

# Rosate

20 Litre

PROTECT FROM FROST

A soluble concentrate herbicide containing 360 g/litre glyphosate acid present as 480 g/litre (41.5% w/w) isopropylamine salt. A foliar-applied, translocated herbicide for the control of annual and perennial weeds in a range of agricultural situations.

## RISK AND SAFETY INFORMATION

Rosate Green – a soluble concentrate containing 480 g/litre (41.5% w/w) glyphosate as isopropylamine salt.

### Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Keep out of the reach of children

Keep away from food, drink and animal feeding stuffs

If swallowed, seek medical advice immediately and show this container or label

Use appropriate containment to avoid environmental contamination

This material and its container must be disposed of in a safe way

To avoid risks to man and the environment, comply with the instructions for use.

PCS no. 04436

## IMPORTANT INFORMATION

FOR USE ONLY AS AN AGRICULTURAL HERBICIDE.

Crops Wheat, durum wheat, barley, oats, oilseed rape, combining pea, mustard, field bean, linseed, all edible crops (stubble) and all non-edible crops (stubble).

Maximum Individual Dose per hectare, Maximum Total Dose per hectare, ) See under

Maximum Number of Treatments, Latest Time of Application, Other Specific Restrictions ) "Directions for Use"

**READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.**

## SAFETY PRECAUTIONS

### Operator protection

Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment:

WEAR SUITABLE PROTECTIVE GLOVES when handling the concentrate and when handling contaminated surfaces.

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND RUBBER BOOTS when using hand-held sprayers and using weedwiper equipment.

However, engineering controls may replace personal protective equipment if a risk assessment shows they provide an equal or higher standard of protection.

WASH HANDS AND EXPOSED SKIN before eating drinking or smoking and after work.

### Environmental protection

Do not contaminate water with the product or its container. Do not clean application equipment near surface water. Avoid contamination via drains from farmyards and roads.

### Storage and disposal

KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place. RINSE CONTAINER THOROUGHLY by using an integrated pressure rinsing device or manually rinsing three times. Add washings to sprayer at time of filling and dispose of the container safely.

For advice on medical emergencies, fires, spillages or chemical hazards, telephone: +44 (0) 1235 239 670 (24 hour)

Approval Holder and Marketing Company:

Albaugh Europe Sàrl, Chemin du Raidillon 1B, 1091 Grandvaux, Vaud, Switzerland Tel: +41 21 799 9130 Fax: +41 21 799 9139

## DIRECTIONS FOR USE

**IMPORTANT:** This information is approved as part of the Product Label. All instructions within this section must be read carefully in order to obtain safe and successful use of this product.

### IMPORTANT INFORMATION

FOR USE ONLY AS AN AGRICULTURAL HERBICIDE

| Crops/Situations  | Maximum Individual Dose (litres of product per ha) | Maximum Total Dose (litres of product per ha) | Latest Time of Application  |
|---|--|---|---|
| Wheat, durum wheat, barley, oats, combining pea, field bean   | 4.0  | 4.0 per crop                                  | 7 days before harvest   |
| Oilseed rape, inseed  | 4.0  | 4.0 per crop                                  | 14 days before harvest  |
| Mustard   | 4.0  | 4.0 per crop                                  | 8 days before harvest   |
| All edible crops (stubble) and all non-edible crops (stubble) | EITHER 4.0   | 4.0 per year                                  | 5 days before drilling or planting of following crop                                |
|   | OR 1.5   | 1.5 per year                                  | 2 days before drilling or planting of following crop or 24 hours before cultivation |

### OTHER SPECIFIC RESTRICTIONS:

Weedwipers may be used in any crop where the wiper does not touch the growing crop.

The maximum concentrations used must not exceed a 1:2 dilution with water in a Weedwiper mini or a 1:1 dilution with water in other wipers.

The maximum individual dose must not exceed 22.5 g/l glyphosate for hydraulic knapsack sprayers.

**READ THE LABEL BEFORE USE, USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.**

### GENERAL INFORMATION

Rosate Green is a soluble concentrate herbicide, containing the active ingredient glyphosate, for the control of most species of emerged annual and perennial grass and broad-leaved weeds. It is adsorbed by the weed foliage and translocated to the growing points in the roots and to the underground rhizomes/stolons of perennial weeds. Best results are obtained from applications made under good growing conditions (adequate soil moisture and warm/humid conditions), when the weeds are actively growing and at the recommended growth stages for treatment.

After application, glyphosate is strongly adsorbed onto the soil particles and becomes practically immobilized within the soil. As a result, it has no further herbicidal activity and it is subsequently broken down by microbial activity. New crops can be sown or planted at very short intervals after application.

FOR PROFESSIONAL USE ONLY

### WARNINGS AND RESTRICTIONS

TAKE EXTREME CARE TO AVOID SPRAY DRIFT to avoid severe damage or complete destruction of plants outside the target area.

DO NOT APPLY under windy conditions.

DO NOT MIX, STORE, USE OR APPLY IN GALVANISED OR UNLINED STEEL CONTAINERS OR SPRAY TANKS.

DO NOT allow the spray mixture to stand in the tank for a long period and make sure spray tanks are well vented.

FOILAGE OF ANY POISONOUS WEEDS (SUCH AS RAGWORT) MUST BE REMOVED OR BURIED PRIOR TO GRAZING OR CUTTING FOR FEED when applications are made to foliage which will be subsequently fed to stock in any way.

At least 6 hours are required for the spray to become rainfall and taken up by the foliage after application. For maximum efficacy, it is preferable that at least 24 hours elapse before any rainfall occurs after application.

Do not apply where the target weeds are senescing naturally or if they are under stress, particularly from drought, high temperatures or frost, as they may be poorly controlled under these conditions. Weed control will take longer when weeds are growing slowly.

Do not cultivate BEFORE application.

After application Rosate Green takes several days to fully translocate through the plant. For this reason, do not make applications of fertiliser, lime, manure or other pesticides for at least 5 days before or after application.

Do not tank-mix with any other product except with a suitable authorised adjuvant where specifically recommended on this label. After application, large concentrations of decaying foliage, roots, or rhizomes/stolons should be dispersed or buried by thorough cultivation before crop drilling. Trace amounts of Rosate Green remaining in the sprayer after use can cause damage to other crops subsequently treated with the same equipment. Immediately after use, thoroughly clean the sprayer and all equipment as detailed in the section "SPRAYER DECONTAMINATION".

### TRANSFORMATION PROCESSES

Effects on brewing and baking have not been established. Consult grain merchant or processor before use.

### WEEDS CONTROLLED

Rosate Green controls most species of emerged annual and perennial grass and broad-leaved weeds. After application the active ingredient is translocated from the treated foliage to the roots and other underground parts of perennial plants. Weeds are most susceptible to Rosate Green when they are actively growing under warm, humid conditions with adequate soil moisture. Poor control will occur if application is made to weeds that are subject to natural senescence or if their growth is held back by dry conditions, waterlogging, high temperatures or frost. Weed control can also be reduced if these conditions occur soon after application. Any other situation that restricts uptake into the plant (e.g. a covering of dust on the foliage from wind-blown soil) will reduce levels of weed control.

It is important that weeds are actively growing and at the correct growth stages at the time of application, otherwise re-growth can occur and will require subsequent re-treatment.

Symptoms of weed control are usually seen within 7 - 10 days after application but it may take longer under poor growing conditions. Treated foliage usually shows a gradual wilting and loss of vigour followed by a slight reddening then yellowing followed by plant death. Symptoms are usually seen on grass weeds before becoming apparent on broad-leaved weeds.

Complete death and deterioration of the weed foliage and root system may take up to 4 weeks or longer under poor growing conditions.

### Annual Weeds

For best results annual weeds must be growing actively at the time of application. Annual grass weeds should have at least 5 cm of emerged leaf length and broad-leaved weeds should have at least 2 fully expanded true leaves.

Annual grasses such as Black-grass and Brome grasses should be treated either at full ear emergence or before stem elongation. Treatments made during the stem elongation phase of annual grasses may result in poor weed control and require a further application.

### **Perennial Weeds**

For best results perennial broad-leaved weeds must be treated when they are actively growing (they are most susceptible around the time of flowering).

Perennial grass weeds must have developed an actively growing emerged foliage when the application is made. For Common couch (short-term control) the tillering stage (when the growth of new rhizomes starts) is the most susceptible growth stage. This is usually when there are 4-5 leaves, each about 10-15 cm in length.

The action of Rosate Green on the control of Nettles is slow and does not give an acceptable level of control of Horsetails (*Equisetum arvense*) from a single application.

### **FOLLOWING CROPS**

After application, glyphosate is strongly adsorbed by the soil particles and subsequently broken down by microbial activity. Once adsorbed onto the soil, Rosate Green has no further herbicidal activity and crops can be sown or drilled at specified intervals after application.

However, a slight check to crop growth can occur if seeds of the newly planted crop germinate within the residual mat of dying and decaying weed foliage, roots, or rhizomes/stolons. Direct drilled crops are particularly susceptible. Cultivate the ground thoroughly to disperse or bury the decaying organic matter remaining after application. Loose or fluffy soils/seedbeds should be consolidated and a normal programme of fertiliser and crop protection treatments should be applied as appropriate to the new crop, particularly where this follows destruction of grassland.

Trees and shrubs may be planted 7 days after application.

Grass may be sown 14 days after application.

All other crops may be sown or planted 2 days after application.

### **RESISTANCE MANAGEMENT**

There is low risk for the development of weed resistance to Rosate Green.

Strains of some annual weeds (e.g. Black-grass, Wild oats and Italian Ryegrass) have developed resistance to herbicides which may lead to poor control. A strategy for preventing and managing such resistance should be adopted. This should include integrating herbicides with a programme of cultural control measures. Guidelines have been produced by the Weed Resistance Action Group and copies are available from the Teagasc, your distributor, or crop adviser. Implement a weed resistance strategy based on Good Agricultural Practice and including the following:

Follow the label recommendations.

Adopt complementary weed control practices.

Minimise the risk of spreading weed infestations.

Implement good spraying practice to maintain effective weed control.

Use the correct spray nozzles to maximise coverage.

Apply only under appropriate weather conditions.

Monitor herbicide performance and report any unexpected results to Albaugh Europe Sàrl.

### **APPLICATION**

Before use, make sure the spraying equipment is cleaned from any previous use and that it is calibrated to apply the recommended spray volume and pressure. This is particularly important when using low-volume applications. After use, make sure the sprayer and all equipment is thoroughly cleaned as detailed in the section "SPRAYER DECONTAMINATION". Do not store, mix or use in unlined or galvanized steel tanks or equipment.

Spray immediately after mixing, do not allow the mixture to stand for long periods in the spray tank.

### **Tractor-mounted or Trailed Sprayers**

Before use, make sure the sprayer is cleaned from any previous use and calibrated to apply the recommended spray volume and pressure. Make sure all the sprayer nozzles are performing equally and that the spray boom is set at the correct height above the target weeds. This is particularly important when making pre-harvest applications to a crop. Unless a different water volume is specified under "Crop Recommendations", apply in 80 - 250 litres of water per hectare as a MEDIUM or COARSE spray (BCPC) and with a spray pressure of 1.5 - 2.5 bars using suitable 80° or 110° nozzles. For best results and to reduce the risk of spray drift, fit a spray pressure within this range. The preferred application volume is normally between 200 - 250 litres per ha but this can be reduced with the use of appropriate low volume nozzles, adjusting spray pressure and tractor ground speed (tractor speed will typically need to be set to 4-9 kph). Do not allow the spray boom to bounce or yaw, this is particularly important for pre-harvest applications. Ensure that the water volume selected gives a good even spray cover of the target weeds.

Half fill the sprayer tank with clean water and begin gentle agitation. To avoid the mixing operation resulting in excessive foaming, do not use agitation from the top of the tank. Add the required quantity of product into the sprayer tank and allow to disperse fully. Rinse the containers thoroughly by using an integrated pressure rinsing device or manually rinsing three times. Add the washings to the sprayer and continue agitation whilst topping up the tank with water to the required level. Continue agitation until the mix is sprayed out. The use of a defoaming product may be necessary. Spray immediately after mixing, do not allow the mixture to stand. If a tank-mix with an authorised adjuvant is being used, add to the sprayer tank separately, and follow any specific instructions on the order of mixing.

### **Knapsack Sprayers**

Knapsack sprayers may be used for spot or directed applications. Apply in 100 - 300 litres of water per hectare as a MEDIUM or COARSE spray (BCPC). For water volumes in the range of 100 - 160 litres of water per ha, it will be necessary to fit low volume spray nozzle(s).

Example spray dilution calculation: to apply 4.0 litres per ha of Rosate Green in a water volume of 200 litres per ha in a sprayer tank of capacity 5 litres, add 100 ml of Rosate Green to 4.9 litres of water in the sprayer tank. This volume of diluted spray will cover an area of 250 m<sup>2</sup>. Do not make up a spray solution of a greater quantity than required for the area to be treated. Ensure an even spray coverage with an even walking speed during application.

Half fill the sprayer tank with clean water. Add the required quantity of product into the sprayer tank and allow to disperse fully. Rinse any empty containers thoroughly by using an integrated pressure rinsing device or manually rinsing three times. Add the washings to the sprayer and top up the tank with water to the required level and mix thoroughly by agitating the tank. Spray immediately after mixing, do not allow the mixture to stand. If a tank-mix with an authorised adjuvant is being used, add to the sprayer tank separately, and follow any specific instructions on the order of mixing.

### **Rotary Atomiser Sprayers**

Apply through a rotary atomizer sprayer using a minimum water volume of 40 litres per ha and a spray droplet spectrum of a minimum Volume Median Diameter (VMD) of 200 microns and up to 300 microns. This corresponds to a MEDIUM or COARSE spray (BCPC). The tractor forward speed will typically be in the range of 4-9 kph but it must be calibrated in the field to apply the correct spray volume. Use a spray bout marker to avoid overlapping spray bouts. Do not tank-mix Rosate Green with any adjuvant when applying through Rotary Atomiser Sprayers.

### **Hand-held Weedwipers**

For use only in orchards and non-crop situations. Use a concentration of 1 part of Rosate Green to 2 parts of water. Do not exceed this maximum concentration and add a dye (water-based) if necessary.

### Tractor-mounted Weedwipers

Tractor-mounted weedwipers may be used in arable crops for the control of Weed beet, Sugar beet bolters and other tall weeds growing above the crop.

WEEDS THAT ARE NOT ACTIVELY GROWING WILL NOT BE CONTROLLED.

KEEP STOCK OUT of treated areas for 7 days.

THE FOLIAGE OF ANY POISONOUS WEEDS (SUCH AS RAGWORT) MUST BE REMOVED OR BURIED PRIOR TO GRAZING OR CUTTING FOR FEED.

To ensure that application does not result in crop damage, the weeds should always be at least 10 cm taller than the crop vegetation and a distance of 5 cm must be maintained between the top of the crop vegetation and the wiper. The optimum weed height for treatment is 10 cm above the height of the crop vegetation.

If the weed vegetation is dense, it will be necessary to make two passes of the wiper from opposite directions of the tractor travel. Weeds growing from below the wiped area will need subsequent applications.

To minimize weed seed return to the soil, application should be made prior to weed seed maturity. For sugar beet bolters, apply a programme of three applications with an interval of two weeks between applications starting in early July to early August.

Use a concentration of 1 part of Rosate Green to 1 part of water. Do not exceed this maximum concentration. Under very hot or dry conditions it may be necessary to reduce the concentration to 1 part of Rosate Green to 2 parts of water. For best results, ensure that the wiping surface is impregnated with the herbicide solution at all times but does not drip. Clean the wiping ropes as required during the working day to ensure that flow rate to the wiping surface is maintained at full rate at all times. The maximum recommended forward speed is 5 kph or less.

### **CROP RECOMMENDATIONS**

#### **Pre-harvest Treatment in Arable Crops**

Rosate Green can be applied as a pre-harvest treatment for the control of weeds in certain recommended arable crops prior to harvest for the control of a range of perennial and annual grass and broad-leaved weeds.

DO NOT TREAT CROPS GROWN FOR SEED.

Consult the processor before use on any crop intended for processing.

#### **Wheat (including Durum Wheat), Barley and Oats**

Apply when the moisture of the youngest grains in the ear is below 30% and not less than 7 days before harvest. Make an accurate measurement of seed moisture immediately prior to application.

DO NOT TREAT CROPS GROWN FOR SEED.

To minimise crop damage, apply using a high-clearance tractor fitted with narrow wheels and crop dividers.

Do not use straw from a treated crop as a horticultural mulch. Straw from a treated crop may be used for any other purpose.

After harvest, straw may be chopped, incorporated or removed according to normal practice and the land can be cultivated normally after harvest and straw disposal.

For best results if dull weather conditions occur after application, allow up to 14 days between application and harvest.

Certain broad-leaved weeds (Annual nettle, Rosebay willow-herb, Redshank, Pale persicaria and Knotgrass) are not susceptible at rates of 1.5 l/ha or less. For application rates of Rosate Green of 2.0 litres per ha or less, in certain situations it is recommended to add a suitable authorised adjuvant. Do not use an adjuvant when applying through a rotary atomiser sprayer.

Apply in 80 – 250 litres of water per ha by means of a hydraulic nozzle sprayer – use a higher volume within this range where the crop canopy and/or weed foliage is dense. Alternatively, apply in a minimum of 40 litres of water per ha using a rotary atomiser sprayer ensuring that the spray droplet spectrum is in the range of a Volume Median Diameter (VMD) of 200 – 300 microns.

Select the correct application rate according to the weed species to be treated, weed population or situation as in the table below.

| Weed Species/Situation  | Application rate – Litres product/hectare |
|---|---|
| Common couch (short-term control), up to 25 shoots/m <sup>2</sup>   | 2.0 *                                     |
| Common couch (short-term control), 25 – 75 shoots/m <sup>2</sup>  | 3.0                                       |
| Common couch (short-term control), over 75 shoots/m <sup>2</sup> in direct drilled crops                          | 4.0                                       |
| Perennial broad-leaved weeds and other perennial grasses  |   |
| Annual grasses, cereal stems, cereal leaves plus reduction of green material in the crop (harvest management aid) | 1.0 *                                     |
| Annual broad-leaved weeds plus reduction of green material in the crop (harvest management aid)                   | 1.5 *                                     |

\* For application rates of Rosate Green of 2.0 litres per ha or less, it is recommended in certain situations to add a suitable authorised adjuvant. Do not use an adjuvant when applying through a rotary atomiser sprayer.

#### **Oilseed Rape and Mustard**

Apply when the moisture of the grains (crop seeds) is below 30% and at the time as indicated below. Make an accurate measurement of seed moisture immediately prior to application.

Oilseed Rape: 14 – 21 days before harvest. Observe the latest time of application of 14 days before harvest.

Mustard: 8 – 10 days before harvest. Observe the latest time of application of 8 days before harvest.

#### **DO NOT TREAT CROPS GROWN FOR SEED.**

To minimise crop damage, apply using a high-clearance tractor fitted with narrow wheels and crop dividers.

After harvest, straw may be chopped, incorporated or removed according to normal practice and the land can be cultivated normally after harvest and straw disposal.

Uneven crop maturity may occur from applications made to crops under stress due to drought, disease or excessive heat.

Do not treat patches or areas of the crop that are late maturing due to any cause eg. waterlogging or pigeon damage.

Do not treat crops that have a significant number of secondary re-growth shoots.

Apply in 100 – 250 litres of water per ha by means of a hydraulic nozzle sprayer – use a higher volume within this range where the crop canopy and/or weed foliage is dense. Do not apply with a rotary atomiser sprayer.

Select the correct application rate according to the weed species to be treated, weed population or situation as in the table below.

| Weed Species/Situation   | Application rate – Litres product/hectare |
|--|---|
| Common couch (short-term control), up to 75 shoots/m <sup>2</sup>          |   |
| Annual weeds   | 3.0                                       |
| Crop destruction before direct combine harvesting (harvest management aid) |   |
| Common couch (short-term control), over 75 shoots/m <sup>2</sup>           | 4.0                                       |
| Perennial broad-leaved weeds and other perennial grasses                   |   |

### Combining Pea, Field Beans

Apply when the moisture of the grains (crop seeds) is below 30% and at least 7 days before harvest. Make an accurate measurement of seed moisture prior to application. Observe the latest time of application of 7 days before harvest.

#### DO NOT TREAT CROPS GROWN FOR SEED

Apply using a high-clearance tractor fitted with narrow wheels and crop dividers to minimise crop damage.

Not for use as a crop desiccant treatment.

Apply in 80 – 250 litres of water per ha by means of a hydraulic nozzle sprayer – use a higher volume within this range where the crop canopy is dense. Alternatively, apply in a minimum of 40 litres of water per ha using a rotary atomiser sprayer ensuring that the spray droplet spectrum is in the range of a Volume Median Diameter (VMD) of 200 – 300 microns.

Select the correct application rate according to the weed species to be treated, weed population or situation as in the table below.

| Weed Species/Situation   | Application rate – Litres product/hectare |
|--|---|
| Common couch (short-term control), up to 75 shoots/m <sup>2</sup>  | 3.0                                       |
| Common couch (short-term control), over 75 shoots/m <sup>2</sup><br>Perennial broad-leaved weeds and other perennial grasses | 4.0                                       |

### Linseed

Apply when the moisture of the grains (crop seeds) is below 30% and at least 14 days before harvest. Make an accurate measurement of seed moisture prior to application. The seed pods will usually be brown, the seeds light brown, and the plant leaves and stems yellow-green to green in colour. An interval of up to 4 weeks may be required before the crop can be harvested by direct combining.

Weeds may not be susceptible from applications made in the autumn – see “Weed Control”.  
DO NOT TREAT CROPS GROWN FOR SEED.

Apply in 80 – 250 litres of water per ha by means of a hydraulic nozzle sprayer – use a higher volume within this range where the crop canopy is dense. Do not apply with a rotary atomiser sprayer.

Select the correct application rate according to the weed species to be treated, weed population or situation as in the table below.

| Weed Species/Situation   | Application rate – Litres product/hectare |
|--|---|
| Common couch (short-term control), up to 75 shoots/m <sup>2</sup>  | 3.0                                       |
| Common couch (short-term control), over 75 shoots/m <sup>2</sup><br>Perennial broad-leaved weeds and other perennial grasses | 4.0                                       |
| Crop destruction before direct combine harvesting (harvest management aid)   | 3.0                                       |

### Treatment of Stubbles of all Crops prior to Sowing or Planting any Crop except Orchards (see Separate Section “Orchards”)

#### Control of Common Couch (short-term control), other Perennial Grasses and Volunteer Potatoes (Autumn) in Stubbles of all Crops

Rosate Green can be applied to the stubbles of all crops in the autumn or spring for the control of Common Couch (short-term control), other perennial grasses and volunteer potatoes, prior to cultivation and sowing or planting of any crop. The ground must not be cultivated prior to application.

Leave an interval of at least 5 days before and after application.

Volunteer potatoes (autumn application only) must have a significant amount of top growth at application.

For spring applications allow a minimum of 21 days of weed growth prior to application.

Apply in 80 – 250 litres of water per ha by means of a hydraulic nozzle sprayer – use a higher volume within this range where the crop canopy is dense. Alternatively, apply in a minimum of 40 litres of water per ha using a rotary atomiser sprayer ensuring that the spray droplet spectrum is in the range of a Volume Median Diameter (VMD) of 200 – 300 microns. Select the correct application rate according to the weed species to be treated, weed population or situation as in the table below.

| Weed Species/Situation  | Application rate – Litres product/hectare |
|---|---|
| Common couch (short-term control), up to 75 shoots/m <sup>2</sup>   | 3.0                                       |
| Common couch (short-term control), over 75 shoots/m <sup>2</sup><br>Other perennial grasses<br>Volunteer potatoes – autumn treatment only | 4.0                                       |

#### Control of Volunteer Cereals, Annual Grasses and Annual Broad-leaved Weeds in Stubbles of all Crops prior to Sowing or Planting any Crop.

Rosate Green can be applied to the stubbles of all edible and non-edible crops prior to cultivation in the autumn or spring for the control of Volunteer cereals, annual grasses and annual broad-leaved weeds prior to cultivation and sowing or planting of any crop.

Land may be cultivated after an interval of at least 24 hours has elapsed after application.

Land can be direct drilled after an interval of at least 2 days has elapsed after application.

Apply in 80 – 250 litres of water per ha by means of a hydraulic nozzle sprayer – use a higher volume within this range where the crop canopy is dense. Alternatively, apply in a minimum of 40 litres of water per ha using a rotary atomiser sprayer ensuring that the spray droplet spectrum is in the range of a Volume Median Diameter (VMD) of 200 – 300 microns.

Apply Rosate Green at 1.5 litres per ha and for best results add a suitable authorised adjuvant. Do not use an adjuvant when applying through a rotary atomiser sprayer.

Cultivation after at least 24 hours has elapsed is only applicable where the 1.5 l/ha rate of Rosate Green has been used.

### Orchards

Rosate Green should be used on land that is to be planted to orchard (top fruit).

#### Land to be planted to Orchard with Top Fruit Trees

Apply in 200 – 250 litres of water per ha by means of a hydraulic nozzle sprayer – use a higher volume within this range where the weed foliage is dense. Alternatively, apply in a minimum of 40 litres of water per ha using a rotary atomiser sprayer ensuring that the spray droplet spectrum is in the range of a Volume Median Diameter (VMD) of 200 – 300 microns.

Select the correct application rate according to the weed species to be treated, weed population or situation as in the table below.

| Weed Species                             | Situation                   | Application rate – Litres product/hectare |
|--|-----------------------------|---|
| Perennial grasses and broad-leaved weeds | In stubbles of arable crops | 4.0                                       |

All top fruit crops may be planted after 7 days have elapsed after treatment.

#### **SPRAYER DECONTAMINATION**

Trace amounts of Rosate Green remaining in the sprayer after use can cause damage to other crops subsequently treated with the same equipment. Immediately after use, thoroughly clean the sprayer and all equipment with a proprietary detergent cleaner. It is essential that all nozzles, filters, tubing, strainers, pumps and the spray tank are thoroughly cleaned after use to avoid the risk of damage to crops subsequently treated with the same equipment.

#### **COMPANY ADVISORY INFORMATION**

This section is not part of the Product Label under the Control of Pesticides Regulations 1986. It provides additional advice on product use at the discretion of the applicant.

#### **TERMS AND CONDITIONS OF SUPPLY, SALE AND USE**

Many factors can affect or influence the activity of this product, including, but not limited to: weather and soil conditions, crop variety, treatment timing, water volume, application rates, spraying techniques, crop rotation, regional factors, and the occurrence and development of strains resistant to the active ingredient. Under certain circumstances, changes in activity or crop damage can occur. The manufacturer or supplier is unable to accept any liability in these circumstances. All goods supplied by us are of a high grade and we believe them to be suitable for the purpose for which we expressly supply them: but as we cannot exercise any control over their mixing, use or application which may affect the performance of the goods, all conditions and warranties statutory or otherwise as to the quality or fitness for any purpose of our goods are excluded and no responsibility will be accepted by us for any damage or injury whatsoever arising from their storage, handling, application or use. These conditions cannot be varied by our staff, our agents or the re-sellers of the product whether or not they supervise or assist in the use of such goods.

AlbEU-EI\_Rosate Green\_LBL\_20L\_02-05-12

SPECIMEN - 2012 to date

## ROSATE 36

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

Version 1 EI

Issue date: 02-5-2012

### 1. Identification of the substance/preparation and the company/undertaking

**Identification of the preparation:** Glyphosate acid 360 g/l as the isopropylamine salt plus coformulants to 100%, as a soluble liquid.

Trade name: Rosate Green

**Use of the preparation:** For use only as an agricultural herbicide.

**Company identification:** Albaugh Europe Sàrl, Chemin du Pailillon, 1B, 1091 Grandvaux, Vaud, Switzerland  
Telephone: +41 21 799 9130 Fax: +41 21 799 9139  
Email: mds@albaugh-europe.eu

**Emergency telephone:** For advice on medical emergencies, fires, spillages or chemical hazards ONLY: +44 (0) 1235 239 670  
UK National Poisons Information Service: +44 (0)121 507 4123

### 2. Hazards identification

RS2/53: *Harmful to aquatic organisms. May cause long-term adverse effects in the environment.*

### 3. Composition / information on ingredients

• **Chemical Name:** N-(phosphonomethyl)glycine, compound with 2-propylamine (1:1)  
CAS-No.: 38641-94-0 – EC-No.: 254-056-8  
Classification: N; R51/53  
Concentration % w/w: 41.5%

• **Chemical Name:** Confidential  
Classification: Xi; R36  
Concentration % w/w: 7.6%

• **Other Ingredients**  
Concentration: to 100.0%

For full text of R phrases, refer to Section 16.

### 4. First aid measures

**General advice:** If symptoms occur after exposure to this product, seek medical advice and show the product label or this SDS. Remove to fresh air and keep at rest. Do not allow smoking or eating. Take off all contaminated clothing and footwear. Comply with all the necessary protection and safety measures to avoid contamination in giving first aid.

**Eye contact:** Immediately rinse with water. Holding eyes open, continue rinsing for 15 minutes at least. Remove contact lenses as soon as possible. Seek medical attention if irritation persists.

**Skin contact:** Remove all contaminated clothing immediately. Wash skin with soap and rinse with plenty of water. Seek medical attention if irritation persists. Wash clothes before re-use.

**Inhalation:** Remove to fresh air and keep at rest. Administer artificial respiration if breathing has stopped and seek medical attention immediately.

**Ingestion:** If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label. Offer the casualty water to drink. Remove any residues from mouth and rinse it with plenty of water. Never give anything by mouth to an unconscious person.

**Information for doctors:** Treat symptomatically. No specific antidote. In case of ingestion, do NOT induce vomiting. Gastric lavage may be necessary (with proper laryngeal control). Before emptying the stomach, assess the potential danger arising from lung aspiration against the product toxicity. Report to Albaugh Europe Sàrl any unusual symptoms occurring after exposure by any route.

### 5. Fire fighting measures

**Suitable extinguishing media:** Carbon dioxide, water spray, alcohol-resistant foam, dry chemical for small fires, alcohol-resistant foam or water spray for large fires.

**Unsuitable extinguishing media:** Solid water jet.

**Special hazards:** May evolve toxic and irritant fumes in fire (nitrogen oxides, carbon oxides and phosphorus oxides). Avoid breathing smoke or mists when fire fighting.

**Protective equipment:** Use a positive pressure, self-contained breathing apparatus and protective clothing.

**Further information:** Call the Fire Brigade at once to deal with all fires involving pesticides unless the fire is small and immediately controllable. Spray unopened containers with a mist spray to keep cool. If without risk, remove intact containers from exposure to fire. Contain fire-fighting water, bunding if necessary with sand or earth. Do not allow contamination of public drains or surface or ground waters. Dispose of fire debris and contaminated water as advised in the MAFF/HSE "Pesticides: Code of Practice for the Safe Use of Pesticides on Farms and Holdings".

### 6. Accidental release measures

**Personal precautions:** Wear prescribed protective clothing, refer to precautions outlined in Section 8.

**Environmental precautions:** Use appropriate containment to avoid environmental contamination. Control the release at its source. Contain the spill to prevent it from spreading, contaminating soil or entering sewages and drainage systems or any body of water. Inform the local water company if the release enters drains and the Environment Agency (England and Wales), the Scottish Environmental Protection Agency (Scotland) or the Environment and Heritage Service (Northern Ireland) if it enters surface or ground waters. Do not allow people or animals to access the contaminated area.

**Methods for cleaning up:** Clean up spills immediately. Contain spill by diking with earth, sand or absorbent material and place it into a compatible marked storage container. Scrub area with a hard water detergent. Soak up wash liquid with additional absorbent material and place into a marked disposal container. Once all material is cleaned up and placed in a container, seal and arrange for disposal according to Section 13.

### 7. Handling and storage

CAUTION: HANDLE WITH CARE.

**Handling:** Avoid all contact by mouth, with eyes and skin. Do not breathe spray. Wear personal protective equipment as specified in Section 8. When using, do not eat, drink or smoke. Wash hands and exposed skin before eating and after work. Wash all protective clothing thoroughly after use, especially the insides of gloves.

**Storage:** Keep in original container, tightly closed, in a dry, cool and safe place. Store in a locked, suitable pesticide store. Keep out of the reach of children and unauthorised personnel. Keep away from food, drink and animal feeding stuffs. Keep dry and frostproof in a suitable pesticide store. Keep away from heat and sources of ignition. DO NOT STORE in galvanised or unlined mild steel containers (see section 10).

**Specific uses:** For professional use exclusively as a herbicide as directed by the product label, every other use is hazardous.

### 8. Exposure control/personal protection

Comply with the Health and Safety at Work etc. Act 1974, as amended, and the instructions indicated on the label.

**Exposure limit values:** No specific occupational exposure limit values have been set for the preparation or any of its components.

**Exposure controls:** In order to minimize worker and environmental exposure, use engineering controls and appropriate work processes in preference to personal protective equipment in the areas where the preparation is handled, transported, loaded, unloaded, stored and used.

**Occupational exposure controls:** Provide adequate ventilation. Use specialized transfer systems if available. Wear suitable protective gloves when handling the concentrate and when handling contaminated surfaces. Wash concentrate from skin or eyes immediately. Do not breathe spray. Wash hands and exposed skin before meals and after work. Wash all protective clothing thoroughly after use, especially the insides of gloves. When using do not eat, drink or smoke.

**Respiratory protection:** No special requirement when used as recommended. For exposure to spray particles, wear particle filtering half mask (EN 149) or half mask connected to particle filter (EN 140 + 143).

**Hand protection:** Wear suitable protective gloves against chemicals (EN 374 part 1, 2, 3). Nitrile rubber min. 0.5 mm thick and 300 mm long gloves are the ones proven to be the most suitable according to tests on pesticide products. Wash the gloves thoroughly after each use, especially the insides. Replace gloves if damaged and before exceeding the breakthrough time.

**Eye protection:** Avoid contact with eyes. If there is a significant potential for contact, wear suitable eye protection (EN 166).

**Skin protection:** Avoid contact with skin. If there is a significant potential for contact, wear suitable coveralls (ISO 13982-1, Type 5, EN 13034, Type 6).

**Environmental exposure controls:** Implement all applicable local and community environmental protection legislation. Use appropriate containment to avoid environmental contamination. Do not contaminate water with the product or its container except when used as directed. Do not clean application equipment near surface water. Avoid contamination via drains from farmyards and roads. Refer to Section 12 and 13.

## 9. Physical and chemical properties

### General information

|             |                     |
|-------------|---------------------|
| Appearance: | Liquid              |
| Colour:     | Light to dark brown |
| Odour:      | Faint amine         |

### Important health, safety and environmental information

|                   |  |
|-------------------|--|
| pH:               | 4.77 (1% dilution)                     |
| Flash point:      | None (water based)                     |
| Water solubility: | Completely soluble in water            |
| Viscosity:        | 29.0 mPa.s at 20°C, 12.3 mPa.s at 40°C |
| Boiling point:    | approximately 100 °C                   |
| Specific gravity: | 1.186 g/cm <sup>3</sup> at 20°C        |
| Surface tension:  | 21.0 mNm <sup>-1</sup>                 |

### 10. Stability and reactivity

**Conditions to avoid:** Reacts with galvanised steel and unlined mild steel with the release of hydrogen, a highly flammable gas that may explode. Do not store in proximity of sources of ignition and direct sunlight.

**Materials to avoid:** Galvanised steel and unlined mild steel containers.

**Hazardous decomposition products:** None under correct storage and handling conditions. During decomposition evolves toxic and irritating fumes.

### 11. Toxicological information\*

|  |                                 |
|--|---------------------------------|
| Acute oral LD <sub>50</sub> (rat):       | > 5000 mg/kg                    |
| Acute dermal LD <sub>50</sub> (rabbit):  | > 5000 mg/kg                    |
| Acute Inhalation LD <sub>50</sub> (rat): | > 5.12 mg/l                     |
| Skin irritation:                         | Non irritant                    |
| Eye irritation:                          | Mild irritant                   |
| Sensitisation (guinea pig):              | Non sensitising                 |
| Carcinogen status:                       | No evidence of carcinogenicity. |
| Mutagenicity:                            | No evidence of mutagenicity.    |
| Reproductive toxicity:                   | No evidence of teratogenicity.  |

\*Based on data from similar preparations

### 12. Ecological information

#### Ecotoxicity

|  |                    |
|--|--------------------|
| LC <sub>50</sub> Fish                  | > 10.0 mg/l        |
| EC <sub>50</sub> Daphnia magna:        | > 10.0mg/l         |
| LC <sub>50</sub> Algae:                | > 10.0mg/l         |
| LD <sub>50</sub> Birds (Mallard duck): | > 5620 mg/kg       |
| Honey bees:                            | Non toxic to bees. |

|                                       |                 |
|---------------------------------------|-----------------|
| <b>Mobility:</b>                      | Not determined. |
| <b>Persistence and degradability:</b> | Not determined  |
| <b>Bioaccumulative potential:</b>     | Not determined. |
| <b>Other adverse effects:</b>         | Not determined. |

### 13. Disposal considerations

Disposal of waste product, contaminated packaging materials and any excess diluted spray should be in accordance with 'The Hazardous Waste (England and Wales) Regulations 2005' and any other applicable

local or national legislation (for guidance refer to the MAFF/HSE

\*Pesticides: Code of Practice for the Safe Use of Pesticides on Farms and Holdings\*).

For the handling and management of accidental release, follow the information given under Section 6 and 7.

This material and its container must be disposed of in a safe way.

### 14. Transport information

The preparation is not classified as hazardous for transport.

### 15. Regulatory information

This preparation is a herbicide classified as non hazardous in accordance with The Chemicals (Hazard Information & Packaging for Supply) Regulations 2002 (CHIP 3)<sup>1</sup>.

### Restrictions and health, safety and environmental information on the product label not mentioned elsewhere on this SDS:

Rinse container thoroughly by using an integrated pressure rinsing device or manually rinsing three times. Add washings to sprayer at time of filling and dispose of the container safely.

To avoid risks to man and the environment, comply with the instructions for use.

### Code letter and hazard designation of the preparation:

**R-phrases:** S2/S3

**S-phrases:** 2, 13, 20/21, 35, 57

For professional use only.

Comply with the Health and Safety at Work etc. Act 1974, as amended, and the instructions indicated on the label.

<sup>1</sup> implementing, among others:

The Dangerous Preparations Directive 1989/45/EC and its first ATP 2001/60/EC;

The second Amendment, 2001/58/EC, of the Safety Data Sheet Directive 91/155/EEC.

The relevant parts of 2001/59/EC – the 28th ATP to the Dangerous Substances Directive 67/548/EEC.

### 16. Other information

References/Sources of data:

- Commission Directive 2000/32/EC on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances;
- Health and Safety at Work etc. Act 1974 as amended.
- BS EN 347, part 1, 2, 3.

### Code letter and hazard designation mentioned in Section 2 and 3:

|    |                               |
|----|-------------------------------|
| Xi | Irritant                      |
| N  | Dangerous for the environment |

### Full text of relevant R and S phrases:

|                   |        |  |
|-------------------|--------|--|
| <b>R-phrases:</b> | R36    | Irritating to eyes   |
|                   | R51/53 | Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment   |
|                   | R52/53 | Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment |
| <b>S-phrases:</b> | S2     | Keep out of reach of children.   |
|                   | S13    | Keep away from food, drink and animal feeding stuffs.  |
|                   | S20/21 | When using do not eat, drink or smoke.   |
|                   | S35    | This material and its container must be disposed of in a safe way.                           |
|                   | S57    | Use appropriate containment to avoid environmental contamination.                            |

The information and recommendations in this publication are, to the best of our knowledge, information and belief, accurate at the date of publication. Nothing herein is to be construed as a warranty, expressed or implied. In all cases it is the responsibility of the user to determine the applicability of such information or the suitability of any products for their own particular purpose.

This Material Safety Data Sheet was compiled in compliance with Regulation (EC) No. 1907/2006. This version replaces all previous versions. Changes from the previous version are indicated by a / in the margin.

**Compiled by:** Etracoms SA, Fraz. Polto, 15/B, 13835 Trivero, Biella, Italy  
Tel. +39 015 7388058 – email: jward@etracoms.com