

# **Safety Data Sheet**

## TRADE NAME

## **AQUARIS DES**

# 1. IDENTIFICATION OF THE PRODUCT / INTRODUCTION OF THE COMPANY

Chemical properties Hydrogen peroxide urea adduct, tablets 1 g each

Range of application Disinfectant for reverse osmosis

Company Identification BWT AQUA Ltd.

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Swiss Toxicological Information

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(24 h-emergency telephone) National 145

# 2. INFORMATION ON INGREDIENTS

Chemical description Substance

CAS-No. EINECS-No.

 $CH_4N_2O.H_2O_2$ 

Hydrogen peroxide urea adduct

tablets 1 g each 124-43-6 204-701-4

Molekular weight 94.07 AMU

# 3. HAZARDS IDENTIFICATION

Label precautionary statements



C corrosive



O oxidising

Contact with combustible material may cause fire. Corrosive.

# 4. FIRST AID MEASURES

General informations Take off immediately all contaminated clothing.

Inhalation If inhaled, remove to fresh air. Keep warm. Oxygen supply. If

breathing becomes difficult, call a physician.

Skin contact Flush with copious amount of water and soap. Skincare. Call a

physician if irritation persist.



Eye contact Flush with copious amounts of water for at least 15 minutes. Assure

adequate flushing by separating the eyelids with fingers. Make a

sterile gauze bandage. Call a physician.

Ingestion Give a lot of water to drink. Do not induce vomiting. Call a physician.

#### 5. FIRE FIGHTING MEASURES

Extinguishing media Jets of water, carbon dioxide, dry chemical powder or appropriate

foam.

Special fire fighting procedures Wear self-contained breathing apparatus and protective clothing to

prevent contact with skin and eyes.

may cause fire. May accelerate combustion.

Keep containers cool with water. Keep contaminated water off the

sewage system.

#### 6. ACCIDENTAL RELEASE MEASURES

Suitable extinguishing agents Absorb on sand or vermiculite and place in closed containers for

disposal. Ventilate area and wash spill site after material pickup is

complete. Evacuate area. Don't breath vapour/spray.

Protective equipment Wear self-contained breathing apparatus, rubber boots and heavy

rubber gloves.

Procedures Take off product carefully perhaps with a clean PE-shovel.

Avoid making dust. Clean the rest with a lot of water.

Don't smoke. Keep away from fire. Don't mix with other chemicals.

# 7. HANDLING AND STORAGE

**Handling** Open carefully. Never mix with other chemicals. Never give back

product in original container.

Storage Keep container tightly closed, Store in dry, dark and cool area under

25°C. Do not smoke.

Further informations Keep away from combustible materials, heat, sparks and open

flame. Do not store with: organic materials, strong oxidants, Ether,

Acetone, heavy metal compounds, alcohol, reducing agent.

Keep away from humidity.

# 8. EXPOSURE CONTROL AND PERSONAL PROTECTION EQUIPMENT

**Exposure limit information** 

CAS-Nr. 7722-84-1 Hydrogen peroxide

TRGS 900 (Nov. 1999) : 1 ppm  $(1,4 \text{ mg/}^3)$ 

TRGS 905 (march 2000) TRGS 906 (Dec. 1999) No. 63

Respiratory protection appropriate approved respirator - do not breathe vapour

Hand protection chemical-resistant gloves

Eye protection safety goggles

Body protection other protective clothing

Other protective equipment Face shield (8-inch minimum). Do not get in eyes, on skin, on

clothing. Avoid prolonged or repeated exposure. Keep away from combustible materials, heat, sparks and open flame. Safety shower



and eye bath. Preventive skincare.

Hygiene measures Wash thoroughly after handling. Remove and wash contaminated

clothing promptly.

#### 9. PHYSIAL AND CHEMICAL PROPERTIES

Form powder or tablets

Colour white Odour odourless

DATA RELEVANT FOR SAFETY:

pH-value T=20°C 3-5,2 (0,5 – 10% in water) Melting point 75-85 °C (dissolution!)

 $\begin{array}{lll} \mbox{Boiling point} & \mbox{n. a.} \\ \mbox{Solubility in water} & \mbox{T=}20^{\circ}\mbox{C} & \mbox{miscible} \\ \mbox{Density} & \mbox{T=}20^{\circ}\mbox{C} & \mbox{about 650 g/l} \end{array}$ 

Vapour pressure n. a.

Solvent content Recipe doesn't contain organic solvent

#### 10. STABILITY AND REACTIVITY

Conditions to avoid Keep away from combustible materials, humidity, heat, sparks and

open flame.

Incompatibilities Organic materials, strong oxidants, Ether, Acetone, heavy metal

compounds, alcohol, reducing agent.

Keep away dust, rust, ashes.

Other informations Strong dissolution with temperature >60°C.

# 11. TOXICOLOGICAL INFORMATION

**ACUTE TOXIZITY** 

LD<sub>50</sub> (oral, rat) - Hydrogen peroxide 1232 mg/kg

LD<sub>50</sub> (oral, rat) – Urea 14300 mg/kg (hydrogen peroxide 35%)

Irritation lapin/skin: irritating (hydrogen peroxide <50%)

Sensitization No sensitization known

Exposure May be harmful by inhalation, ingestion or skin absorption. Material

is extremely destructive to tissue of the mucous membranes and upper respiration tract, eyes and skin. Inhalation may result in spasm, inflammation and oedema of the larynx and bronchi,

chemical pneumonitis and pulmonary oedema.

# 12. ECOLOGICAL DATA

Data on elimination (persistence

and degradability) biodegradable

Aquatic toxicity Do not allow to enter sewage system, a harmful effect on aquatic

organisms/activated sludge cannot be excluded in case of improper

handling or disposal.

Other ecological information

COD-value/BOD-value/AOX

General information

Product of dissolution: water and oxygen

Follow local regulations. Do not allow the undiluted product to enter

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sewerage systems, sewers, groundwater, rivers, soils, drinking water supplies.

# 13. DISPOSAL CONSIDERATIONS

**Product** 

Recommendations Contact a licensed professional waste disposal service to dispose of

this material. Observe all federal, state and local environmental

regulations. Do not keep into toilettes.

European Waste Catalogues (94/3EC) 16 09 03\* - peroxide

Contaminated packaging

Recommendations Can be used after cleaning

Cleaning with water

# 14. TRANSPORT INFORMATION

Land transport ADR/RID and GGVS/GGVE
Class 5.1
UN-Number 1511

Packing Group III

Shipping name UREA HYDROGEN PEROXIDE

Maritime transport IMDG/GGVSee

Class 8 - 8136
UN-Number 1511
Packing Group III
Chiffre 1 b
EMO-Nr. 5.1 -05
MFAG Nr. 735
Marine pollutant no

Shipping name UREA HYDROGEN PEROXIDE

Air transport ICAO-TI and IATA-DGR

Class 5.1 UN-Number 1511 Packing Group III

Shipping name UREA HYDROGEN PEROXIDE

Further information For all transports: dangerous label Nr. 5.1 + 8

# 15. REGULATORY INFORMATION

European information



C corrosive



O oxidising



R-phrases R 8 Contact with combustible material may cause fire.

R 34 Causes burns.

S-phrases S 17 Keep away from combustible material.

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 36/37/39 Wear suitable protective clothing, gloves and

eye/face protection.

S 45 In case of accident or if you feel unwell, seek

medical advice immediately. (Show the label

where possible).

Water hazard class WGK 2: polluting substance

# **16. OTHER INFORMATION**

n. a. not available Date of issue 25.7.2001

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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