

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 13.01.2015


Version number 53

Revision: 13.01.2015

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

- **1.1 Product identifier**
- **Trade name:** Dinatriumtetraboraat 10 aq
- **Article number:** 0270
- **EC number:**  
215-540-4
- **Index number:**  
005-011-01-1
- **Registration number** 01-2119490790-32-XXXX
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture :** For Laboratory, Research or Manufacturing use.
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Avantor Performance Materials B.V.  
P.O.Box 1  
7400 AA Deventer  
The Netherlands  
Tel: (+31) (0)570 - 687500  
Fax: (+31) (0)570 - 687574  
E-mail : jtbaker.nl@avantormaterials.com
- **Informing department:**  
E-mail : pawel.skiba@avantormaterials.com  
Avantor Performance Materials Sales Office Tel.: +31(0) 570 687500
- **1.4 Emergency telephone number:**  
Environment Health & Safety department  
during normal opening times (8 am till 5.30 pm) tel: (+31)(0) 570 687500

**SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
  - **Classification according to Regulation (EC) No 1272/2008**  
Repr. 1B H360FD May damage fertility. May damage the unborn child.
  - **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**  
T; Toxic  
Repr. Cat. 2  
R60-61: May impair fertility. May cause harm to the unborn child.
  - **Information concerning particular hazards for human and environment:** void
  - **2.2 Label elements**
  - **Labelling according to Regulation (EC) No 1272/2008**  
The substance is classified and labelled according to the CLP regulation.
  - **Hazard pictograms**
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GHS08
- **Signal word** Danger
  - **Hazard statements**  
H360FD May damage fertility. May damage the unborn child.
  - **2.3 Other hazards**
  - **Results of PBT and vPvB assessment**
  - **PBT:** Not applicable.
  - **vPvB:** Not applicable.

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### SECTION 3: Composition/information on ingredients

· **3.1 Chemical characterisation: Substances**

- **CAS No. Designation:**  
Dinatriumtetraboraate 10 aq
- **Identification number(s):**
- **EC number:** 215-540-4
- **Index number:** 005-011-01-1

· **SVHC**

Dinatriumtetraboraate 10 aq

### SECTION 4: First aid measures

· **4.1 Description of first aid measures**

- **After inhalation** Supply fresh air; consult doctor in case of symptoms.
- **After skin contact** The product is not skin irritating.
- **After eye contact** Rinse opened eye for several minutes under running water.
- **After swallowing**  
Rinse out mouth  
Seek medical treatment.

· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

### SECTION 5: Firefighting measures

· **5.1 Extinguishing media**

- **Suitable extinguishing agents**  
CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
- **For safety reasons unsuitable extinguishing agents** Water with a full water jet.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Avoid causing dust.
- **6.2 Environmental precautions:** No special measures required.
- **6.3 Methods and material for containment and cleaning up:**  
Dispose of contaminated material as waste according to item 13.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling  
See Section 8 for information on personal protection equipment.  
See Section 13 for information on disposal.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Open and handle container with care.
- **Information about protection against explosions and fires:** Keep breathing equipment ready.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:** No special requirements.

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- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Components with critical values that require monitoring at the workplace:**
- **Additional information:** The lists that were valid during the compilation were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
  - Keep away from foodstuffs, beverages and food.
  - Instantly remove any soiled and impregnated garments.
  - Wash hands during breaks and at the end of the work.
  - Store protective clothing separately.
- **Breathing equipment:** Not necessary if room is well-ventilated.
- **Protection of hands:**
  - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
  - Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
  - 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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Not required.

### SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

<b>Form:</b>	Powder
<b>Colour:</b>	White
<b>Smell:</b>	Odourless
<b>Odour threshold:</b>	Not determined.
- **pH-value (10 g/l) at 20 °C:** 9.24
- **Change in condition**

<b>Melting point/Melting range:</b>	75 °C (-8H <sub>2</sub> O)
<b>Boiling point/Boiling range:</b>	320 °C (-10H <sub>2</sub> O)
<b>Flash point:</b>	Not applicable
- **Inflammability (solid, gaseous)** Product is not inflammable.
- **Ignition temperature:**
- **Decomposition temperature:** Not determined.
- **Self-inflammability:** Not determined.
- **Danger of explosion:** Product is not explosive.
- **Critical values for explosion:**

<b>Lower:</b>	Not determined.
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<b>Upper:</b>	Not determined.
· <b>Steam pressure at 20 °C:</b>	0 hPa
· <b>Density at 20 °C</b>	1.73 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not applicable.
· <b>Evaporation rate</b>	Not applicable.
· <b>Solubility in / Miscibility with</b>	
<b>Water at 20 °C:</b>	50 g/l
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>dynamic:</b>	Not applicable.
<b>kinematic:</b>	Not applicable.
· <b>9.2 Other information</b>	No further relevant information available.

### SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** Heat, boiling temperatures.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
  - **Acute toxicity:**
- |   |          |                      |
|---|----------|----------------------|
| · <b>LD/LC50 values that are relevant for classification:</b> |          |                      |
| Oral  | LD50     | 2660 mg/kg (rat)     |
| Dermal  | LD50     | >2000 mg/kg (rabbit) |
|   | LC50/72h | 630 mg/l (C.auratus) |
- **Primary irritant effect:**
  - **on the skin:** Irritant
  - **on the eye:** irritation
  - **Sensitisation:** No sensitizing effect known.
  - **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**  
Repr. 1B

### SECTION 12: Ecological information

- **12.1 Toxicity**
  - **Aquatic toxicity:**
- |            |                                   |
|------------|-----------------------------------|
| EC0 / 16h  | 15.8 mg/l (Pseudomonas putida.)   |
| EC5 / 72h  | 1.3 mg/l (Entosiphon sulcatum)    |
|            | 1.3 mg/l (Protozoën) E.sulcatum)  |
| EC50/48h   | 1085-1402 mg/l (daphnia magna)    |
| IC50 / 96h | 158 mg/l (Desmodemus subspicatus) |
| LC50       | 807 mg/l (Fish)                   |
- **12.2 Persistence and degradability** No further relevant information available.

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- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- **General notes:**

Water hazard class (D) 1 (Assessment by list): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

- **12.5 Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**

- **Recommendation**

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

- **Uncleaned packagings:**

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

### SECTION 14: Transport information

- **14.1 UN-Number**

- **ADR, ADN, IMDG, IATA** Void

- **14.2 UN proper shipping name**

- **ADR, ADN, IMDG, IATA** Void

- **14.3 Transport hazard class(es)**

- **ADR, ADN, IMDG, IATA**

- **Class** Void

- **14.4 Packing group**

- **ADR, IMDG, IATA** Void

- **14.5 Environmental hazards:**

- **Marine pollutant:** No

- **14.6 Special precautions for user**

Not applicable.

- **14.7 Transport in bulk according to Annex II of**

**MARPOL73/78 and the IBC Code** Not applicable.

- **UN "Model Regulation":**

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### SECTION 15: Regulatory information

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

- **Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the CLP regulation.

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· **Hazard pictograms**



GHS08

· **Signal word** *Danger*

· **Hazard statements**

*H360FD May damage fertility. May damage the unborn child.*

· **National regulations**

· **Other regulations, limitations and prohibitive regulations**

· **Substances of very high concern (SVHC) according to REACH, Article 57**

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· **15.2 Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

**SECTION 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.*

· **Department issuing data specification sheet:** *EHS*

· **Contact:** *Paweł Skiba*

· **Abbreviations and acronyms:**

*RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)*

*IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)*

*ICAO: International Civil Aviation Organisation*

*ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)*

*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*

*IMDG: International Maritime Code for Dangerous Goods*

*IATA: International Air Transport Association*

*GHS: Globally Harmonised System of Classification and Labelling of Chemicals*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*CAS: Chemical Abstracts Service (division of the American Chemical Society)*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

*Repr. 1B: Reproductive toxicity, Hazard Category 1B*

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