

## Safety Data Sheet according to 1907/2006/EC, Article 31

Printing date 07.06.2010

Revision: 07.06.2010

### \* 1 Identification of substance:

- **Product name:** Total Alkalinity
- **Catalog number:** 00515329, 515320, (4)515321, 515323(0), 505321, 515325
- **Application of the substance / the preparation:** Reagent for water analysis
- **Supplier:**  
Tintometer GmbH  
Schleefstr. 8-12  
DE - 44287 Dortmund  
Made in Germany
- **Informing department:**  
e-mail: produktsicherheit@tintometer.de  
Product Safety Department
- **Contact for technical details:**  
Technical Department  
e-mail: technik@tintometer.de
- **Emergency information:**  
Poison Center Berlin, Germany  
phone: 0049-30 30686 790

phone: +49 231 945100  
e-mail: sales@tintometer.de

### \* 2 Hazards identification

- **Hazard designation:**



Xi Irritant

- **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.

R 41 Risk of serious damage to eyes.

- **GHS label elements**



Danger

H318 - Causes serious eye damage.

- **Prevention:**

P280 Wear protective gloves/protective clothing/eye protection/face protection.

- **Response:**

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.

### \* 3 Composition/information on ingredients

- **Description:** Mixture contains anorganic and organic compounds.

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<b>· Dangerous components:</b>			
CAS: 7681-38-1	sodium bisulfate	 Xi; R 41	5-10%
EINECS: 231-665-7		Danger:  3.3/1	
Index number: 016-046-00-X			

- **REACH - Pre-registered substances** All components are REACH pre-registered.
  - **Additional information** For the wording of the listed risk phrases refer to section 16.
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### \* 4 First aid measures

- **General information** Instantly remove any clothing soiled by the product.
  - **After inhalation** Supply fresh air.
  - **After skin contact** Instantly wash with water and soap and rinse thoroughly.
  - **After eye contact**  
Rinse opened eye for several minutes (at least 10 min) under running water.  
Call a doctor immediately.
  - **After swallowing**  
Seek medical treatment.  
Rinse out mouth and then drink 1-2 glasses of water.
  - **The following symptoms may occur:**
    - after inhalation:  
breathing difficulty  
coughing
    - after swallowing:  
gastric or intestinal trouble
    - After swallowing of large amounts:  
fatigue  
ataxia (impaired locomotor coordination)  
drop in temperature  
cramps
- 

### \* 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.  
Sulphur oxides (SO<sub>x</sub>)  
nitrogen oxides (NO<sub>x</sub>)  
Sodium oxide
  - **Protective equipment:** Wear self-contained breathing apparatus.
  - **Additional information**  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.  
Collect contaminated fire fighting water separately. It must not enter drains.
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### 6 Accidental release measures

- **Person-related safety precautions:**  
Wear protective equipment. Keep unprotected persons away.  
Keep away from ignition sources
- **Measures for environmental protection:** Do not allow product to reach sewage system or water bodies.
- **Measures for cleaning/collecting:**  
Dispose of contaminated material as waste according to item 13.  
Collect mechanically.

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 Ensure adequate ventilation.
 

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### \* 7 Handling and storage

- **Handling**
- **Information about protection against explosions and fires:** The product is not flammable
- **Storage**
- **Requirements to be met by storerooms and containers:** Store in cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
  - Protect from heat and direct sunlight.
  - Store under dry conditions.
  - Protect from humidity and keep away from water.
  - This product is hygroscopic.
  - Protect from the effects of light.
- **Recommended storage temperature:** 20°C +/- 5°C

### \* 8 Exposure controls and personal protection

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

· <b>Components with limit values that require monitoring at the workplace:</b>	
<b>9004-34-6 cellulose</b>	
WEL (Great Britain)	Short-term value: 20* mg/m <sup>3</sup> Long-term value: 10* 4** mg/m <sup>3</sup> *inhalable dust **respirable
<b>14807-96-6 Talc (Mg<sub>3</sub>H<sub>2</sub>(SiO<sub>3</sub>)<sub>4</sub>)</b>	
WEL (Great Britain)	Long-term value: 1 mg/m <sup>3</sup>
OEL (Sweden)	Long-term value: 2* 1** mg/m <sup>3</sup> *totaldamm **respirabelt damm

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

- **Personal protective equipment**

- **General protective and hygienic measures**

Take off immediately all contaminated clothing  
 Wash hands during breaks and at the end of the work.  
 Avoid contact with the eyes.  
 Do not eat, drink or smoke while working.

- **Breathing equipment:** Use breathing protection against the effects of fumes/dust/aerosol.

- **Recommended filter device for short term use:** Filter P1

- **Protection of hands:**

Preventive skin protection by use of skin-protecting agents is recommended.  
 After use of gloves apply skin-cleaning agents and skin cosmetics.

- **Material of gloves**

nitrile rubber, NBR  
 Recommended thickness of the material: ≥ 0.11 mm

- **Penetration time of glove material**

The exact break trough 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  
 Tightly sealed safety glasses.

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 · **Body protection:** Protective work clothing.

### \* 9 Physical and chemical properties:

· <b>Form:</b>	Tablets
· <b>Colour:</b>	Red
· <b>Odour:</b>	Odourless
· <b>Melting point/Melting range:</b>	Not determined
· <b>Boiling point/Boiling range:</b>	Not determined
· <b>Flash point:</b>	Not applicable
· <b>Danger of explosion:</b>	Product is not explosive.
· <b>Density</b>	Not determined
· <b>Solubility in / Miscibility with Water:</b>	Partly soluble
· <b>pH-value (1.66 g/l) at 20°C:</b>	2.5
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	0.0 %
<b>Solids content:</b>	100.0 %

### \* 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** To avoid thermal decomposition do not overheat.
- **Materials to be avoided:**
  - alkalis
  - metals
  - alcohols
  - oxidizing agents
- **Dangerous reactions**
  - Reacts with alcohols
  - Forms hydrogen in aqueous solution with metals
  - Liberates acid in contact with water or alcohol.
  - Reacts with light alloys to form hydrogen
- **Dangerous products of decomposition:**
  - Sulphur oxides (SO<sub>x</sub>)
  - see chapter 5

### \* 11 Toxicological information

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

· <b>LD/LC50 values that are relevant for classification:</b>		
<b>7681-38-1 sodium bisulfate</b>		
Oral	LD50	2490 mg/kg (rat)

- **Primary irritant effect:**
  - **on the skin:** Irritant to skin and mucous membranes.
  - **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitization:** No sensitizing effect known.

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- **Additional toxicological information:**

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

- Irritant

- **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)** no data available

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### \* 12 Ecological information:

- **Information about elimination (persistence and degradability):**

- **Other information:** Quantitative data on the ecological effect of this product are not available.

- **Ecotoxicological effects:**

- **Remark:**

Toxic for fish:

NH<sub>4</sub><sup>+</sup> > 0.3 mg/l

sulphates > 7 g/l

- **Bacterial toxicity:** sulphates toxic > 2.5 g/l

- **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 or large quantities of it to reach ground water, water bodies or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralized.

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

- **vPvB assessments:** no data available

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### 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
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- **Uncleaned packagings:**

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

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

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### \* 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":** -

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

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### \*15 Regulatory information

· **Designation according to EC guidelines:**

The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV)

· **Code letter and hazard designation of product:**

Xi Irritant

· **Risk phrases:**

41 Risk of serious damage to eyes.

· **Safety phrases:**

24 Avoid contact with skin.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

39 Wear eye/face protection.

60 This material and its container must be disposed of as hazardous waste.

· **National regulations**

· **Information about limitation of use:** Employment restrictions concerning young persons must be observed.

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### 16 Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant R-phrases**

41 Risk of serious damage to eyes.

· **Sources** Data arise from reference works and literature.

· **\* Data compared to the previous version altered.**

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