

ROUNDUP QUIKPRO™ HERBICIDE

Version 2.0 / USA Revision Date: 01/27/2023 102000037606 Print Date: 05/30/2024

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

Product identifier

Trade name ROUNDUP QUIKPRO™ HERBICIDE

Product code (UVP) 86809095

SDS Number 102000037606

EPA Registration No. 524-535

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

Specific target organ toxicity - repeated exposure: Category 2

Labelling in accordance with regulation HCS 29CFR §1910.1200



Signal word: Warning

Hazard statements

May cause damage to organs (Eyes, Kidney) through prolonged or repeated



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exposure.

Precautionary statements

Do not breathe dust.

Get medical advice/ attention if you feel unwell.

Dispose of contents/container in accordance with local regulation.

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 |
|--------------------------------|-------------|---------------------------|
| Ammonium salt of glyphosate | 114370-14-8 | 73.3 |
| Diquat dibromide | 85-00-7 | 2.9 |
| Polyether modified trisiloxane | 134180-76-0 | 14.1 |

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.



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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. Equipment should be thoroughly

decontaminated after use.

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 Not applicable

Auto-ignition temperature No data available

Lower explosion limit Not applicable

Upper explosion limit Not applicable

Explosivity Not explosive



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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 Avoid dust formation. Sweep up or vacuum up spillage and collect in

suitable container for disposal. 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 handling Avoid dust formation. Use 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. Protect from freezing. Keep away from direct sunlight. Reacts with galvanised steel or unlined mild steel to produce hydrogen, a highly flammable gas that could explode. 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.



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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

| Components | CAS-No. | Control parameters | Update | Basis |
|------------------------|---------|------------------------|---------|-----------|
| Diquat dibromide | 85-00-7 | 0.5 mg/m3 (REL) | 2005 | NIOSH |
| Diquat dibromide | 85-00-7 | 0.1 mg/m3 (TWA) | 01 2022 | ACGIH |
| (Respirable fraction.) | | , , , | | |
| Diquat dibromide | 85-00-7 | 0.5 mg/m3 (TWA PEL) | 09 2006 | US CA OEL |
| (Total dust.) | | | | |
| Diquat dibromide | 85-00-7 | 0.5 mg/m3 (TWA) | 06 2008 | TN OEL |
| Diquat dibromide | 85-00-7 | 0.5 mg/m3 (TWA) | 01 2022 | ACGIH |
| (Inhalable fraction.) | | | | |

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 small rod

Colour light yellow to brown

Odour slight

Odour Threshold No data available



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pH 3.7 (10 g/l)

Melting point/rangeNo data availableBoiling PointNo data availableFlash pointNot applicableFlammabilityNot applicableAuto-ignition temperatureNo data availableThermal decompositionNo data available

Minimum ignition energy Not applicable

Self-accelarating

decomposition temperature

(SADT)

Upper explosion limit

Lower explosion limit

Vapour pressure

Evaporation rate

Relative vapour density

No data available

Bulk density 0.68 g/ml (bulk density tapped)

Water solubility soluble

Partition coefficient: n-

octanol/water

Glyphosate: log Pow: -2.9

No data available

Diquat dibromide: log Pow: -4.6

Viscosity, dynamicNo data availableViscosity, kinematicNo data available

Oxidizing properties No oxidizing properties

Explosivity Not explosive

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

SECTION 10: STABILITY AND REACTIVITY



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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.

Conditions to avoid Extremes of temperature and direct sunlight.

Incompatible materials Galvanised steel, Unlined mild steel

Hazardous decomposition

products

No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes Skin contact, Eye contact, Inhalation, Ingestion

Immediate Effects

Eye May cause temporary eye irritation.

Skin Not expected to produce significant adverse effects when

recommended use instructions are followed.

IngestionHarmful if swallowed.InhalationHarmful if inhaled.

Information on toxicological effects

Acute oral toxicity LD50 (Rat) 4,443 mg/kg
Acute inhalation toxicity LC50 (Rat) > 0.99 mg/l

Exposure time: 4 h

Determined in the form of liquid aerosol.

Highest attainable concentration.

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

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

Serious eye damage/eye

irritation

Moderate eye irritation. (Rabbit)

Respiratory or skin Skin: Non-sensitizing. (Guinea pig) **sensitisation** OECD Test Guideline 406, Buehler test

Assessment STOT Specific target organ toxicity - single exposure

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

Diquat dibromide: May cause respiratory irritation.

Assessment STOT Specific target organ toxicity - repeated exposure

Glyphosate did not cause specific target organ toxicity in experimental animal studies. Diquat dibromide caused specific target organ toxicity in experimental animal studies in the following organ(s): Eyes, Kidney. Diquat dibromide caused Cataract in animal studies.



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Assessment mutagenicity

Glyphosate was not mutagenic or genotoxic in a battery of in vitro and in vivo tests. Diquat dibromide was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

Glyphosate was not carcinogenic in lifetime feeding studies in rats and mice.

Important comment to IARC Listing:, Our expert opinion is that classification as a carcinogen is not warranted.

Diquat dibromide was not carcinogenic in lifetime feeding studies in rats and mice.

ACGIH

Diquat dibromide 85-00-7 Group A4

NTP

None.

IARC

Ammonium salt of glyphosate 114370-14-8 Overall evaluation: 2A

Assessment toxicity to reproduction

Glyphosate did not cause reproductive toxicity in a two-generation study in rats. Diquat dibromide did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity

Glyphosate did not cause developmental toxicity in rats and rabbits.

Diquat dibromide caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Diquat dibromide are related to maternal toxicity.

Aspiration hazard

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

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout)) 5.4 mg/l

static test; Exposure time: 96 h

Test conducted with a similar formulation.

LC50 (Lepomis macrochirus (Bluegill sunfish)) 12.1 - 21.5 mg/l

static test; Exposure time: 72 h

The value mentioned relates to the active ingredient diguat dibromide.

LC50 (Oncorhynchus mykiss (rainbow trout)) 14.8 mg/l

static test; Exposure time: 96 h

The value mentioned relates to the active ingredient diquat dibromide.

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.



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Toxicity to aquatic invertebrates

EC50 (Daphnia magna (Water flea)) 11 mg/l static test; Exposure time:

48 h

Test conducted with a similar formulation.

EC50 (Daphnia magna (Water flea)) 0.77 - 1.19 mg/l static test;

Exposure time: 48 h

The value mentioned relates to the active ingredient diquat dibromide.

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.

static test; Exposure time: 72 h

The value mentioned relates to the active ingredient glyphosate.

NOEC (Raphidocelis subcapitata (freshwater green alga)) 26.4 mg/l

static test; Exposure time: 72 h

The value mentioned relates to the active ingredient glyphosate.

EC50 (Raphidocelis subcapitata (freshwater green alga)) 0.0094 mg/l

static test; Exposure time: 96 h

The value mentioned relates to the active ingredient diquat dibromide.

Biodegradability Glyphosate:

Not rapidly biodegradable

Diquat dibromide:

Not rapidly biodegradable

Koc Diquat dibromide: Koc: 2184750

Bioaccumulation Glyphosate: Bioconcentration factor (BCF) < 1

Does not bioaccumulate.

Diquat dibromide: Bioconcentration factor (BCF) 1

Does not bioaccumulate.

Mobility in soil Glyphosate: Slightly mobile in soils

Diquat dibromide: Immobile in soil

Results of PBT and vPvB assessment

PBT and vPvB assessment 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).

Diquat dibromide: 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 further ecological information is available.

Environmental precautions Apply this product as specified on the label.

Do not apply directly to water, to areas where surface water is present

or to intertidal areas below the mean high water mark.

Do not contaminate surface or ground water by cleaning equipment or

disposal of wastes, including equipment wash water.



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Retain and dispose of contaminated wash water.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

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

regulations.

Contaminated packaging Consult state and local regulations regarding the proper disposal of

container.

Follow advice on product label and/or leaflet.

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

UN number 3077
Class 9
Packaging group III

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID,

N.O.S.

(DIQUAT DIBROMIDE)

RQ Reportable Quantity is reached with 34,482 lb of product.

IMDG

UN number 3077
Class 9
Packaging group III
Marine pollutant YES

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(DIQUAT DIBROMIDE)

IATA

UN number 3077
Class 9
Packaging group III
Environm. Hazardous Mark YES

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(DIQUAT DIBROMIDE)

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.



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Freight Classification: COMPOUNDS, TREE OR WEED KILLING, N.O.I. other than

poison, HAVING A DENSITY OF 20 LBS OR GREATER PER

CUBIC FOOT

SECTION 15: REGULATORY INFORMATION

EPA Registration No. 524-535

US Federal Regulations

TSCA list

Polyether modified trisiloxane 134180-76-0

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 substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

US State Right-To-Know Ingredients

Diquat dibromide 85-00-7 CA, CT, IL, NJ, RI

Environmental

CERCLA

Yes

Diquat dibromide 85-00-7

Clean Water Section 307(a)(1)

None.

Safe Drinking Water Act Maximum Contaminant Levels

Yes

Diquat dibromide 85-00-7

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:



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Signal word: Caution!

Hazard statements: Harmful if swallowed.

Harmful if inhaled.

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 -

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: New Safety Data Sheet.

Revision Date: 01/27/2023

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

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