



We create chemistry

# Prowl<sup>®</sup> cs

Reg. No.: 09-C-91-13

Net Content:

# 10 L



GROUP	3 (K1)	HERBICIDE
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**Composition: mass/volume:**

Pendimethalin 455 g/L

A selective pre-planting and pre-emergence herbicide for control of annual grasses including Shamva grass and some broadleaf weeds as listed in cotton, maize, sugarcane and soyabeans.

**Registered by:**

Pivotal Agro-Services (Pvt) Ltd.  
Pivotal Agro House, 37 Kenmark Crescent  
Bluff Hill Industrial Park, Harare, Zimbabwe  
Telephone: +263 242 309825/27

**Manufactured and packed by:**

BASF SE  
Germany

® = Registered trademark of BASF

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**TO CAUSE A HAZARD IN THE USE, STORAGE OR DISPOSAL OF THIS SUBSTANCE IS AN OFFENCE**

**READ THE LABEL BEFORE USING THE PRODUCT**

**WARRANTY:** Although this remedy has been tested under a large variety of conditions the registration holder does not warrant, that it will be efficacious under all conditions because the action and effect thereof may be affected by factors such as abnormal climatic and storage conditions, quality of dilution water, compatibility within other substances not indicated on the label and the occurrence of resistance of the disease, weed or pest, against the remedy concerned, as well as by the method, time and accuracy of application. The registration holder furthermore does not accept responsibility for damage to crops, vegetation, the environment or harm to man or animal or for lack of performance of the remedy concerned due to the failure of the user to follow the label instructions or the occurrence of conditions which could not have been foreseen in terms of the registration. Consult the supplier in the event of any uncertainty.

**WARNINGS:**

- Avoid spray drift onto adjacent crops.
- Causes substantial but temporary eye injury.
- Harmful when swallowed, inhaled or absorbed by skin.
- Keep locked up out of reach of children, uninformed persons and animals.
- Keep in the original container and store in a cool dry place away from food, drink and animal feeds.

**PRECAUTIONS:**

- Handle with care, avoid splashing/contact with concentrate or spray mix, particularly around the eyes and mouth. Poisonous by inhalation, swallowing and skin contact. Remove contaminated clothing immediately and wash before re-use.
- Wear suitable protective clothing (overalls, boots and gloves) when handling the concentrate or when applying the product.
- Wash protective clothing thoroughly after use, especially the insides of gloves.
- Dangerous to fish and bees.
- Keep out of the reach of children.
- Keep apart from food and foodstuffs.
- Wash exposed parts of the body after spraying and before eating, drinking or smoking.
- Do not contaminate pond, waterways and ditches.
- Destroy empty containers by puncturing and burying.
- Flammable liquid and vapour. Do not use, pour, spill or store near heat or open flame.
- Store in original container, tightly closed and keep under lock and key.
- Do not inhale the spray.

**SYMPTOMS OF POISONING:**

Depression and prostration in case of oral intoxication

**FIRST AID MEASURES**

Remove contaminated clothing and seek medical advice.

Have the product label/container with you when calling the Doctor.  
First Aid providers must wear protective clothing to prevent exposure.

**General advice:** Avoid contact with the skin, eyes and clothing.

Take off immediately all contaminated clothing.

If difficulties occur: Obtain medical attention.

Show container, label and/or safety data sheet to physician.

**If Inhaled:** Keep patient calm, remove to fresh air and seek medical attention.

**On Skin contact:** Wash thoroughly with soap and water.

If irritation develops, seek medical attention.

**On contact with eyes:** Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

**On Ingestion:** Rinse mouth and then drink plenty of water.

Do not induce vomiting, unless told so by a poison control centre or doctor.

Seek medical attention.

Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

**Note to physician:** Treat according to symptoms (decontamination, vital functions), no known specific antidote.

Administer corticosteroid dose aerosol to prevent pulmonary edema.

## DIRECTIONS FOR USE: USE ONLY AS DIRECTED

### GENERAL INFORMATION

Prowl® CS is a member of the dinitroaniline group of herbicides and provides selective control of most annual grasses and small-seeded broadleaved weeds. Prowl® CS inhibits cell division, through the inhibition of the protein tubulin and subsequently inhibits lateral root formation. Prowl® CS controls weeds by arresting seedling development. It will not control established weeds.

### CAUTION:

Prolonged periods of rainfall and/or excessive soil moisture at, or following application, may delay breakdown of Prowl® CS capsules, resulting in reduced weed control.

### COMPATIBILITY

Prowl® CS may be applied in a tank mix or a sequentially with other herbicides registered for use in a given crop. Always read the companion product label(s) and apply within label conditions for each product. Refer to the companion label for weeds controlled in addition to Prowl® CS alone.

Always perform amixing test to check the compatibility of Prowl® CS with all potential tank mix partners. Prowl® CS is compatible with herbicides for broad leaf weed control such as, Bladex® and Atrazine on maize, Diuron and Floumeturon on cotton and Pursuit® and Optill™ on soyabeans.

### USE RESTRICTIONS:

#### 1. Efficacy

- Some soil moisture must be present for Prowl® CS to be activated. Best results will be obtained if rainfall occurs within seven days of application.
- Residual control may be reduced:
  - under prolonged dry conditions
  - on soils with a high Kd factor

- where organic matter exceeds 6%
- where ash content is high
- Do not disturb the soil after Prowl® CS has been applied as this will result in reduced weed control.
- Where cultural techniques which encourage the build-up of organic residues in the surface soil are practised for a number of seasons, the effectiveness of residual herbicides may be reduced. In such circumstances periodic ploughing is recommended to disperse residues into a greater volume of soil.

## **2. Soil types**

- Prowl® CS may be used on all mineral soil types.
- Do not use Prowl® CS on soils with more than 10% organic matter.
- Do not use Prowl® CS on stony or gravelly soils. There is a risk of crop damage, especially if heavy rainfall is expected soon after application.
- Do not use Prowl® CS on water logged soil or soils prone to water logging.
- Do not apply Prowl® CS on very light sandy soils with less 10% clay.

## **3. Seedbed preparation**

Trash and straw should be incorporated evenly during seedbed preparation.

Seedbed must have a fine, firm tilth. Consolidate loose or cloddy seedbeds before use. Following pre-emergence applications, unconsolidated clods (especially if larger than 75mm (3") diameter) may reduce the level of weed control and cause seed to be inadequately covered, which could result in crop damage.

## **4. Crop safety**

- Extreme care should be taken to avoid damage by drift onto plants outside the target area.
- Do not apply Prowl® CS to crops suffering from stress, which may be caused for example by pests, disease, water logging, poor seedbed conditions or previous chemical treatment.
- Seed should be well covered with a settled soil (check the crop specific information).
- Shallow drilled crops should be treated post-emergence.
- Ensure that planting furrows are fully closed after planting and that no grooves or indentation remain above the seed, since heavy rains wash treated soil furrows, causing a concentration of the herbicide above or close to the seed, which may lead to crop damage. There must be no possibility of water accumulating in the furrow line.
- The use of non – till planters under conditions which do not allow good soil coverage of the crop seed can result in reduced crop stand or injury. Check equipment to ensure good seed coverage and furrow closure.
- Do not spray Prowl® CS under sown crops.
- Do not under sow crops treated with Prowl® CS.
- Prowl® CS should not be used on protected crops, or in greenhouses.
- Before using Prowl® CS on crops to be processed please consult your processor.

## **MIXING INSTRUCTIONS:**

Fill the spray tank to about ¾ full with clean water. Shake the Prowl® CS container well. Measure the required volume of Prowl® CS, add it to the spray tank and start agitating to mix the Prowl® CS, there after fill up the rest of the spray tank. Then fill up the spray tank to the required level while maintain the agitation to ensure thorough mixing of the spray mixture before spraying starts. Maintain the agitation during spraying. The prepared mixture must not be left in the tank for long periods e.g. overnight.

## SPRAYING INSTRUCTIONS:

### Ground application:

- Use a properly calibrated sprayer equipped with flat fan nozzle to achieve uniform spray distribution and minimize drift.
- Use about 200- 400 litres/ha. Higher volumes of water will improve coverage. Use pressure of at least 210 Kpa.
- The boom must be 60 cm or less above the target surface.
- Apply only when the potential for drift to adjacent non target areas is minimal (e.g. wind speed is less than 15 km/h).
- Keep at least 5 metres isolation distance between the area being sprayed and non-target sensitive crops.

## FOLLOW UP CROP RESTRICTIONS:

- Land treated with PROWL® CS may be replanted with unregistered crops after 12 months.
- Do not plant unregistered crops as follow crops in case of failure/destruction of Prowl® CS treated crops as crop injury may result.
- Use of PROWL® CS in accordance with label directions is expected to result in normal growth of rotational crops in most situations.

## APPLICATION RATES:

Crops	Maximum Individual Dose	Maximum number of treatments	Latest time of application
Maize	3.0 L/ha	One per crop	Before 4th leaf stage
Soybeans	3.0 L/ha	One per crop	Pre-emergence
Cotton	3.0 L/ha	One per crop	Pre-emergence
Sugarcane	3.5 L/ha	One per crop	Pre-emergence

## CROP SPECIFIC INFORMATION

### Maize

Dose rate	3.0 L/ha
Water volume	200-400 L/ha
Timing	Pre-emergence
Notes	Do not use on sweet corn or maize grown for seed. Maize seed must be covered with minimum of 4 cm of settled soil. The use of no-till planters under conditions which do not allow good soil coverage can result in reduced crop stand or injury. The use of Prowl® CS may affect the full development of crown roots which function only to anchor the plant. This has no effect on the yield of maize.

## Cotton

Dose rate	3.0 L/ha
Water volume	200-400 L/ha
Timing	pre-emergence
Notes	Seed must be covered with minimum of 2.5 cm of settled soil. Planting furrows must be completely closed after planting, as heavy rain can wash soil into furrow, concentrating Prowl® CS close to the seed which may lead to crop damage. Do not use on soils with less than 20% of the clay content.

## Soyabeans

Dose rate	3.0L/ha
Water volume	200-400 L/ha
Timing	Pre-emergence
Notes	Apply as soon as possible after planting. Seed must be covered with minimum of 3 cm of settled soil. Do not apply after the crop has germinated of the crop as serious crop injuries may occur.

## Sugarcane

Dose rate	3.5L/ha
Water volume	200-400 L/ha
Timing	Pre-emergence of the weeds
Notes	Plant cane: Apply within two days of planting. Ratoon cane: Apply not later than seven days after harvesting

## WEEDS CONTROLLED BY Prowl® CS:

## ANNUAL GRASSES CONTROLLED BY PROWL® CS

BOTANICAL NAME	COMMON NAME
<i>Brachiaria spp.</i>	Signal grass
<i>Chloris virgata</i>	Old lands grass
<i>Dactyloctenium aegyptium</i>	Crow's foot grass
<i>Digitaria spp.</i>	Finger grass
<i>Echinochloa colona</i>	Jungle rice
<i>Eleusine indica</i>	Rapoko grass
<i>Eragrostis aspera</i>	Rough love grass
<i>Panicum novmnerve</i>	Blackseed panicum
<i>Rottboellia cochinchinensis</i>	Shamva grass

<i>Setaria pumila</i>	Annual timothy
<i>Setaria verticillata</i>	Bur grass
<i>Tragus spp.</i>	Carrot seed grass
<i>Urochloa panicoides</i>	Garden urochloa

#### **BROAD LEAF WEEDS CONTROLLED BY PROWL® CS**

<b>BOTANICAL NAME</b>	<b>COMMON NAME</b>
<i>Amaranthus hybridus</i>	Pigweed
<i>Amaranthus thunbergii</i>	Red pigweed
<i>Chenopodium album</i>	Fat hen
<i>Hibiscus meeusei</i>	Wild cotton
<i>Portulaca oleracea</i>	Purslane
<i>Richardia scabra</i>	Mexican clover
<i>Tribulus terrestris</i>	Devil's thorn

**FOR FURTHER INFORMATION ON THIS PRODUCT PHONE (04) 309800**



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