

1 Identification of the substance/mixture and the company

Product identifier	Cyanuric acid
Use of substance	Reagent for water analysis
Supplier	WAPOTEC GmbH Carola-Blome-Str. 7 A-5020 Salzburg Tel: +43 662 434342-0 Fax: +43 662 434342-3
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2 Hazards identification

Hazard designation



T Toxic

Information pertaining to particular dangers for man and environment.

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" (1999/45/EC) in the latest valid version.
R60 May impair fertility.
R61 May cause harm to the unborn child.
Restricted to professional users.

GHS label elements



Danger

H360 May damage fertility or the unborn child.

Prevention

P281 Use personal protective equipment as required.
P201 Obtain special instructions before use.
P201 Do not handle until all safety precautions have been read and understood.

Response:

P308+P313 IF exposed or concerned: Get medical advice/attention.

Storage:

P405 Store locked up.

Disposal:

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

3 Composition/information on ingredients

Description: Mixture contains anorganic and organic compounds.

Dangerous components:

CAS: 10043-35-3 boric acid

Repr. Cat. 2;  T; R 60-61

80-90%

EINECS: 233-139-2

Danger  3.7/1B

Index number: 005-007-00-2

REACH – Pre-registered substances All components are REACH pre-registered.

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

4 First-aid measures

General information Instantly remove any clothing soiled by the product.

After inhalation Supply fresh air. Seek medical treatment in case of complaints.

After skin contact Instantly rinse with water. Seek medical treatment.

After eye contact Rinse opened eye for several minutes (at least 10 min) under running water. Seek medical treatment.

After swallowing Rinse out mouth and then drink 1-2 glasses of water.

Most important symptoms may occur: After swallowing: sickness, vomiting, diarrhoea
After swallowing of large amounts: fatigue, crampfs, ataxia (impaired locomotor coordination), drop in temperature, CNS disorders

5 Fire-fighting measures

Suitable extinguishing agents Use fire fighting measures that suit the environment.

Special hazards caused by the material, its products of combustion or resulting gases:

Formation of toxic gases is possible during heating or in case of fire, ammonia (NH₃), Phosporus oxides (PxOx), dipotassium oxide, hydrogen canide (prussic acid).

Protective equipment:

Wear self-contained breathing apparatus.

Wear full protective suit.

Additional information

Collect contaminated fire fighting water separately. It must not enter drains.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations. Ambient fire may liberate hazardous vapours.

6 Accidental release measures

- ⦿ **Person-related safety precautions:** Avoid causing dust. Keep unprotected persons away. Wear protective equipment.
- ⦿ **Measures for environmental protection:** Do not allow product to reach sewage system or water bodies.
- ⦿ **Measures for cleaning/collecting:**
Collect mechanically. Ensure adequate ventilation. Dispose of contaminated material as waste according to item 13.
- ⦿ **Additional information:** No dangerous materials are release.

7 Handling and storage

- ⦿ **Handling**
- ⦿ **Information for safe handling** Prevent formation of dust. Ensure good dventilation/exhaustion at the workplace.
- ⦿ **Information about protection against explosions and fires:**
The product is not flammable
- ⦿ **Conditions for safe storage, including any incompatibilities**
- ⦿ **Storage**
- ⦿ **Requirements to be met by storerooms and containers:** Store in cool location.
- ⦿ **Information about storage in one common storage facility:** Store away from oxidizing agents.
- ⦿ **Further information about storage conditions:**
Protect from heat and direct sunlight. Protect from humidity and keep away from water. Protect from the effects of light. Store in a locked cabinet or with access restricted to technical experts or their assistants.
- ⦿ **Recommended storage temperature:** 20°C +/-5°C

8 Exposure controls and personal protection

- ⦿ **Additional information about design of technical systems:** No further data; see item7.
- ⦿ **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- ⦿ **Additional information:** The lists that were valid during the compilation were used as basis.
- ⦿ **Personal protective equipment**
- ⦿ **General protective and hygienic measures** The usual precautionary measures should be adhered to general rules for handling chemicals.

- ☉ **Breathing equipment:** Use breathing protection against the effects of fumes/dust/aerosol.
- ☉ **Recommended filter device for short term use:** Filter P3
- ☉ **Protection of hands:** Preventive skin protection by use of skin-protection agents is recommended.
- ☉ **Material of gloves** nitrile rubber, NBR. Recommended thickness of the material: ≥ 0.11 mm
- ☉ **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. Value for the permeation: Level ≥ 1 (>10 min)
- ☉ **Eye protection:** Use against the effects of fumes / dust. Safety glasses.
- ☉ **Body protection:** Protective work clothing

9 Physical and chemical properties

Information basic physical and chemical properties

Appearance:

☉ Form:	Tablets
☉ Colour:	White
☉ Odour:	Odourless
☉ pH-value (10g/l) at 20°C	6
☉ Melting point/ Metling range:	Not determined
☉ Boiling point / Boiling range:	300°C
☉ Flash point:	Not applicable
☉ Danger of explosion:	Product is not explosive.
☉ Density at 20°C	1.38g/cm ³
☉ Solubility in / Miscibility with Water at 20°C:	Soluble
☉ Solvent content:	
Organic solvents:	0.0 %
☉ Solids content:	100 %

10 Stability and reactivity

- ☉ **Thermal decomposition / conditions to be avoided:** To avoid thermal decomposition do not overheat.
- ☉ **Materials to be avoided:** alkalis, reducing agents, oxidizing agents
- ☉ **Dangerous products of decomposition:** See chapter 5

11 Toxicological information

Acute toxicity: Quantitative data on the toxicity of the preparation are not available.

LD/LC50 values that are relevant for classification:

10043-35-3 boric acid

Oral/LD50/2660 mg/kg (rat)

Dermal/LD50/>2000mg/kg (rat)
(RTECS)

LD₀₁/1500mg/kg (child)
(MERCK)

NOAEL/9.6 B mg/kg (rat)
(NTP)

Primary irritant effect:

☉ **on the skin:**slight irritations possible

☉ **on the eye:** Irritant effect.

☉ **Sensitization:** No sensitizing effect known.

☉ **Subacute to chronic toxicity:** CAS-No. 10043-35-3, MERCK: Sensitization test (guinea pig); negative (OECD 406)

☉ **Additional toxicological information:** Toxic. Product is suspected to cause injury to foetus

☉ **Mutagenicity:** Boric acid: Mutagenicity (mammal cell test): chromosome aberration negative (NTP)

☉ **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**

Boric acid:

Bacterial mutagenicity: Ames test – negative (IUCLID)

Mutagenicity (mammal cell test): chromosome aberration negative (NTP)

Evaluation for carcinogenicity: negative in animals (NTP)³

12 Ecological information

☉ **Information about elimination (persistence and degradability).**

☉ **Other information:** Quantitative data on the ecological effect of this product are not available. The following statements refer to the individual components.

☉ **Toxicity**

☉ **Aquatic toxicity:**

☉ **100-97-0 methenamine**

EC50 36 mg/l/48h (Daphnia magna)
(IUCLID)

LC50 49.8 mg/l/96h (pimephales promelas)

Toxicity EC10 5 g/l (fish)

Toxicity Eco 10 g/l/48h (Daphnia magna)

☉ **Persistence and degradability**

☉ **Behaviour in environmental systems:** 10043-35-3 boric acid. Log P(o/w)/0.76 (25°C (.)

☉ **Mobility and bioaccumulative potential** Depending on the concentration, phosphorus compounds may contribute to the eutrophication of water supplies.

☉ **Ecotoxicological effects:**

☉ **Acquatic toxicity:**

10043-35-3 boric acid

EC50; 133 mg/l/48 (Daphnia magna)
(ECOTOX)

LC50; 50-100 mg/l/96h (Oncorhynchus mykiss)
(ECOTOX)

☉ **Additional ecological information:**

General notes: Water hazard class 1 (German Regulation) (Self-assessment acc VwVwS Annex 4): slightly hazardous for water. Do not allow undiluted product to reach ground water, water bodies or sewage system. Must not reach sewage water or drainage ditch undiluted or unneutralized.

PBT assessments: no data available

vPvB assessments: no data available

13 Disposal considerations

☉ **Product:**

☉ **Recommendation:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

☉ **European waste catalogue:** 16 05 06 – laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals

☉ **Uncleaned packagings:**

☉ **Recommendation:** Disposal must be made according to official regulations.

☉ **Recommended cleaning agent:** Water, if necessary with cleaning agent.

14 Transport information

Land transport ADR/RID (cross border)

ADR/RID-GGVS/E class:

Maritime transport IMDG:

IMDG Class:

Marine pollutant: No

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class:

Un "Model Regulation": ---

Transport/Additional information: Not dangerous according to the above specifications.

15 Regulatory information

☉ **Designation according to EC guidelines:**

☉ **Code letter and hazard designation of product:** T Toxic

- ⦿ **Hazard-determining components of labeling** boric acid
- ⦿ **Risk phrases**
 - 60 May impair fertility.
 - 61 May cause harm to the unborn child.
- ⦿ **Safety phrases:**
 - 53 Avoid exposure – obtain special instructions before use.
 - 20 When using do not eat or drink.
 - 36 Wear suitable protective clothing.
 - 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
 - 60 This material and its container must be disposed of as hazardous waste.
- ⦿ **Special designation of certain preparations:** Restricted to professional users:
- ⦿ **National regulations**
- ⦿ **Information about limitation of use:** Observe employment restrictions for pregnant and nursing mothers according to the 'mother protection guideline' (92/85/EEC)
- ⦿ Employment restrictions concerning young persons must be observed.
- ⦿ **Substances of very high concern (SVHC) according to REACH, Article 57** 10043-35-3 boric acid

16 Other information

The information provided on this SDS is correct to the best of our knowledge and information, but not to be considered as warranty or quality specification nor creates contractual relationship. The information given is designed only as a guidance for safe handling. The categorisation according to Dangerous Preparations Directive 1999/45/EC resp. regulation CLP (EC)1272/2008 is based on the classification of the single component according to Annex VI of regulation CLP (EC)1272/2008 as well as on manufacturer's data completed by hazardous material database.

- ⦿ **Relevant R-phrases**
 - 60 May impair fertility.
 - 61 May cause harm to the unborn child.
- ⦿ **Edition** Number 1
- ⦿ **Translated by** WAPOTEC GmbH
- ⦿ **Short cut** ---