

Read the label before opening the container.

For full particulars, see enclosed leaflet.

**KEEP OUT OF REACH OF CHILDREN AND ANIMALS**

# METSULFURON

South Africa Reg. No: L9467 Act No. 36 of 1947

HRAC HERBICIDE GROUP CODE: B

A water dispersible granule herbicide for the control of certain broad-leaved weeds in cereals as listed and the control of bramble, gum trees and Triffid weed.

## ACTIVE INGREDIENT:

Metsulfuron-methyl (sulfonyl urea).....600g/kg

## HAZARD STATEMENTS

- Very toxic to aquatic life with long lasting effects.

## PRECAUTIONARY STATEMENTS

- Wash hands, forearms and face thoroughly after handling.
- Avoid release into the environment.
- Dispose of contents in accordance with local/regional/national regulations.



**WARNING**

**Product Information: 072 678 8226**  
**In case of poisoning: 082 446 8946**

**enviro**  
bio-chem

Registration holder: Eintrade cc t/a RT Chemicals

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Expiry Date:

Batch No:

Date of Manufacture:

**UN No. 3077**

## **WARNINGS:**

- Very toxic to aquatic life with long lasting effects.
- Store under lock and key away from food and feedstuffs.
- Keep out of reach of children, uninformed persons and animals.
- Where lengthy wet, cold periods prevail soon after application, use of this product can lead to yellowing of leaves and eventual temporary retarded growth.
- **Re-entry:** Do not enter the treated field until the spray deposit has dried unless wearing protective clothing.
- **Aerial Application:** Notify all inhabitants in the immediate vicinity of the area to be sprayed and issues the necessary warnings. Do not spray over water or allow to drift and contaminate adjacent areas.

**Although this product has been extensively 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 effected by factors such as abnormal soil, climatic and storage conditions; quality of dilution water, compatibility with other substances not indicated on the label and the occurrence of resistance of the pest against the product concerned as well as by the method, time and accuracy of the 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 product concerned due to failure of the user to follow the label instructions or to the occurrence of conditions that could not have been foreseen in terms of the registration. Consult the supplier in event of any uncertainty.**

## **PRECAUTIONS:**

- Wash hands, forearms, and face thoroughly after handling.
- Do not eat, drink or smoke whilst mixing or applying or before washing hands and face and change of clothing.
- Prevent contamination of food, feedstuff, eating utensils and drinking water.
- Prevent drift of spray mist onto other crops, grazing, rivers, dams or areas not under treatment.
- Triple rinse empty container in the following manner: Invert the empty container over the spray or mixing tank and allow to drain for at least 30 seconds after the flow has slowed down to a drip. Thereafter, rinse the empty container three times with a volume of water equal to a minimum of 10% of that of the container. Add the rinsings to the content of the spray tank. Empty containers should be taken for local recycling or waste disposal. Do not re-use empty containers.
- Clean applicator after use and dispose of wash water where it will not contaminate crops, grazing, dams or rivers.
- Collect spillage.
- Dispose of contents/container in accordance with local/regional/ national regulations.

## **RELEVANT SUBSTANCES:**

Metsulfuron-methyl 60%  
Isopropyl amine <5%  
Hexylene glycol <5%

## **FIRST AID TREATMENT:**

**INHALATION:** Remove person to fresh air and keep comfortable for breathing.

**INGESTION:** Immediately call a POISON CENTER or doctor/physician.

**SKIN CONTACT:** Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

If skin irritation occurs: Get medical advice/attention.

**EYE CONTACT:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

## **RESISTANCE WARNING:**

Any weed population may contain individuals naturally resistant to METSULFURON and other group B herbicides. The resistant individuals can eventually dominate the weed population if the herbicide is used repeatedly. To delay herbicide resistance, avoid exclusive

repeated use of herbicides from the same herbicide group code. Alternate or tank mix with products from a different herbicide group code. Integrate other control methods (chemical, cultural, biological) into weed control programmes.

### **USE RESTRICTIONS - CEREALS:**

1. Do not plant treated areas with any crops other than grain cereals within 10 months of treatment. Wheat can be planted within one month whereas barley and oats can be planted within 6 months.
2. Longer residual activity in respect of follow up crops may result in soils with pH levels exceeding 6.5 and/or traces of lime.
3. Erratic weed control may occur where there are light, sandy acid soils; excessive stones covering the soil surface and application is made later than 6 to 7 weeks after planting.
4. Do not spray product on cereals growing under stress conditions
5. Do not spray product on cereals undersown with pastures.
6. Only use water suitable for overhead irrigation.
7. Do not add a wetter to the spray mixture when EC formulations are mixed with **METSULFURON**.

### **DIRECTIONS FOR USE IN CEREALS: Use only as directed.**

#### **Compatibility:**

Do not apply **METSULFURON** in combination with insecticides containing chlorpyrifos.

**METSULFURON** may also be used in tank mixes with **SPYDER** (Reg No: L7679) in cereals. Apply after emergence of both crop and weeds, between 3 to 5 leaf stage.

#### **Mixing Instruction:**

Pre-mix the required quantity of **METSULFURON** with a small volume of clean water to form a smooth paste. Half fill the spray tank with water and add the slurry while stirring. Add water to make up the desired spray volume. Constantly stir the spray mixture during mixing and spraying.

#### **High Volume (e.g.: ground sprayer):**

Add the required amount of surfactant to the spray mixture and mix thoroughly.

#### **Low volume (e.g.: aircraft):**

Add the required amount of surfactant to the spray mixture and ensure thorough stirring before pumping mixture into aircraft.

#### **Application:**

##### **Ground Application:**

Apply with a correctly calibrated tractor-mounted boomsprayer.

Ensure a delivery of at least 200 litres spray mixture/ha at a constant speed and pressure of 100 to 200kPa. Avoid overlapping of swaths and over application.

##### **Aerial application:**

Aerial application of **METSULFURON** may only be done by a registered Aerial Application Operator using a correctly calibrated, registered aircraft according to the instructions of SABS Code 10118 (Aerial Application of Agricultural Pesticides).

Ensure that the spray mixture is distributed evenly over the target area and that the loss of spray material during application is restricted to a minimum. It is therefore essential that the following criteria be met:

- **Volume:** A spray mixture volume of 30 to 35ℓ/ha is recommended. As this product has not been evaluated at a reduced volume rate, the registration holder cannot guarantee efficacy, or be held responsible for any adverse effects if this product is applied aerially at a lower volume rate than recommended above.
- **Droplet coverage:** 30 to 40 droplets per cm<sup>2</sup> must be recovered at the target area.
- **Droplet size:** A droplet spectrum with a VMD of 300 to 350 microns is recommended. Limit the production of fine droplets less than 150 microns (high drift and evaporation potential) to a minimum.
- **Flying height:** Maintain the height of the spray boom at 3 to 4 metres above the target. Do not spray when aircraft dives, is in a climb

or when banking

- Use suitable atomising equipment that will produce the desired droplet size and coverage, but which will ensure the minimum loss of product. The spraying system must produce a droplet spectrum with the lowest possible Relative Span.
- Position all the atomisers within the inner 60 to 75% of the wingspan to prevent droplets from entering the wingtip vortices.
- The difference in temperature between the wet and dry bulb thermometers, of a whirling hygrometer, should not exceed 8°C.
- Stop spraying if the wind speed exceeds 15km/h.
- Stop spraying under turbulent, unstable and dry conditions during the heat of the day.
- Spraying under temperature inversion conditions (spraying in or above the inversion layer) and/or high humidity conditions (relative humidity 80% and above) may lead to the following:  
Reduced efficacy due to suspension and evaporation of small droplets in the air (inadequate coverage). Damage to other sensitive crops and/or non-target areas through drifting of the suspended spray cloud away from the target field.
- Ensure that the Aerial Spray Operator knows exactly which fields to spray.
- Obtain an assurance from the Aerial Spray Operator that the above requirements will be met and that relevant data will be compiled in a logbook and kept for future reference.

CROP	DOSAGE	REMARKS
Wheat & Barley <u>Ground &amp; Aerial application:</u> <i>Western, Southern &amp; Eastern Cape</i>	3.5g or 4g plus 200ml <b>BOOSTER OIL</b> /100ℓ spray mixture	Apply as a post-emergence spray at 3 to 5 leaf stage.

[Booster Oil (Reg No: L6148)]

**NOTE:** Do not apply after weeds have exceeded recommended growth stage, as established weeds will not be controlled. Do not exceed recommended dosage rates.

### Weeds Controlled

BOTANICAL NAME	COMMON NAME	MAXIMUM WEED APPLICATION STAGE	
		3.5g/ha	4.0g/ha
<i>Anagallis Arvensis</i>	Pimpernel	3cm high	5cm high
<i>Chenopodium Album</i>	White Goosefoot	3cm high	5cm high
<i>Emex Australis</i>	Spiny Emex	3cm diameter	5cm diameter
<i>Fumaria Muralis</i>	Fumitory	<b>NOT RECOMMENDED</b>	3cm high
<i>Galinsoga Parviflora</i>	Gallant Soldier	2cm high	3cm high
<i>Pentzia Suffructicosa</i>	Small Stinkweed	3cm high	5cm high
<i>Plantago Lanceolata</i>	Narrow Leaved Ribwort	2cm high	3cm high
<i>Polygonum Aviculare</i>	Prostrate Knotweed	<b>NOT RECOMMENDED</b>	3cm high
<i>Raphanus Raphanistrum</i>	Wild Radish	2 leaves	3 leaves
<i>Sisymbrium Thellungii</i>	Common Mustard	2 leaves	3 leaves
<i>Spergula Arvensis</i>	Corn Spurry	3cm high	5cm high

**DIRECTIONS FOR THE CONTROL OF TREES AND SHRUBS:** Use only as directed.

**Use Restrictions:**

Allow a minimum of 8 weeks between treating Eucalyptus at the recommended rate and replanting the area to either Eucalyptus or Pinus species. Allow a minimum of 12 months before planting any other species. Do not allow the spray mixture to stand overnight. Mix **METSULFURON** only with water with a pH below 8, a resistance below 300ohm and conductivity below 1.0mS/cm.

**Mixing Instructions:**

Mix the required amount of **METSULFURON** in a small volume of water to form a slurry. Stir until the granules are fully dissolved. Half fill the spray tank with water; add the **METSULFURON** slurry followed by the required volume of **BOOSTER OIL** (Reg. No. L6148, Act No. 36 of 1947) at 200mℓ per 100ℓ water. Fill the spray tank to the desired volume. Stir continuously while mixing and spraying.

**Foliar application:**

Use a knapsack sprayer or other suitable spray equipment. It is recommended to use a low pressure to avoid excess spray drift to non-target areas. Avoid spray deposit on the soil surface. Apply as a directed spray to the foliage of the target plants for complete spray cover. Plants must be actively growing and not under stress. Do not allow the spray to come into contact with desirable broadleaf plants.

SPECIES	DOSAGE	REMARKS
Gum Coppice ( <i>Eucalyptus Grandis</i> )	80g per 100ℓ water	Apply to actively growing coppice between 0.5 and 2 metres high.
American Bramble ( <i>Rubus Cuneifolius</i> )	25g per 100ℓ water	Apply when plants have the maximum number of leaves from January to May. A follow-up spot treatment may be necessary.
Triffid Weed ( <i>Chromolaena Odorata</i> )	25g per 100ℓ water	Apply when plants are 0.5 to 1 metres high and actively growing during spring and summer. Plants taller than 1 metre should be slashed and the re-growth sprayed. A follow-up spot treatment may be necessary.

**Cut stump application:**

Cut the tree stump as close to the soil surface as possible. Use a knapsack, or pressurised hand-held spray, or dosing gun to apply 15 to 20mℓ of the spray mixture per 10cm of the stump diameter at ground level. For optimum results, **METSULFURON** must be applied to the cambium area of the stump immediately after felling and not more than 2 hours after felling.

SPECIES	DOSAGE RATE	REMARKS
Gum Coppice ( <i>Eucalyptus Grandis</i> )	180g per 100ℓ water	Apply within two hours of felling to the cambium area of the freshly cut stump.