



## Roundup

Version 1 / ZA  
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Revision Date: 11.02.2022  
Print Date: 11.02.2022

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product identifier

Trade name Roundup  
Product code (UVP) 86789574

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Use Herbicide

#### 1.3 Details of the supplier of the safety data sheet

Supplier Bayer (Pty) Ltd.  
27 Wrench Road, P.O. Box 143  
1600 Isando  
South Africa

Telephone +27 (011) 921 5911

Telefax +27 (011) 921 5766

Responsible Department QHSE - Nigel, South Africa  
+27 (011) 365 8675 (during business hours only)

#### 1.4 Emergency telephone no.

Emergency telephone no. +27 (0861) 555 777 (Western Cape Poisons Helpline)

Global Incident Response Hotline (24h) +1 (760) 476 3964 (Company 3E for Bayer AG, Crop Science Division)

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.

Eye irritation: Category 2  
H319 Causes serious eye irritation.

#### 2.2 Label elements

Labelling in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.

Hazard label for supply/use required.

Hazardous components which must be listed on the label:

- Potassium salt of glyphosate



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Revision Date: 11.02.2022  
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EUH401 To avoid risks to human health and the environment, comply with the instructions for use.**Precautionary statements**P264 Wash hands thoroughly after handling.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337 + P313 If eye irritation persists: Get medical advice/ attention.  
P501 Dispose of contents/container in accordance with local regulation.**2.3 Other hazards**

No additional hazards known beside those mentioned.

Potassium salt of glyphosate: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.2 Mixtures****Chemical nature**Soluble concentrate (SL)  
Potassium salt of Glyphosate 441 g/l**Hazardous components**

Hazard statements according to Regulation (EC) No. 1272/2008

Name	CAS-No. / EC-No. / REACH Reg. No.	Classification	Conc. [%]
		REGULATION (EC) No 1272/2008	
Potassium salt of glyphosate	70901-12-1		35,5
Fatty alkyl ether alkyl amine ethoxylate	68478-96-6	Acute Tox. 4, H302 Eye Dam. 1, H318 Aquatic Chronic 2, H411	> 1 – < 10

**Further information**

For the full text of the H-Statements mentioned in this Section, see Section 16.

**SECTION 4: FIRST AID MEASURES****4.1 Description of first aid measures****General advice** Move out of dangerous area. Place and transport victim in stable position (lying sideways). Remove contaminated clothing immediately and dispose of safely.**Inhalation** Move to fresh air. Keep patient warm and at rest. Call a physician or poison control center immediately.**RESTRICTED**



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<b>Skin contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Do NOT induce vomiting. Call a physician or poison control center immediately. Rinse mouth.
<b>4.2 Most important symptoms and effects, both acute and delayed</b>	
<b>Symptoms</b>	Skin, eye and mucous membrane irritation
<b>4.3 Indication of any immediate medical attention and special treatment needed</b>	
<b>Risks</b>	This product is not a cholinesterase inhibitor.
<b>Treatment</b>	Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. Treatment with atropine and oximes is not indicated. There is no specific antidote.

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## SECTION 5: FIREFIGHTING MEASURES

### 5.1 Extinguishing media

<b>Suitable</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Unsuitable</b>	High volume water jet

**5.2 Special hazards arising from the substance or mixture** In the event of fire the following may be released: Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Nitrogen oxides (NO<sub>x</sub>), Oxides of phosphorus

### 5.3 Advice for firefighters

<b>Special protective equipment for firefighters</b>	In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus.
<b>Further information</b>	Contain the spread of the fire-fighting media. Do not allow water to come into direct contact with the product.

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

**Precautions** Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment.

**6.2 Environmental precautions** Do not allow to get into surface water, drains and ground water.

### 6.3 Methods and materials for containment and cleaning up

**Methods for cleaning up** Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.

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**6.4 Reference to other sections** Information regarding safe handling, see section 7.  
Information regarding personal protective equipment, see section 8.  
Information regarding waste disposal, see section 13.

**SECTION 7: HANDLING AND STORAGE****7.1 Precautions for safe handling**

**Advice on safe handling** Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.

**Hygiene measures** Avoid contact with skin, eyes and clothing. Keep working clothes separately. Wash hands before breaks and immediately after handling the product. Wash hands immediately after work, if necessary take a shower. Remove soiled clothing immediately and clean thoroughly before using again. Garments that cannot be cleaned must be destroyed (burnt).

**7.2 Conditions for safe storage, including any incompatibilities**

**Requirements for storage areas and containers** Store in original container. Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Store in a place accessible by authorized persons only. Reacts with galvanised steel or unlined mild steel to produce hydrogen, a highly flammable gas that could explode. Protect from frost. Partial crystallization may occur on prolonged storage below the minimum storage temperature. Freezing will affect the physical condition but will not damage the material. Thaw and mix before using.

**Advice on common storage** Keep away from food, drink and animal feedingstuffs.

**7.3 Specific end use(s)** Refer to the label and/or leaflet.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Control parameters**

No known occupational limit values.

**8.2 Exposure controls**

**Respiratory protection** Respiratory protection is not required under anticipated circumstances of exposure.  
Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.

**Hand protection** Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Wash gloves when contaminated. Dispose of when contaminated inside, when perforated or when contamination outside cannot be removed.

Material	Nitrile rubber
Rate of permeability	> 480 min
Glove thickness	> 0,4 mm

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	Protective index Directive	Class 6 Protective gloves complying with EN 374.
<b>Eye protection</b>	Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).	
<b>Skin and body protection</b>	Wear standard coveralls and Category 3 Type 6 suit. If there is a risk of significant exposure, consider a higher protective type suit. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently. If chemical protection suit is splashed, sprayed or significantly contaminated, decontaminate as far as possible, then carefully remove and dispose of as advised by manufacturer.	

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

<b>Form</b>	Liquid, clear to slightly turbid
<b>Colour</b>	yellow to amber
<b>Odour</b>	slight amine odour
<b>Odour Threshold</b>	No data available
<b>pH</b>	4,8 (10 g/l) (23 °C) (deionized water)
<b>Melting point/range</b>	Not applicable
<b>Boiling Point</b>	No data available
<b>Flash point</b>	does not flash
<b>Flammability</b>	No data available
<b>Auto-ignition temperature</b>	No data available
<b>Minimum ignition energy</b>	No data available
<b>Self-accelerating decomposition temperature (SADT)</b>	No data available
<b>Upper explosion limit</b>	No data available
<b>Lower explosion limit</b>	No data available
<b>Vapour pressure</b>	No data available
<b>Evaporation rate</b>	No data available
<b>Relative vapour density</b>	No data available
<b>Relative density</b>	No data available
<b>Density</b>	1,25 g/cm <sup>3</sup> (20 °C)
<b>Water solubility</b>	miscible
<b>Partition coefficient: n-octanol/water</b>	Potassium salt of glyphosate: log Pow: < -3,2 (25 °C)

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<b>Viscosity, dynamic</b>	8,0 mPa.s (20 °C)
<b>Viscosity, kinematic</b>	No data available
<b>Oxidizing properties</b>	No data available
<b>Explosivity</b>	Not explosive
<b>9.2 Other information</b>	Further safety related physical-chemical data are not known.

**SECTION 10: STABILITY AND REACTIVITY**

<b>10.1 Reactivity</b>	Stable under normal conditions.
<b>Self heating</b>	not self-heating
<b>10.2 Chemical stability</b>	Stable under recommended storage conditions.
<b>10.3 Possibility of hazardous reactions</b>	Reacts with galvanised steel or unlined mild steel to produce hydrogen, a highly flammable gas that could explode.
<b>10.4 Conditions to avoid</b>	Extremes of temperature and direct sunlight.
<b>10.5 Incompatible materials</b>	Unlined mild steel, Carbon steel, Galvanised steel Store only in the original container.
<b>10.6 Hazardous decomposition products</b>	Hazardous products of combustion: see section 5.

**SECTION 11: TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects**

<b>Acute oral toxicity</b>	LD50 (Rat) > 5.000 mg/kg Test conducted with a similar formulation.
<b>Acute inhalation toxicity</b>	LC50 (Rat) > 5,05 mg/l Exposure time: 4 h Test conducted with a similar formulation.
<b>Acute dermal toxicity</b>	LD50 (Rat) > 5.000 mg/kg Test conducted with a similar formulation.
<b>Skin corrosion/irritation</b>	Slight irritant effect - does not require labelling. (Rabbit) Test conducted with a similar formulation.
<b>Serious eye damage/eye irritation</b>	Severe eye irritation. (Rabbit) Test conducted with a similar formulation.
<b>Respiratory or skin sensitisation</b>	Skin: Non-sensitizing. (Guinea pig) OECD Test Guideline 406, Buehler test Test conducted with a similar formulation.

**Assessment STOT Specific target organ toxicity – single exposure**

Potassium salt of glyphosate: Based on available data, the classification criteria are not met.

**Assessment STOT Specific target organ toxicity – repeated exposure****RESTRICTED**

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Potassium salt of glyphosate did not cause specific target organ toxicity in experimental animal studies.

**Assessment mutagenicity**

Potassium salt of glyphosate is not considered mutagenic.

**Assessment carcinogenicity**

Potassium salt of glyphosate: Based on available data, the classification criteria are not met.

**Assessment toxicity to reproduction**

Potassium salt of glyphosate: Based on available data, the classification criteria are not met.

**Assessment developmental toxicity**

Potassium salt of glyphosate: Based on available data, the classification criteria are not met.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**Further information**

No further toxicological information is available.

**SECTION 12: ECOLOGICAL INFORMATION****12.1 Toxicity**

<b>Toxicity to fish</b>	LC50 (Oncorhynchus mykiss (rainbow trout)) 28 mg/l static test; Exposure time: 96 h Test conducted with a similar formulation.
<b>Toxicity to aquatic invertebrates</b>	EC50 (Daphnia magna (Water flea)) 69 mg/l static test; Exposure time: 48 h Test conducted with a similar formulation.
<b>Toxicity to aquatic plants</b>	ErC50 (Desmodesmus subspicatus (green algae)) 14 mg/l static test; Exposure time: 72 h Test conducted with a similar formulation. NOEC (Desmodesmus subspicatus (green algae)) 2 mg/l static test; Exposure time: 72 h Test conducted with a similar formulation.
<b>Toxicity to other organisms</b>	LD50 (Apis mellifera (bees)) > 265 mcg/bee (contact) Exposure time: 48 h Test conducted with a similar formulation. LD50 (Apis mellifera (bees)) > 285 mcg/bee (oral) Exposure time: 48 h Test conducted with a similar formulation. LC50 (Eisenia fetida (earthworms)) > 2.700 mg/kg Exposure time: 14 d Test conducted with a similar formulation.

**12.2 Persistence and degradability**

**Biodegradability** Potassium salt of glyphosate:  
Not readily biodegradable.

**Koc** Potassium salt of glyphosate: Koc: 884

**12.3 Bioaccumulative potential****RESTRICTED**



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<b>Bioaccumulation</b>	Potassium salt of glyphosate: Bioconcentration factor (BCF) < 1
<b>12.4 Mobility in soil</b>	
<b>Mobility in soil</b>	Potassium salt of glyphosate: Variable, depends on temperature, soil type, soil moisture, soil pH and organic matter content.
<b>12.5 Results of PBT and vPvB assessment</b>	
<b>PBT and vPvB assessment</b>	Potassium salt of glyphosate: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).
<b>12.6 Other adverse effects</b>	
<b>Additional ecological information</b>	No further ecological information is available.

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## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

<b>Product</b>	In accordance with current regulations and, if necessary, after consultation with the site operator and/or with the responsible authority, the product may be taken to a waste disposal site or incineration plant.
<b>Contaminated packaging</b>	Not completely emptied packagings should be disposed of as hazardous waste.

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## SECTION 14: TRANSPORT INFORMATION

According to SANS 10231/IMDG/IATA not classified as dangerous goods.

14.1 – 14.5 Not applicable.

### 14.6 Special precautions for user

See sections 6 to 8 of this Safety Data Sheet.

### 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

No transport in bulk according to the IBC Code.

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## SECTION 15: REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### Further information

WHO-classification: U (Unlikely to present acute hazard in normal use)

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## SECTION 16: OTHER INFORMATION

### Text of the hazard statements mentioned in Section 3

H302	Harmful if swallowed.
H318	Causes serious eye damage.
H411	Toxic to aquatic life with long lasting effects.

### Abbreviations and acronyms

ADN European Agreement concerning the International Carriage of Dangerous Goods by

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ADR	Inland Waterways European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute toxicity estimate
CAS-Nr.	Chemical Abstracts Service number
Conc.	Concentration
EC-No.	European community number
ECx	Effective concentration to x %
EINECS	European inventory of existing commercial substances
ELINCS	European list of notified chemical substances
EN	European Standard
EU	European Union
IATA	International Air Transport Association
IBC	International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code)
ICx	Inhibition concentration to x %
IMDG	International Maritime Dangerous Goods
LCx	Lethal concentration to x %
LDx	Lethal dose to x %
LOEC/LOEL	Lowest observed effect concentration/level
MARPOL	MARPOL: International Convention for the prevention of marine pollution from ships
N.O.S.	Not otherwise specified
NOEC/NOEL	No observed effect concentration/level
OECD	Organization for Economic Co-operation and Development
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
TWA	Time weighted average
UN	United Nations
WHO	World health organisation

The information contained within this Safety Data Sheet is in accordance with the guidelines established by Regulation (EU) 1907/2006 and Regulation (EU) 2015/830 amending Regulation (EU) No 1907/2006 and any subsequent amendments. This data sheet complements the user's instructions, but does not replace them. The information it contains is based on the knowledge available about the product concerned at the time it was compiled. Users are further reminded of the possible risks of using a product for purposes other than those for which it was intended. The required information complies with current EEC legislation. Addressees are requested to observe any additional national requirements.

**Reason for Revision:** Safety Data Sheet according to Regulation (EU) No. 2015/830.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.