hasten at 1 L/100 L or Kwickin at 1 L/100 L or Uptake at 500 mL/100 L spray volume.  Use a spray volume of 150 L/ha when spraying dense grass populations.  Do NOT use on Gymnosperms (pines, 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.

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

**WITHHOLDING PERIODS:**

**HARVEST:**

**CANOLA, CHICKPEAS, COTTON, FABA BEANS,  
FIELD PEAS, LENTILS, LUPINS, MUNG BEANS,  
PEANUTS, 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:**

**CANOLA, CHICKPEAS, FABA BEANS, FIELD PEAS, LENTILS, LUPINS, MUNG BEANS, PEANUTS, 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.**

## GENERAL INSTRUCTIONS

### RESISTANT WEEDS WARNING

<b>GROUP</b>	<b>A</b>	<b>HERBICIDE</b>
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Smart Clethodim 240EC Herbicide is a member of the cyclohexanedione group of herbicides. Smart Clethodim 240EC Herbicide has the inhibitor of acetyl coA carboxylase mode of action. For weed resistance management Smart Clethodim 240EC Herbicide is a Group A Herbicide. Some naturally occurring weed biotypes resistant to Smart Clethodim 240EC 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 Smart Clethodim 240EC Herbicide or other Group A Herbicides.

Since the occurrence of resistant weeds is difficult to detect prior to use, Crop Smart Pty Ltd accepts no liability for any losses that may result from the failure of Smart Clethodim 240EC Herbicide to control resistant weeds.

### CLEANING SPRAY EQUIPMENT

#### Before using SMART Clethodim 240EC

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

#### After using SMART Clethodim 240EC

Empty the tank and drain the whole system.

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

Use of a household detergent will aid in 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 and add the required amount of product. Add spray additive and agitate thoroughly, then add the remainder of the water. Agitate again before spraying commences.

### APPLICATION

#### Ground Application

Smart Clethodim 240EC Herbicide should be applied with calibrated spray equipment producing a median droplet range of 200 to 300 microns VMD. Apply in a minimum of 50 litres of water per hectare. Use 150 L/ha when spraying dense populations.

#### Aerial Application

Smart Clethodim 240EC Herbicide can be applied through aircraft fitted with boom or Micronair equipment. A spray volume of 20 to 30 L/ha is recommended and equipment should be adjusted to deliver droplets in the range of 200 to 250 microns VMD.

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.

### COMPATIBILITY

Smart Clethodim 240EC Herbicide is compatible with the following grass herbicides: Quizalop-p-ethyl, Fluazifop-p, Haloxyfop 520 and Sertin.

NOTE: in all situations where Smart Clethodim 240EC Herbicide is mixed with another grass herbicide, Smart Clethodim 240EC Herbicide should be used at the full label rate specified for target weed species.

Smart Clethodim 240EC Herbicide may also be applied in tank mixtures with one of the following products: Sumi-Alpha\* 50 EC, Alpha-cypermethrin 100 Insecticide and Omethoate 290.

Smart Clethodim 240EC Herbicide should not be applied in a tank mix with Diflufenican 500, Basagran\* or Blazer. Apply as separate applications.



For information on compatibility of products not listed, please refer to Crop Smart Pty Ltd.

### **CAUTION**

Ornamentals and Trees – While Smart Clethodim 240EC Herbicide is generally selective to broadleaved plants (i.e. it is active against grasses), tests should always be made on a smaller 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.

### **PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS:**

DO NOT apply Smart Clethodim 240EC Herbicide if wind is likely to cause drift onto susceptible crops/plants, cropping lands or pastures. Smart Clethodim 240EC 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 watercourses 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 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: Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

### **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 PVC gloves, 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.

### **FIRST AID**

If poisoning occurs, contact a doctor, or Poisons Information Centre (Phone Australia 131126).

If swallowed, do NOT induce vomiting.

### **SAFETY DATA SHEET**

Additional information is listed in the Safety Data Sheet, which is available from the supplier.

### **CONDITION OF SALE**

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