### CAUTION

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

# CALDERA 250 SL

## HERBICIDE

**Smart** 

ACTIVE CONSTITUENT: 250 g/L IMAZAPYR (as the isopropylamine salt)



For the control of various annual and perennial weeds in non-crop situations as indicated in the DIRECTIONS FOR USE table.



IMPORTANT: READ THIS LEAFLET BEFORE USE



Contents 20L, 110L & 1000L

**APVMA Approval 64773/111924** 

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**DIRECTIONS FOR USE RESTRAINTS:** DO NOT apply by AIRCRAFT as spray drift may cause damage to desirable surrounding species.

Situation	Weeds	States	Rate	Critical Comments
Around agricultural buildings and other farm non-crop situations, commercial, industrial and public service areas, rights of way and waste land, away from desirable vegetation	Annual ryegrass (Lolium rigidum) Barnyard grass (Echinochloa crus-galli) Blady grass (Imperata cylindrica) Buckbush (Salsola kali) Deadnettle (Lamium amplexicaule) Feathertop Rhodes grass (Chloris virgata) Fleabane (Conyza canadensis) Hexham Scent (Melilotus indicus) Liverseed grass(Urochloa panicoides) London rocket (Sisymbrium irio) Mayne's pest (Verbena tenuisecta) Medics (Medicago spp.) Mintweed (Salvia reflexa) Blackberry nightshade (Solanum nigrum) Paterson's Curse (Echium plantagineum) Plains grass (Stipa aristiglumis) Prairie grass (Bromus unioloides) Prickly lettuce (Lactuca serriola) Purple top (Verbena bonariensis) Scented top (Capillipedium spp.) Sedges (Cyperus spp.) Slender celery (Apium leptophyllum) Sowthistle (Sonchus oleraceus) St Barnaby's thistle (Centaurea solstitialis) Summer grasses (Digitaria spp.) Thornapples (Datura spp.) Turnip weed (Rapistrum rugosum) Variegated thistle (Silybum marianum) Vasey grass (Paspalum urvillei) Warrego grass (Paspalidium jubiflorum) Wild oats (Avena spp.) Wild turnip (Brassica tournefortii) Wireweed (Polygonum aviculare)	All States	4 L/ha	Applications can be made pre- or post-emergence. Post-emergence applications also provide pre-emergence control.  Medium Volume: 4 L of Smart Caldera 250 SL Herbicide should be applied using spray volumes ranging between 50 and 200L/ha.  High Volume: Apply sufficient spray to wet the surfaces visibly without producing run-off. Measure how much spray is required to cover 10m x 10m and add Smart Caldera 250 SL Herbicide at the rate of 40 mL in this measured volume.

Turnip weed (Rapistrum rugosum) Variegated thistle (Silybum marianum) Vasey grass (Paspalum urvillei) Warrego grass (Paspalidium jubiflorum) Wild oats (Avena spp.) Wild turnip (Brassica tournefortii) Wireweed (Polygonum aviculare Bokhara clover (Melilotus albus) Bracken (suppression only) (Pteridium esculentum) Capeweed (Arctotheca calendula) Couch (Cynodon dactylon) Docks (Rumex spp.) Johnson grass (Sorghum halepense) Panics (suppression only) (Panicum spp.) Paspalum (Paspalum dilatatum) Queensland bluegrass (Dichanthium sericeum) Stinging nettle (Urtica incisa)		6 L/ha	Applications can be made pre- or post-emergence. Post-emergence applications also provide pre-emergence control.  Medium Volume: 6 L of Smart Caldera 250 SL Herbicide should be applied using spray volumes ranging between 50 and 200L/ha.  High Volume: Apply sufficient spray to wet the surfaces visibly without producing run-off. Measure how much spray is required to cover 10m x 10m and add Smart Caldera 250 SL Herbicide at the rate of 60 mL in this measured volume.
Rubber vine (Cryptostegia grandiflora)	Qld only	4 mL/L water	<b>Post-emergence application :</b> Apply sufficient spray to wet the surface visibly to the point of run-off. For effective control, apply when the plant is actively growing and not stressed, yellowing or bearing pods. Flowering is a good indication of the best time for application. Use high volume application as detailed in the General Instructions Section.

Situation	Weeds	States	Rate	Critical Comments
Around agricultural buildings and other farm non-crop situations, commercial, industrial and public service areas, rights of way and waste land, away from desirable vegetation	Thunbergia (Thunbergia spp.)	Qld only	7.5 mL/L water	Post-emergence application: Apply sufficient spray to wet the surface visibly to the point of run-off. For effective control, apply when the plant is actively growing. Use high volume application as detailed in the General Instructions Section.

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

#### **GENERAL INSTRUCTIONS**

Smart Caldera 250 SL Herbicide is a liquid Soluble Concentrate formulation of herbicide which will kill a range of standing weeds and emerging seedlings. It stops growth rapidly, although symptoms may take over 30 days to develop. Affected plants are discoloured and often growth is distorted.

The active material in **Smart Caldera 250 SL Herbicide** is rapidly absorbed through foliage and roots, and translocated throughout plants. Foliage treatments will provide pre-emergence control as the active material is released to the soil following plant decay. Residual control of weeds, for which the lower rate of **Smart Caldera 250 SL Herbicide** is recommended, will increase when the higher rate is used.

#### **RESISTANT WEEDS WARNING**

GROUP	В	HERBICIDE

Smart Caldera 250 SL Herbicide is a member of the imadazolinone group of herbicides. Smart Caldera 250 SL Herbicide has the inhibition of acetolactate synthase (ALS) mode of action. For weed resistance management Smart Caldera 250 SL Herbicide is a Group B Herbicide. Some naturally occurring weed biotypes resistant to Smart Caldera 250 SL Herbicide and other Group B 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 Caldera 250 SL Herbicide or other Group B herbicides.

Since the occurrences 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 Caldera 250 SL Herbicide** to control resistant weeds.

#### **APPLICATION:**

Faster control of standing weeds will result if growing conditions are favourable at, and after, application. Rainfall within two hours of the spray mixture drying on leaves may result in reduced weed control.

#### **SPRAYING INSTRUCTIONS:**

For medium volume spraying, apply through a spray boom calibrated to ensure even coverage. Use spray nozzles suitable to prevent spray drift onto surrounding desirable vegetation. For high volume application, use a hand gun or knapsack to apply sufficient spray to wet the surface visibly without producing run-off.

#### MIXING

**Smart Caldera 250 SL Herbicide** is a liquid Soluble Concentrate formulation. Part fill the spray tank with water, then with the agitator running, add the required amount of product, then fill the tank with water. When tank mixing this product with other recommended compatible products, first add this product to the tank and mix thoroughly to dissolve before adding the other products. Use ONLY stainless steel, fiberglass, plastic or plastic-lined containers for mixing, storage and application.

#### **COMPATIBILITY:**

For faster knockdown of weeds, certain other herbicides may be mixed with **Smart Caldera 250 SL Herbicide**. Bipyridyl herbicides (e.g. Paraquat) are NOT compatible with **Smart Caldera 250 SL Herbicide**. Mixtures of this type will result in poor weed control.

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

DO NOT apply under weather conditions or from spraying equipment which may cause spray to drift onto nearby susceptible plants/crops, cropping lands or pastures.

DO NOT apply on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the chemicals may be washed or moved into contact with their roots.

DO NOT apply where run-off water may flow onto agricultural land or other desirable vegetated areas. Dispose of washings away from desirable plants and their roots.

#### PROTECTION OF LIVESTOCK

Low hazard to bees – may be applied to plants at any time. DO NOT graze or cut for stock feed, vegetation which has been treated with **Smart Caldera 250 SL Herbicide**.

#### PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

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

#### STORAGE AND DISPOSAL

Store in the closed, original container in a dry, cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. Triple or preferably pressure 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 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.

#### **SAFETY DIRECTIONS**

Will irritate the eyes and skin. Avoid contact with eyes and skin. When opening the container and preparing spray wear cotton overalls buttoned to the neck and wrist and wear elbow-length PVC gloves and goggles. When using prepared spray wear cotton overalls buttoned to the neck and wrist and wear elbow-length PVC gloves. If product in eyes wash it out immediately with water. Wash hands after use. After each days use wash gloves and goggles and contaminated clothing.

#### **FIRST AID**

If poisoning occurs, contact a doctor or Poisons Information Centre - Tel: 13 11 26.

#### **MSDS**

Additional information is listed in the Material Safety Data Sheet which can be obtained from the supplier.

IN AN EMERGENCY DIAL 000 FIRE BRIGADE OR POLICE

#### **CONDITIONS OF SALE**

Crop Smart Pty Ltd accepts responsibility for the consistent quality of the product, however since the use and application of the product is beyond control, CROP SMART PTY LTD accepts no responsibility whatsoever for any loss, damage or other result following the use of the product whether used in accordance with directions or not; other than those mandatorily imposed by statutes, the liability is limited to the replacement of the goods and is conditional upon a claim made in writing and, where necessary, a sufficient part of the goods being returned for proper examination by the company within thirty days of sale. Not for repackaging or reformulation. No licence under any patent is granted or implied by purchase of this product.