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# SAFETY DATA SHEET: ADAMA DIQUAT

Revision date: 20/04/2022

Version 2

Print date: 22/11/2022

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name:** ADAMA DIQUAT  
**Other name:** /  
**Recommended use of the chemical and restrictions on use** Herbicide  
**Registration holder:** **ADAMA South Africa (Pty) Ltd**  
Ground Floor, Simeka House  
The Vineyards Office Estate,  
99 Jip de Jager Drive  
Bellville  
7530  
**Phone number:** + 27 21 982 1460  
**Emergency phone number:** Griffon Poison Information Centre: +27 (0)82 446 8946  
Tygerberg Poison Information Centre: +27 (0)861 155 5777  
SPILL TECH®: +27(0)86 100 0366; +27 (0)83 253 6618

## 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

Hazard Class	Category	Hazard Statement Number
Acute Oral Toxicity	4	H302
Acute Dermal Toxicity	4	H312
Acute Inhalation Toxicity	3	H331
Skin Corrosion/Irritation	2	H315
Serious Eye Damage/Irritation	1	H318
Skin sensitization	1	H317
Specific target organ toxicity – Single	3	H336
Specific target organ toxicity – Repeated	1	H37
Aquatic Toxicity Acute	1	H400
Aquatic Toxicity Chronic	1	H410

### GHS Label elements, including precautionary statements:



**Signal word:** DANGER

### Hazard statement(s):

H302: Harmful if swallowed

H312: Harmful in contact with skin

H331: Toxic if inhaled

H315: Causes skin irritation

H318: Causes serious eye damage

H317: May cause an allergic skin reaction



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H336: May cause drowsiness or dizziness

H372: Causes damage to organs.

H400: Very toxic to aquatic life

H410: Very toxic to aquatic life with long lasting effects

### Precautionary statement(s):

P260: Do not breathe dust/fume/gas/mist/ vapours/spray.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P271: Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing.

P301 + P317: IF SWALLOWED: Get medical help.

P302 + P352: IF ON SKIN: Wash with plenty of water.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P354 + P338 IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P316 Get emergency medical help immediately.

P317 Get medical help.

P319: Get medical help if you feel unwell.

P321 Specific treatment.

P330: Rinse mouth.

P332 + P317 If skin irritation occurs: Get medical help.

P333 + P317 If skin irritation or rash occurs: Get medical help.

P362 + P364 Take off contaminated clothing and wash it before reuse.

P391 Collect spillage.

P403 + P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

P501: Dispose of contents/container in accordance with local/regional/national/international Regulations.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration(%)	Classification
Diquat Dibromide	85-00-7	37.4	Acute Toxicity, Oral, Category 4. Acute dermal, Category 3. Acute inhalation, Category 2. Skin Irritation, Category 2. Eye Irritation, Category 2.



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			Skin sensitization, Category 1. Specific target organ toxicity – Single: Category 3 Specific target organ toxicity – Repeated: Category 1 Aquatic Toxicity, Acute, Category 1. Aquatic Toxicity, Chronic, Category 1.
YUS-PQ100	9016-45-9	6.05	Acute Toxicity, oral, Category 5. Skin Irritation, Category 2. Eye Irritation, Category 1. Aquatic Toxicity, Acute, Category 2. Aquatic Toxicity, Chronic, Category 2.
Water	7732-18-5	/	ignore

### 4. FIRST AID MEASURES

**INHALATION:** Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician or Poisons Information Centre immediately.

**SKIN** Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If

**CONTACT:** symptoms persist, call a physician. Wash contaminated clothing before re-use.

**EYE** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

**CONTACT:** Remove contact lenses. Immediate medical attention is required.

**INGESTION:** If swallowed, seek medical advice immediately. DO NOT induce vomiting.

### 5. FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA:** Dry chemical, foam or CO<sub>2</sub> extinguishing media.

**THERMAL DECOMPOSITION** Nil

**PRODUCTS:**

**SPECIAL FIRE FIGHTING** Wear full protective clothing and self-contained breathing apparatus.

**METHODS:** Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.

**UNUSUAL FIRE OR EXPLOSION HAZARDS:** This product may form flammable and explosive hydrogen gas when in contact with aluminum.

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.



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### 6. ACCIDENTAL RELEASE MEASURES

**ACCIDENTAL RELEASE:** Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

### 7. HANDLING AND STORAGE

**HANDLING:** Avoid skin and eye contact and the inhalation of vapour and mist. Wear overalls, face shield, elbow-length impervious gloves, splash apron and rubber boots. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

**STORAGE:** Store in the closed, original container in a dry, cool, well ventilated area. DO NOT store for prolonged periods in direct sunlight. Store in a locked room or a place away from children, animals, food, feedstuffs, seed and fertilisers.

**Incompatible substances and mixtures:** Refer to product label.

**Packaging material:** HDPE plastic containers.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**INGESTION:** Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

**EYE PROTECTION:** Where eye contact is likely, use chemical splash goggles.

**SKIN PROTECTION:** Where contact is likely, wear chemical-resistant gloves (such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyvinyl chloride [PVC] or Viton), coveralls, socks and chemical-resistant footwear. For overhead exposure, wear chemical-resistant headgear.

**RESPIRATOR:** A respirator is not normally required when handling this substance. Use effective engineering controls to comply with occupational exposure limits.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance (physical state, color etc.):** Dark red brown liquid

**Odor:** Non-specific

**Odor threshold:** No data available

**pH:** No data available

**Melting point/freezing point:** No data available

**Initial boiling point and boiling range:** Approx 100°C

**Flash point:** No data available



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<b>Evaporation rate:</b>	No data available
<b>Flammability (solid, gas):</b>	110°C
<b>Upper/lower flammability or explosive limits:</b>	No data available
<b>Vapor pressure:</b>	No data available
<b>Vapor density:</b>	No data available
<b>Relative density:</b>	1.19 g/cm <sup>3</sup>
<b>Solubility(ies):</b>	Soluble in water
<b>Partition coefficient: n-octanol/water:</b>	No data available
<b>Auto-ignition temperature:</b>	No data available
<b>Decomposition temperature:</b>	No data available
<b>Viscosity:</b>	No data available

### 10. STABILITY AND REACTIVITY

CHEMICAL STABILITY:	Corrosive in contact with metals
CONDITIONS TO AVOID:	Corrosive in contact with metals
INCOMPATIBLE MATERIALS:	Aluminium, Mild steel, Iron
HAZARDOUS DECOMPOSITION PRODUCTS:	Combustion or thermal decomposition will evolve toxic and irritant vapours.
HAZARDOUS REACTIONS:	Corrosive in contact with metals

### 11. TOXICOLOGICAL INFORMATION

#### Acute health effects:

Exposure routes: Skin contact, Skin Absorption, Ingestion.

Ingestion: Harmful if swallowed.

Inhalation: Harmful if inhalation.

#### Numerical measures of toxicity:

Acute oral LD50:	1312.2mg/kg
Acute dermal LD50:	1336.9mg/kg
Acute inhalation LC50:	0.6mg/l
Skin irritation:	Category 2
Eye irritation:	Category 1
Skin sensitization:	Category 1
Germ cell mutagenicity:	Not available
Carcinogenicity:	Not available
Reproductive toxicity and Developmental toxicity:	Not available
Specific target organ toxicity (single exposure):	Not available
Repeated dose toxicity and Specific target organ toxicity (repeated exposure):	Not available
Aspiration hazard:	Not available

#### Chronic health effects:



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Not available.

### 12. ECOLOGICAL INFORMATION

This information is based on the active ingredient, diquat dibromide.

TOXICITY TO FISH:	Practically non-toxic to fish
TOXICITY TO DAPHNIA AND OTHER AQUATIC INVERTEBRATES:	Moderately toxic to aquatic invertebrates
AQUATIC INVERTEBRATES:	Daphnia magna (Water flea): EC <sub>50</sub> = 7 mg/L, 48 h
TOXICITY TO ALGAE:	Toxic to algae
ENVIRONMENTAL FATE:	Diquat is rapidly absorbed and deactivated by soil. There is no mobility in soil or water. There is evidence of photodegradation in water and plants.

### 13. DISPOSAL CONSIDERATIONS

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

### 14. TRANSPORT INFORMATION

**UN number: 3082**

**Road Transport ADR/IRD:**

Class: 9

Packaging group: III

UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID.N.O.S

**Maritime Transport IMDG/IMO:**

Class: 9

Packaging group: III

UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID.N.O.S

Marine Pollutant (Y/N): Yes

**Air transport IATA/ICAO:**

Class: 9

Packaging group: III

UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID.N.O.S

**Special/Environmental Precautions: None known.**

### 15. REGULATORY INFORMATION

The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given.

Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and /or local laws.



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### 16. OTHER INFORMATION

The data given here is based on current knowledge and experience. The purpose of this safety data sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

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