

D-Quat

P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P391	Collect spillage.
P310	Immediately call a POISON CENTER or doctor/physician.
P403+233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container in accordance with local regulations.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Benzenesulfonic acid, mono-C10-13-alkyl derivs., sodium salts	1-5%
CAS-No.: 68411-30-3	EC No.:
Classification (EC 1272/2008) Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Dam. 1 - H318	Classification (67/548/EEC) Xn;R22. Xi;R38,R41.
DIQUAT DIBROMIDE	30-60%
CAS-No.: 85-00-7	EC No.: 201-579-4
Classification (EC 1272/2008) Acute Tox. 4 - H302 Acute Tox. 2 - H330 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 STOT SE 3 - H335 STOT RE 1 - H372 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	Classification (67/548/EEC) T+;R26 T;R48/25 Xn;R22 R43 Xi;R36/37/38 N;R50/53

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

Remove affected person from source of contamination. Provide rest, warmth and fresh air. Do not give victim anything to drink if they are unconscious.

Inhalation

Move the exposed person to fresh air at once. Provide fresh air, warmth and rest, preferably in a comfortable upright sitting position. Obtain medical attention and bring these instructions.

Ingestion

Get medical attention immediately! Remove victim immediately from source of exposure. Provide fresh air, warmth and rest, preferably in comfortable upright sitting position. Immediately rinse mouth and drink plenty of water or milk. Keep person under observation. Do not induce vomiting. If vomiting occurs, keep head low. Transport immediately to hospital and bring along these instructions. NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS!

Skin contact

Remove victim immediately from source of exposure. Remove contaminated clothing immediately and wash skin with soap and water. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.

Eye contact

Remove victim immediately from source of exposure. Immediately flush with plenty of water. Remove any contact lenses and open eyes wide apart. Call an ambulance and continue flushing during transportation to hospital. Bring these instructions.

4.2. Most important symptoms and effects, both acute and delayed

D-Quat

General information

NOTE! Effects may be delayed. Keep affected person under observation. Seek medical attention for all burns, regardless how minor they may seem.

Inhalation

Coughing, chest tightness, feeling of chest pressure. Sore throat.

Ingestion

No specific symptoms noted.

Skin contact

Skin irritation.

Eye contact

No specific symptoms noted.

4.3. Indication of any immediate medical attention and special treatment needed

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Extinguish with foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

In case of fire, toxic gases (CO, CO₂, NO_x) may be formed.

5.3. Advice for firefighters

Special Fire Fighting Procedures

Avoid breathing fire vapours. Keep up-wind to avoid fumes. Move container from fire area if it can be done without risk. Keep run-off water out of sewers and water sources. Dike for water control. If risk of water pollution occurs, notify appropriate authorities.

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Do not smoke, use open fire or other sources of ignition. Avoid inhalation of dust and vapours.

6.2. Environmental precautions

Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body. Do not discharge into drains, water courses or onto the ground. Do not allow to enter drains, sewers or watercourses.

6.3. Methods and material for containment and cleaning up

Clean-up personnel should use respiratory and/or liquid contact protection. Wash thoroughly after dealing with a spillage. Absorb spillage with non-combustible, absorbent material. Remove small spills with vacuum cleaner. Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Inform Authorities if large amounts are involved.

6.4. Reference to other sections

For personal protection, see section 8.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Read and follow manufacturer's recommendations. Keep away from heat, sparks and open flame. Eye wash facilities and emergency shower must be available when handling this product. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Do not eat, drink or smoke when using the product. Follow instructions and ensure correct dilution of this product before use.

7.2. Conditions for safe storage, including any incompatibilities

D-Quat

Keep away from heat, sparks and open flame. Keep away from food, drink and animal feeding stuffs. Protect from freezing and direct sunlight. Protect against physical damage and/or friction. Store in tightly closed original container in a dry, cool and well-ventilated place. Store in closed original container at temperatures between 0°C and 30°C.

Storage Class

Toxic storage.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
DIQUAT DIBROMIDE	WEL		0.5 mg/m ³		1 mg/m ³	

WEL = Workplace Exposure Limit.

Ingredient Comments

WEL = Workplace Exposure Limits

8.2. Exposure controls

Protective equipment



Process conditions

Provide eyewash, quick drench.

Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Respiratory equipment

Wear suitable respiratory protection.

Hand protection

Use protective gloves. Nitrile. Butyl rubber. Polyvinyl chloride (PVC).

Eye protection

Wear goggles/face shield.

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

When using do not eat, drink or smoke. Wash hands after handling. Promptly remove any clothing that becomes contaminated. Wash contaminated clothing before reuse.

Skin protection

Protection suit must be worn.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Red brown
Odour	Characteristic.
Solubility	Soluble in water.
Relative density	1.2 g/ml
pH-Value, Conc. Solution	4 - 5.5

D-Quat

Flash point (°C)

Scientifically unjustified.

This product is not flammable.

Comments

Information given concerns the concentrated solution.

9.2. Other information

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition. Avoid frost. Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials To Avoid

Keep in original container. Unsuitable containers: common metals (iron, aluminium, copper).

10.6. Hazardous decomposition products

None known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxic Dose 1 - LD 50

300-2, 000 mg/kg (oral rat)

Toxic Dose 2 - LD 50

>2, 000 mg/kg (dermal rat)

Toxic Conc. - LC 50

<0.23 mg/l/4h (inh-rat)

Toxicological information

This material is very toxic.

Acute toxicity:

Harmful if swallowed. Toxic: danger of serious damage to health by prolonged exposure if swallowed.

Irritating to respiratory system and skin.

Very toxic by inhalation.

Inhalation

Very toxic by inhalation.

Ingestion

Harmful if swallowed.

Skin contact

May cause sensitisation by skin contact.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product contains a substance which is very toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

12.1. Toxicity

D-Quat

Acute Fish Toxicity

Very toxic to aquatic organisms.

LC 50, 96 Hrs, Fish mg/l 48

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

EC 50, 48 Hrs, Daphnia, mg/l 11.7

IC 50, 72 Hrs, Algae, mg/l 0.06

12.2. Persistence and degradability

Degradability

The product is not readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

12.4. Mobility in soil

Mobility:

The product is miscible with water. May spread in water systems.

12.5. Results of PBT and vPvB assessment

Not available.

12.6. Other adverse effects

Not known.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

General	Full protective clothing should be worn when handling this product.
Road Transport Notes	Avoid releasing to the environment.
Rail Transport Notes	Avoid releasing to the environment.
Sea Transport Notes	Do not release into the environment.

14.1. UN number

UN No. (ADR/RID/ADN)	2927
UN No. (IMDG)	2927
UN No. (ICAO)	2927

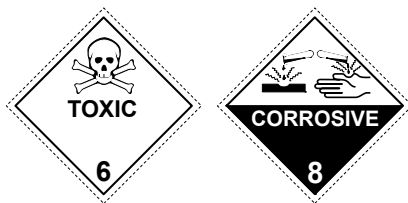
14.2. UN proper shipping name

Proper Shipping Name	TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (Contains Diquat Dibromide)
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14.3. Transport hazard class(es)

ADR/RID/ADN Class	6.1
ADR/RID/ADN Class	Class 6.1: Toxic substances.
ADR Label No.	6.1 & 8
IMDG Class	6.1
ICAO Class/Division	6.1
ICAO Subsidiary risk	8
Transport Labels	

D-Quat



14.4. Packing group

ADR/RID/ADN Packing group	II
IMDG Packing group	II
ICAO Packing group	II

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant



14.6. Special precautions for user

EMS	F-A, S-B
Emergency Action Code	2X
Hazard No. (ADR)	68
Tunnel Restriction Code	(D/E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

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

EU Legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Date	04/03/2014
Risk Phrases In Full	
R22	Harmful if swallowed.
R36/37/38	Irritating to eyes, respiratory system and skin.
R37/38	Irritating to respiratory system and skin.
R38	Irritating to skin.
R43	May cause sensitisation by skin contact.
R41	Risk of serious damage to eyes.
R48/25	Toxic: danger of serious damage to health by prolonged exposure if swallowed.
R26	Very toxic by inhalation.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

D-Quat

Hazard Statements In Full

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H335	May cause respiratory irritation.
H372	Causes damage to organs <<Organs>> through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.