

1 Identification of the substance/preparation and of the company/undertaking

- **Product details**

- **Trade name:** Aquatest A

- **Application of the substance / the preparation** Reagent to determine waterhardness

- **Manufacturer/Supplier:**

BWT AG

Walter Simmer Straße 4

A - 5310 Mondsee

AUSTRIA

Tel.: +43/6232/5011-0

Fax: +43/6232/4058

email: office@bwt.at

- **Further information obtainable from:**

Abteilung F&E - Chemiebeauftragter

Tel.: +43/6232/5011-1423

email: msds-info@bwt-group.com

- **Information in case of emergency:**

Vergiftungsinformation Wien

Tel.: +43/1-406 43 43

2 Hazards identification

- **Hazard description:**



Xi Irritant

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

R 36/37/38 Irritating to eyes, respiratory system and skin.

- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- **GHS label elements**



Danger

H314 - Causes severe skin burns and eye damage.

- **Prevention:**

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

- **Response:**

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

- **Storage:**

P405 Store locked up.

- **Disposal:**

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

3 Composition/information on ingredients

- **Chemical characterization**

- **Description:** Mixture of substances listed below with nonhazardous additions.








(Contd. on page 2)

Printing date 20.04.2010

Revision: 20.04.2010

Trade name: Aquatest A

(Contd. of page 1)

· Dangerous components:		
CAS: 7664-41-7 EINECS: 231-635-3	ammonia, anhydrous  T, C, N; R 10-23-34-50 Danger:  3.1.I/3; 3.2/1B Warning:  2.5/C; 4.1.A/1; 2.2/2	2.5-10%
CAS: 12125-02-9 EINECS: 235-186-4	ammonium chloride  Xn, Xi; R 22-36 Warning:  3.1.O/4, 3.3/2	≤ 2.5%
CAS: 67-56-1 EINECS: 200-659-6	methanol  T, F; R 11-23/24/25-39/23/24/25 Danger:  2.6/2; 3.1.O/3, 3.1.D/3, 3.1.I/3; 3.8/1	≤ 2.5%

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
If symptoms persist consult doctor.
- **Information for doctor:**
- **The following symptoms may occur:**
Dizziness
Gastric or intestinal disorders
Nausea

5 Fire-fighting measures

- **Suitable extinguishing agents:**
Water
Foam
- **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.

(Contd. on page 3)

Printing date 20.04.2010

Revision: 20.04.2010

Trade name: Aquatest A

(Contd. of page 2)

- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Storage class:** 12

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

- **Ingredients with limit values that require monitoring at the workplace:**

7664-41-7 ammonia, anhydrous

WEL	Short-term value: 25 mg/m ³ , 35 ppm
	Long-term value: 18 mg/m ³ , 25 ppm

12125-02-9 ammonium chloride

WEL	Short-term value: 20 mg/m ³
	Long-term value: 10 mg/m ³

67-56-1 methanol

WEL	Short-term value: 333 mg/m ³ , 250 ppm
	Long-term value: 266 mg/m ³ , 200 ppm
	Sk

- **Additional information:** The lists valid during the making were used as basis.

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- **Respiratory protection:**

Use suitable respiratory protective device only when aerosol or mist is formed.

Filter A/P2

- **Protection of hands:**



Protective gloves

Rubber gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

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(Contd. on page 4)

Printing date 20.04.2010

Revision: 20.04.2010

Trade name: Aquatest A

(Contd. of page 3)

9 Physical and chemical properties

· General Information

Form: Fluid
Colour: Dark blue
Odour: Characteristic

· Change in condition

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: Undetermined.

· **Flash point:** Not applicable.

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Density at 20°C:** 1.065 g/cm³

· **Solubility in / Miscibility with water:** Fully miscible.

· **pH-value at 20°C:** 10.3

10 Stability and reactivity

· **Thermal decomposition / conditions to be avoided:** To avoid thermal decomposition do not overheat.

· **Materials to be avoided:**

Bases

Acids

· **Dangerous reactions** No dangerous reactions known.

· **Dangerous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

7664-41-7 ammonia, anhydrous

Oral LD50 350 mg/kg (rat)

Inhalative LC50/4 h 2000 mg/l (rat)

67-56-1 methanol

Oral LD50 5628 mg/kg (rat)

Dermal LD50 15800 mg/kg (rabbit)

· **Primary irritant effect:**

· **on the skin:** Irritant to skin and mucous membranes.

· **on the eye:** Irritating effect.

· **Sensitization:** No sensitizing effects known.

· **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Irritant

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(Contd. on page 5)

Printing date 20.04.2010

Revision: 20.04.2010

Trade name: Aquatest A

(Contd. of page 4)

12 Ecological information

- **Additional ecological information:**
- **General notes:**
 Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
 Do not allow product to reach ground water, water course or sewage system.
 Danger to drinking water if even small quantities leak into the ground.

13 Disposal considerations

- **Product:**
- **Recommendation**
 Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Waste disposal key:**
 20 01 15
 06 02 05
- **Uncleaned packaging:**
- **Recommendation:**
 Packagings that may not be cleansed are to be disposed of in the same manner as the product.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

- **Maritime transport IMDG:**
- **Marine pollutant:** No

15 Regulatory information

- **Labelling according to EU guidelines:**
 The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
- **Code letter and hazard designation of product:**



Xi Irritant

- **Risk phrases:**
 36/37/38 Irritating to eyes, respiratory system and skin.
- **Safety phrases:**
 1/2 Keep locked up and out of the reach of children.
 23 Do not breathe fumes/aerosol.
 46 If swallowed, seek medical advice immediately and show this container or label.
 56 Dispose of this material and its container to hazardous or special waste collection point.
 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

16 Other information

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.

- **Relevant R-phrases**
 10 Flammable.
 11 Highly flammable.

(Contd. on page 6)

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 20.04.2010

Revision: 20.04.2010

Trade name: Aquatest A

(Contd. of page 5)

22 Harmful if swallowed.

23 Toxic by inhalation.

23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

34 Causes burns.

36 Irritating to eyes.

39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

50 Very toxic to aquatic organisms.

Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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