

**MONSANTO COMPANY**  
Material Safety Data Sheet  
Commercial Product

**1. PRODUCT AND COMPANY IDENTIFICATION****Product name**

QuikPRO(TM) Herbicide

**EPA Reg. No.**

524-535

**Chemical name**

Not applicable.

**Synonyms**

None.

**Company**MONSANTO COMPANY, 800 N. Lindbergh Blvd., St. Louis, MO, 63167  
Telephone: 800-332-3111, Fax: 314-694-5557**Emergency numbers**

FOR CHEMICAL EMERGENCY, SPILL LEAK, FIRE, EXPOSURE, OR ACCIDENT Call CHEMTREC - Day or Night: 1-800-424-9300 toll free in the continental U.S., Puerto Rico, Canada, or Virgin Islands. For calls originating elsewhere: 703-527-3887 (collect calls accepted).

FOR MEDICAL EMERGENCY - Day or Night: 314-694-4000 (collect calls accepted).

**2. COMPOSITION/INFORMATION ON INGREDIENTS****Active ingredient**Ammonium salt of N-(phosphonomethyl)glycine; {Ammonium salt of glyphosate}  
6,7-Dihydrodipyrido(1,2-a:2',1'-c) pyrazinidium dibromide; {Diquat dibromide}**Composition**

COMPONENT	CAS No.	% by weight (approximate)
Ammonium salt of glyphosate	114370-14-8	73.3
Diquat dibromide	85-00-7	2.9
Other ingredients		23.8

The specific chemical identity is being withheld because it is trade secret information of Monsanto Company.

**OSHA Status**

This product is hazardous according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**3. HAZARDS IDENTIFICATION****Emergency overview**

Appearance and odour (colour/form/odour): Whitish - Brown / Granules / Slight

CAUTION!  
HARMFUL IF SWALLOWED  
HARMFUL IF INHALED  
CAUSES MODERATE EYE IRRITATION

**Potential health effects****Likely routes of exposure**

Skin contact, eye contact, inhalation

**Eye contact, short term**

May cause temporary eye irritation

**Skin contact, short term**

Not expected to produce significant adverse effects when recommended use instructions are followed

**Inhalation, short term**

Harmful by inhalation.

**Single ingestion**

Harmful if swallowed.

Refer to section 11 for toxicological and section 12 for environmental information.

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#### 4. FIRST AID MEASURES

**Eye contact**

If in eyes, hold eye open and rinse slowly and gently for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing.

**Skin contact**

Wash affected skin with plenty of water.  
Take off contaminated clothing, wristwatch, jewellery.  
Wash clothes and clean shoes before re-use.

**Inhalation**

If inhaled, move person to fresh air. If person is not breathing, call emergency number or ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.

**Ingestion**

Immediately offer water to drink.  
Do NOT induce vomiting unless directed by medical personnel.  
Never give anything by mouth to an unconscious person.  
**QUICK TREATMENT IS ESSENTIAL TO COUNTERACT POISONING** and should be initiated before signs and symptoms of injury appear.  
Get medical advice from a poison control center or doctor.

**Advice to doctors**

This product is not an inhibitor of cholinesterase.

**Antidote**

Treatment with atropine and oximes is not indicated.

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#### 5. FIRE-FIGHTING MEASURES

**Flash point**

Not applicable.

**Extinguishing media**

Recommended: Water, dry chemical, foam, carbon dioxide (CO<sub>2</sub>)

**Unusual fire and explosion hazards**

None.  
Environmental precautions: see section 6.

**Hazardous products of combustion**

Carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), phosphorus oxides (P<sub>x</sub>O<sub>y</sub>), hydrogen bromide (HBr)

**Fire fighting equipment**

Self-contained breathing apparatus.  
Equipment should be thoroughly decontaminated after use.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions

Use personal protection recommended in section 8.

### Environmental precautions

#### SMALL QUANTITIES:

Low environmental hazard.

#### LARGE QUANTITIES:

Minimise spread

Keep out of drains, sewers, ditches and water ways.

### Methods for cleaning up

#### SMALL QUANTITIES:

Flush spill area with water.

#### LARGE QUANTITIES:

Absorb in earth, sand or absorbent material.

Dig up heavily contaminated soil.

Collect in containers for disposal.

Refer to section 7 for types of containers.

Flush residues with small quantities of water.

Minimise use of water to prevent environmental contamination.

Refer to section 13 for disposal of spilled material.

## 7. HANDLING AND STORAGE

Good industrial practice in housekeeping and personal hygiene should be followed.

### Handling

Avoid breathing dust.

Avoid contact with eyes, skin and clothing.

Wash contaminated clothing before re-use.

Wash hands thoroughly after handling or contact.

Observe all labelled safeguards until container is cleaned, reconditioned or destroyed.

### Storage

Compatible materials for storage: stainless steel, aluminium, fibreglass, plastic, glass lining

Incompatible materials for storage: galvanised steel, unlined mild steel, see section 10.

Keep out of reach of children.

Keep away from food, drink and animal feed.

Keep only in the original container.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Airborne exposure limits

Components	Exposure Guidelines
Ammonium salt of glyphosate	No specific occupational exposure limit has been established.
Diquat dibromide	TLV (ACGIH): 0.5 mg/m <sup>3</sup> : inhalable fraction, skin. No specific occupational exposure limit has been established.. The exposure limit indicated is for the diquat cation. TLV (ACGIH): 0.1 mg/m <sup>3</sup> : respirable fraction, skin. No specific occupational

	exposure limit has been established. The exposure limit indicated is for the diquat cation. PEL (OSHA): No specific occupational exposure limit has been established.
Other ingredients	No specific occupational exposure limit has been established.

**Engineering controls**

Provide local exhaust ventilation.

**Eye protection**

If there is significant potential for contact:

Wear dust goggles.

**Skin protection**

No special requirement when used as recommended.

If repeated or prolonged contact:

Wear chemical resistant gloves.

**Respiratory protection**

If airborne exposure is excessive:

Wear respirator.

Full facepiece/hood/helmet respirator replaces need for chemical goggles.

When recommended, consult manufacturer of personal protective equipment for the appropriate type of equipment for a given application.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

Colour/colour range:	Whitish - Brown
Form:	Granules
Odour:	Slight
Flash point:	Not applicable.
Density:	36 lb/ft <sup>3</sup> ; (pour density)
	42.6 lb/ft <sup>3</sup> ; (tap density)
pH:	3.7 - 10 g/l

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## 10. STABILITY AND REACTIVITY

**Stability**

Stable under normal conditions of handling and storage.

**Hazardous decomposition**

Thermal decomposition: Hazardous products of combustion: see section 5.

**Materials to avoid/Reactivity**

Reacts with galvanised steel or unlined mild steel to produce hydrogen, a highly flammable gas that could explode.

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## 11. TOXICOLOGICAL INFORMATION

This section is intended for use by toxicologists and other health professionals.