

BEFORE USING THIS PRODUCT, READ THE LABEL CAREFULLY. KEEP OUT OF REACH OF CHILDREN AND ANIMALS.

Adjuvant



# AMS-GRANULE

Reg. No. L 9610 Act No. 36 of 1947

5: 14/11/2023 -Aug2024

A granular formulation that will reduce alkaline water pH, complex certain antagonistic ions in carrier water, overcome the antagonism of phenoxy herbicides against **Glyphosate** and enhance the activity and compatibility of foliar applied herbicides such as **Glyphosate** .

## ACTIVE INGREDIENT

ammonium sulphate

1000 g/kg

CLASS

B

ADJUVANT

### WARNING

#### Hazard Statements:

May be harmful if swallowed.

#### Precautionary Statements:

If swallowed: Get medical help.

kg

**villa**

UN Number: Not regulated

Registration holder: UNIVERSAL CROP PROTECTION (PTY) LTD.

Co. Reg. No. 1983/008184/07

P.O. Box 801, Kempton Park, 1620

Tel. (011) 396 2233

Website: [www.villacrop.co.za](http://www.villacrop.co.za)

**24 HR EMERGENCY NUMBERS:**

Griffon Poison Centre: +27 82 446 8946

24 HR Transport / Spill Emergency no: (Hazcall24) +27 86 044 4411

(Client: Villa Crop Protection)

DIRECTIONS FOR USE ENCLOSED

Batch Number:

Date of Manufacture:

REFER TO DETAILS AS PRINTED ON CONTAINER / BAG

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**WARNINGS****Hazard statements:**

May be harmful if swallowed.

- Adhere to all label warnings that apply to the product or products with which **AMS-GRANULE** is to be used.
- May irritate the eyes and skin.
- Store in a cool, dry, well-ventilated place.
- Store away from food, feeds, seed, fertilizers and other agricultural chemicals.
- Keep out of reach of children, uninformed persons and animals.
- Re-entry: Adhere to the re-entry interval and requirements as indicated on the herbicide label.

**Aerial application:**

Notify all the inhabitants in the immediate vicinity of the area to be sprayed and issue the necessary warnings.

**Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not warrant that it will be efficacious under all conditions. The action and effect thereof may be affected by factors such as abnormal soil, climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label, the occurrence of resistance of the weeds against the herbicide 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 failure of the user to follow the label instructions or to the occurrence of conditions, which could not have been foreseen in terms of the registration. Consult the supplier in the event of any uncertainty.**

**PRECAUTIONS****Precautionary statements:**

If inhaled, skin irritation or rash occurs: Get medical help.

- May irritate the eyes and skin.
- Avoid inhalation of the spray mist.
- Wear protective clothing, overalls, rubber boots and gloves when handling the product.
- Wash thoroughly with soap and water after use and after accidental skin contact.
- In the case of eye contact flush eyes with copious amounts of water for at least 15 minutes.
- Wash contaminated clothing after use.
- Do not eat, drink or smoke whilst mixing or applying or before washing hands and face and change of clothing.
- Prevent drift of spray mist onto other crops, grazing, rivers, dams or areas not under treatment.
- Thoroughly clean the applicator after use and dispose of wash water in a way that will not contaminate food, grazing, boreholes, rivers and dams.
- Destroy the empty container/bag by perforation and dispose of it in a safe and responsible way.
- **Never** re-use the empty container/bag for any other purpose.
- Prevent contamination of food, feeds, drinking water and eating utensils.

**FIRST AID TREATMENT**

- Remove the victim from the area of exposure. Wash off remaining material with plenty of water. In the event of any complaints or symptoms, avoid further exposure. Immediately consult a doctor.
- **Inhalation:** Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation occurs. **Seek medical attention if you feel unwell after inhalation.**
- **Skin:** Remove contaminated clothing and shoes. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. **Obtain medical attention if irritation persists.**
- **Eyes:** Flush eyes with clean water for at least 15 to 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. **Seek medical attention if irritation persists.**
- **Ingestion:** Seek medical attention immediately. Do not induce vomiting unless instructed to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person. If the person is alert, rinse mouth thoroughly with water.

**PRODUCT PROPERTIES**

- **Glyphosate** requires the pH of spray solution to be slightly acidic (normally pH 4.5 to 5.5). **Glyphosate** can also be antagonized by ions dissolved in carrier water. **AMS-GRANULE**, in combination with **Glyphosate**, will decrease the pH of the spray solution and will complex antagonistic ions such as calcium, magnesium, sodium and potassium. The spray solution pH will, however, not be decreased to the extent that incompatibility with phenoxy herbicides is experienced.
- Additional acidification with other buffers and/or acidifiers is not recommended.
- The use of **AMS-GRANULE** will increase **Glyphosate** efficacy by improving its uptake and may aid compatibility of **Glyphosate** with certain other herbicides.
- **AMS-GRANULE** overcomes the antagonism of phenoxy herbicides (e.g. **2,4-D** and **MCPA**) on **Glyphosate**.

**USE RESTRICTIONS**

- **AMS-GRANULE** should not be used with any herbicide not listed on this label as it may improve the efficacy of certain herbicides to such an extent that it may cause damage to the crop.
- Take all necessary precautions associated with aerial spraying of herbicides especially with regard to control of drift.
- Test the mixture on a small scale before applying it on a large scale.

**DIRECTIONS FOR USE: Use only as directed.****Adjuvant Classification**

Active	Class	Category
Ammonium sulphate	B	Salt adjuvant

**Compatibility:**

- **AMS-GRANULE** can be used with **ROUNDUP®** (L 0407 / W 130361), **ROUNDUP® MAX** (L 6790), **ROUNDUP® POWERMAX** (L 7769), **ROUNDUP® TURBO** (L 7166 / W 130359 / N-AR 0638), **ROUNDUP® WEATHERMAX** (L 8065), **MAMBA™ 360 SL** (L 4817), **MAMBA™ 480 SL MAX** (L 7714), **Scat® 360 SL** and **Mallet 100 SL / Imazethapyr 100 SL**.
- Consult the labels of the above-mentioned products for full particulars.

**Mixing Instructions:**

- Half fill the spray tank with clean water. Dissolve **AMS-GRANULE** completely in a small amount of water (using a ratio of 1 kg **AMS-GRANULE** to at least 2 litres water) before adding to the spray tank while agitating.
- Add the herbicide and then the remainder of the water while agitating.
- In the event of tank mixes, add **AMS-GRANULE** first, then the complementary herbicide followed by the correct amount of the foliar active herbicide and then the remaining water with continual agitation.
- Should a wetter/spreader be required, add this last and only use **Villa 51** or an approved Villa Crop Protection surfactant.
- Maintain adequate agitation during application and the prepared mixture must not be left in the spray tank for any length of time.
- **AMS-GRANULE** is corrosive; therefore, the sprayer, tank and system should be rinsed thoroughly after the use of **AMS-GRANULE**, to remove all ammonium sulphate residues.

**Application Instructions:****Ground application:**

**AMS-GRANULE** can be used with any correctly calibrated spray equipment as recommended on the herbicide label.

**Aerial application:**

Take all necessary precautions associated with aerial spraying of herbicides especially with regard to control of drift. Follow the label instructions of the herbicide being used with **AMS-GRANULE**. If in any doubt, consult with the supplier and aerial crop sprayer.

**APPLICATION RATES****HERBICIDE GROUPS**

<i>Herbicide Groups</i>	<i>Active ingredients</i>	<i>Trade name examples</i>
<b>REMARKS:</b> Contact a Villa Technical representative for further guidance on rate selection for specific situations. Adhere to the “Mixing Instructions”, “DIRECTIONS FOR USE” and “DOSAGE RATES” of the products, as well as the approved tank mixtures with which <b>AMS-GRANULE</b> is to be used.		
<b>Glycines (HRAC Group 9)</b>	Glyphosate	Roundup <sup>®</sup> , Roundup <sup>®</sup> Max, Roundup <sup>®</sup> PowerMax, Roundup <sup>®</sup> Turbo, Roundup <sup>®</sup> WeatherMax, Mamba <sup>™</sup> 360 SL, Mamba <sup>™</sup> 480 SL Max, Scat <sup>®</sup> 360
<b>Imidazolinones (HRAC Group 2)</b>	Imazethapyr	Mallet 100 SL, Imazethapyr 100 SL

- If possible, test the Electrical Conductivity or have an analysis of the spray water done. The precise rate of **AMS-GRANULE** can then be determined by your Villa Crop Protection representative. The analysis report must contain values for calcium, magnesium, sodium and potassium content OR an Electrical Conductivity measurement when a full analysis is not available. If this is not possible, use the dosage rate table as a guideline.
- In cases where a water analysis or an Electrical Conductivity measurement is not available, add 0.25 to 1.0 kilogram **AMS-GRANULE** (after pre-solubilizing in a small amount of water) to 100 litres clean water (preferably not murky) to obtain a 0.25 to 1.0 % spray solution.
- If in any doubt about the spray water quality/Electrical Conductivity, use the higher recommended **AMS-GRANULE** rate.

**DOSAGE RATE OF AMS-GRANULE IF A WATER ANALYSIS IS NOT AVAILABLE OR IF A VILLA REPRESENTATIVE HAS NOT MADE A PRECISE CALCULATION**

<i>Electrical Conductivity (EC)</i>			<i>AMS-GRANULE DOSAGE RATE</i>	
<i>Milli Siemens per m (mS/m)</i>	<i>Milli Siemens per cm (mS/cm)</i>	<i>Micro Siemens per cm (µS/cm)</i>	<i>%</i>	<i>Kilograms per 100 litres water</i>
0 to 100	0 to 1.0	0 to 1000	0.25 %	0.25 kilograms per 100 litres water
101 to 200	1.1 to 2.0	1001 to 2000	0.5 %	0.5 kilograms per 100 litres water
> 200	> 2.0	> 2000	1.0 %	1.0 kilogram per 100 litres water

**NOTE**

If a water analysis is available that indicates the levels of calcium (Ca<sup>2+</sup>), magnesium (Mg<sup>2+</sup>), sodium (Na<sup>+</sup>) and potassium (K<sup>+</sup>) / OR Electrical Conductivity, your **Universal Crop Protection** representative can determine the precise amount of product to be used. This calculated amount may be outside the 0.25 to 1% rate range, depending on the quality of spray water.

The following products mentioned in this label may be replaced with equivalent products:

- **SCAT<sup>®</sup> 360 SL** (L 5716 / W 130453) = **PANGA 360 SL** (L 7812) = **SLASH 360 SL** (L 7811 / N-AR 1087) (**Glyphosate**),
- **MALLET 100 SL** (L 8049) = **IMAZETHAPYR 100 SL** (L 8051) and
- **VILLA 51** (L 8050 / W 130454 / N-AR 1090) = **WEN 51** (L 8315).

**ROUNDUP<sup>®</sup>, ROUNDUP<sup>®</sup> MAX, ROUNDUP<sup>®</sup> TURBO, ROUNDUP<sup>®</sup> POWERMAX and ROUNDUP<sup>®</sup> WEATHERMAX** are registered trademarks of **Bayer (Pty) Ltd.**

**MAMBA<sup>™</sup>360SL** and **MAMBA<sup>™</sup> MAX 480SL** are registered trademarks of **Dow Agrosciences SA (Pty) Ltd.**

**VILLA 51, WEN 51, SLASH 360 SL** and **IMAZETHAPYR 100 SL** are registered products of **Universal Crop Protection (Pty) Ltd.**

**SCAT<sup>®</sup> 360 SL** is a registered trademark of **Universal Crop Protection (Pty) Ltd.**

**PANGA 360 SL** and **MALLET 100 SL** are registered products of **Villa Crop Protection (Pty) Ltd.**