

1/12

ROUNDUP POWERMAX® HERBICIDE

Version 4.0 / USA Revision Date: 11/25/2024 102000040206 Print Date: 11/29/2024

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

Product identifier

Trade name ROUNDUP POWERMAX® HERBICIDE

Product code (UVP) 62290321

SDS Number 102000040206

EPA Registration No. 524-549

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

Use Herbicide

Restrictions on useSee product label for restrictions.

Information on supplier

Supplier Bayer CropScience LP

800 North Lindbergh Blvd. St. Louis, MO 63167

USA

Responsible Department Email: SDSINFO.BCS-NA@bayer.com

Emergency telephone no.

Emergency Telephone Number (24hr/ 7 days)

1-800-334-7577

Product Information Telephone Number

1-866-99BAYER (1-866-992-2937)

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200 Acute toxicity(Inhalation): Category 4

Labelling in accordance with regulation HCS 29CFR §1910.1200



Signal word: Warning **Hazard statements** Harmful if inhaled.



2/12

ROUNDUP POWERMAX® HERBICIDE

Version 4.0 / USA Revision Date: 11/25/2024 102000040206 Print Date: 11/29/2024

Precautionary statements

Avoid breathing mist/ spray.

Use only outdoors or in a well-ventilated area.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/doctor/physician if you feel unwell.

Hazards Not Otherwise Classified (HNOC)

No physical hazards not otherwise classified. No health hazards not otherwise classified.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name CAS-No. Concentration % by weight Potassium salt of glyphosate 70901-12-1 48.7 7 - 13

Surfactant blend (proprietary)

The specific chemical identity and/or concentration range is being withheld because it is trade secret information.

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General advice When possible, have the product container or label with you when

calling a poison control center or doctor or going for treatment.

Inhalation Move to fresh air. If person is not breathing, call 911 or an ambulance,

then give artificial respiration, preferably mouth-to-mouth if possible.

Call a physician or poison control center immediately.

Skin contact Wash off immediately with plenty of water for at least 15 minutes. Take

off contaminated clothing and shoes immediately. Call a physician or

poison control center immediately.

Eye contact Hold eye open and rinse slowly and gently with water for 15-20

minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center

immediately.

Ingestion Call a physician or poison control center immediately. Rinse out mouth

> and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim

unattended.

Most important symptoms and effects, both acute and delayed

Symptoms To date no symptoms are known.

Indication of any immediate medical attention and special treatment needed

Risks This product is not a cholinesterase inhibitor.



3/12

ROUNDUP POWERMAX® HERBICIDE

Version 4.0 / USA Revision Date: 11/25/2024 102000040206 Print Date: 11/29/2024

Treatment Treatment with atropine and oximes is not indicated. Appropriate

supportive and symptomatic treatment as indicated by the patient's

condition is recommended.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable Use water spray, alcohol-resistant foam, dry chemical or carbon

dioxide.

Unsuitable High volume water jet

Special hazards arising from the substance or

mixture

In the event of fire the following may be released:, Carbon monoxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx), Oxides of

phosphorus

Advice for firefighters

Special protective equipment for firefighters In the event of fire and/or explosion do not breathe fumes. Firefighters should wear NIOSH approved self-contained breathing apparatus and

full protective clothing.

Further information Keep out of smoke. Fight fire from upwind position. Cool closed

containers exposed to fire with water spray. Do not allow run-off from

fire fighting to enter drains or water courses.

Specific hazards from the substance or mixture which can increase the fire

Flash point does not flash

Auto-ignition temperature No data available

Lower explosion limit Not applicable

Upper explosion limit Not applicable

Explosivity Not explosive



ROUNDUP POWERMAX® HERBICIDE

Version 4.0 / USA Revision Date: 11/25/2024 Print Date: 11/29/2024

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions Keep unauthorized people away. Isolate hazard area. Avoid contact

with spilled product or contaminated surfaces.

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.

Additional advice Use personal protective equipment. If the product is accidentally

spilled, do not allow to enter soil, waterways or waste water canal. Do

not allow product to contact non-target plants.

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

Precautions for safe handling

Advice on safe handlingUse only in area provided with appropriate exhaust ventilation. Handle

and open container in a manner as to prevent spillage.

Hygiene measures Wash hands thoroughly with soap and water after handling and before

eating, drinking, chewing gum, using tobacco, using the toilet or

applying cosmetics.

Remove Personal Protective Equipment (PPE) immediately after handling this product. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean

clothing.

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

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 original container and out of the reach of children, preferably in a locked storage area. Reacts with galvanised steel or unlined mild steel to produce hydrogen, a highly flammable gas that could explode. Protect from freezing. Freezing will affect the physical condition but will not damage the material. Thaw and mix before using. Partial crystallization may occur on prolonged storage below the

minimum storage temperature.

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



ROUNDUP POWERMAX® HERBICIDE

Version 4.0 / USA Revision Date: 11/25/2024 102000040206 Print Date: 11/29/2024

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

No known occupational limit values.

Additional advice

This product contains material which are Trade Secret and may have Occupational Exposure Limits.

Exposure controls

Personal protective equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection When respirators are required, select NIOSH approved equipment

based on actual or potential airborne concentrations and in

accordance with the appropriate regulatory standards and/or industry

recommendations.

Hand protection Chemical-resistant gloves (barrier laminate, butyl rubber, nitrile

rubber or Viton)

Eye protection Tightly fitting safety goggles

Skin and body protection Wear long-sleeved shirt and long pants and shoes plus socks.

General protective measures Follow manufacturer's instructions for cleaning/maintaining PPE. If

no such instructions for washables, use detergent and warm/tepid

water

Keep and wash PPE separately from other laundry.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Form Liquid, clear

Colour light yellow to light red brown

Odour odourless

Odour Threshold No data available

pH 4.3 - 4.8 (6.77 %) (23 °C) (deionized water)

Melting point/range No data available

Boiling Point

No data available

Flash point does not flash
Flammability Not applicable

Auto ignition temperature No data available

Auto-ignition temperature No data available



ROUNDUP POWERMAX® HERBICIDE

Version 4.0 / USA Revision Date: 11/25/2024 Print Date: 11/29/2024

Thermal decomposition No data available

Minimum ignition energy Not applicable
Self-accelarating No data available

decomposition temperature

(SADT)

Upper explosion limitNot applicableLower explosion limitNot applicable

Vapour pressure

Relative vapour density

No significant volatility.

No data available

No data available

No data available

1.3565 (20 °C)

Water at 15.6 °C

Density ca. 1.36 g/cm³ (20 °C)

Water solubility soluble

Partition coefficient: n-

octanol/water

Potassium salt of glyphosate: log Pow: < -3.2 (25 °C)

Viscosity, dynamic

Viscosity, kinematic

Oxidizing properties

No data available

Other information Further safety related physical-chemical data are not known.

SECTION 10: STABILITY AND REACTIVITY

Reactivity Stable under normal conditions.

Chemical stability Stable under recommended storage conditions.

Possibility of hazardous

reactions

Reacts with galvanised steel or unlined mild steel to produce hydrogen,

a highly flammable gas that could explode.



ROUNDUP POWERMAX® HERBICIDE

Version 4.0 / USA Revision Date: 11/25/2024 102000040206 Print Date: 11/29/2024

Conditions to avoid Extremes of temperature and direct sunlight.

Incompatible materials Galvanised steel, Carbon steel, Unlined mild steel

Hazardous decomposition

products

No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes Eye contact, Inhalation, Skin contact, Ingestion

Immediate Effects

May cause temporary eye irritation. Eye

Skin Not expected to produce significant adverse effects when

recommended use instructions are followed.

Ingestion Not expected to produce significant adverse effects when

recommended use instructions are followed.

Inhalation May be harmful if inhaled.

Information on toxicological effects

Acute oral toxicity LD50 (Rat) > 5,000 mg/kg

Test conducted with a similar formulation.

LC50 (Rat) > 2.58 mg/lAcute inhalation toxicity

Exposure time: 4 h

Determined in the form of liquid aerosol.

highest concentration tested

Test conducted with a similar formulation.

LD50 (Rat) > 5,000 mg/kgAcute dermal toxicity

Test conducted with a similar formulation.

Skin corrosion/irritation Slight irritant effect - does not require labelling. (Rabbit)

Test conducted with a similar formulation.

Serious eye damage/eye

irritation

Slight irritant effect - does not require labelling. (Rabbit)

Test conducted with a similar formulation.

Respiratory or skin

sensitisation

OECD Test Guideline 406, Buehler test Test conducted with a similar formulation.

Skin: Non-sensitizing. (Guinea pig)

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

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.



ROUNDUP POWERMAX® HERBICIDE

Version 4.0 / USA Revision Date: 11/25/2024 102000040206 Print Date: 11/29/2024

Assessment carcinogenicity

Potassium salt of glyphosate: Based on available data, the classification criteria are not met. Important comment to IARC Listing:, Our expert opinion is that classification as a carcinogen is not warranted.

ACGIH

None.

NTP

None.

IARC

Potassium salt of glyphosate 70901-12-1 Overall evaluation: 2A

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

Acute toxicity studies have been bridged from a similar formulation(s).

The non-acute information pertains to the active ingredient(s).

No further toxicological information is available.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish LC50 (Lepomis macrochirus (Bluegill sunfish)) 5.2 mg/l

static test; Exposure time: 96 h

Test conducted with a similar formulation. LC50 (Cyprinus carpio (Carp)) 4.0 mg/l

static test; Exposure time: 96 h

Test conducted with a similar formulation.

Chronic toxicity to fish Oncorhynchus mykiss (rainbow trout)

flow-through test NOEC: >= 9.63 mg/l

The value mentioned relates to the active ingredient glyphosate.

Toxicity to aquatic invertebrates

EC50 (Daphnia magna (Water flea)) 8.0 mg/l static test; Exposure time:

48 h

Test conducted with a similar formulation.

Chronic toxicity to aquatic

invertebrates

EC50 (Daphnia magna (Water flea)): 12.5 mg/l

Exposure time: 21 d

The value mentioned relates to the active ingredient glyphosate.



ROUNDUP POWERMAX® HERBICIDE

Version 4.0 / USA Revision Date: 11/25/2024 102000040206 Print Date: 11/29/2024

Toxicity to aquatic plants EC50 (Raphidocelis subcapitata (freshwater green alga)) 0.46 mg/l

static test; Exposure time: 72 h

Test conducted with a similar formulation.

Biodegradability Potassium salt of glyphosate:

Not readily biodegradable.

Koc Potassium salt of glyphosate: Koc: 884

Bioaccumulation Potassium salt of glyphosate: Bioconcentration factor (BCF) < 1

Mobility in soil Potassium salt of glyphosate: Variable, depends on temperature, soil

type, soil moisture, soil pH and organic matter content.

Results of PBT and vPvB assessment

PBT and vPvB assessment 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).

Additional ecological

information

No other effects to be mentioned.

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

Do not contaminate surface or ground water by cleaning equipment or

disposal of wastes, including equipment wash water.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product Dispose in accordance with all local, state/provincial and federal

regulations.

Contaminated packaging Follow advice on product label and/or leaflet.

Consult state and local regulations regarding the proper disposal of

container.

RCRA Information Characterization and proper disposal of this material as a special or

hazardous waste is dependent upon Federal, State and local laws and

are the user's responsibility. RCRA classification may apply.

SECTION 14: TRANSPORT INFORMATION

49CFR Not dangerous goods / not hazardous material

IMDG

UN number 3082
Class 9
Packaging group III
Marine pollutant YES



10/12

ROUNDUP POWERMAX® HERBICIDE

Version 4.0 / USA Revision Date: 11/25/2024 102000040206 Print Date: 11/29/2024

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(ALKYLAMINE ALKOXYLATE)

IATA

UN number 3082
Class 9
Packaging group III
Environm. Hazardous Mark YES

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(ALKYLAMINE ALKOXYLATE)

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

SECTION 15: REGULATORY INFORMATION

EPA Registration No. 524-549

US Federal Regulations

TSCA list

Water 7732-18-5

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

No export notification needs to be made.

SARA Title III - Section 302 - Notification and Information

Not applicable.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

None.

US States Regulatory Reporting

CA Prop65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

US State Right-To-Know Ingredients

None.

Environmental

CERCLA

None.

Clean Water Section 307(a)(1)

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.



ROUNDUP POWERMAX® HERBICIDE

Version 4.0 / USA Revision Date: 11/25/2024 102000040206 Print Date: 11/29/2024

EPA/FIFRA Information:

This chemical is a pesticide product regulated by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information required on the pesticide label:

Signal word: Caution!

Hazard statements: Causes moderate eye irritation.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms

49CFR Code of Federal Regulations, Title 49
ACGIH US. ACGIH Threshold Limit Values

ATE Acute toxicity estimate

CAS-Nr. Chemical Abstracts Service number

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

EINECS European inventory of existing commercial substances

ELINCS European list of notified chemical substances IARC International Agency for Research on Cancer IATA International Air Transport Association IMDG International Maritime Dangerous Goods

N.O.S. Not otherwise specified

NTP US. National Toxicology Program (NTP) Report on Carcinogens OECD Organization for Economic Co-operation and Development

TDG Transportation of Dangerous Goods

TWA Time weighted average

UN United Nations

WHO World health organisation

NFPA 704 (National Fire Protection Association):

Health - 2 Flammability - 0 Instability - 0 Others - none

HMIS (Hazardous Materials Identification System, based on the Fourth Edition Ratings Guide)

Health - 1 Flammability - 0 Physical Hazard - 0 PPE -

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard,

* = chronic health hazard

Reason for Revision: The following sections have been revised: Section 14: Transport Information. Reviewed and updated for general editorial purposes.

Revision Date: 11/25/2024

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



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