

METTLER TOLEDO SAFETY DATA SHEET

according to the Globally Harmonized System

Buffer solution pH 9.21

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

1.1. Product identifier

Product name Buffer solution pH 9.21
Product code 52118025, 51350008, 51350022, 51350036, 51350046, 51302070, 51302085

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture Laboratory chemicals

1.3. Details of the supplier of the safety data sheet

Company/Undertaking Identification Mettler-Toledo GmbH
Im Langacher 44
CH-8606 Greifensee
Switzerland
Tel: +41 22 567 53 22
Fax: +41 22 567 53 23
Email: ph.lab.support@mt.com

1.4. Emergency telephone number (24-Hour-Number): GBK GmbH +49 6132 84463

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Version GHS 2

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 The substance or mixture is not classified.

In accordance with Regulation (EC) No. 1272/2008, the product does not need to be classified nor labelled.

Additional information For the full text of the phrases mentioned in this Section, see Section 16.

2.2. Label elements

| | |
|---------------------------------|---------------------------------------|
| Signal Word | - |
| Hazard Statements | None. |
| Precautionary statements | None. |
| Supplemental information | None. |
| Product identifier | None. |
| 2.3. Other hazards | No hazards to be specially mentioned. |

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Buffer solution.

| Components | | CLP Classification | Product identifier |
|--|-----------|--|---|
| Deionised water | 95% - 99% | | CAS-No.: 7732-18-5 EC-No.: 231-791-2 |
| disodium tetraborate decahydrate; borax decahydrate | 1% - 2.5% | Repr. 1B H360 (FD) [Repr1B_FFDD: C ≥ 8,5 %] | CAS-No.: 1303-96-4 EC-No.: 215-540-4 Index-No: 005-011-01-1 |

For the full text of the phrases mentioned in this Section, see Section 16.

Hazardous impurities None known.

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|---------------------|--|
| Inhalation | Move to fresh air in case of accidental inhalation of vapours or decomposition products. Consult a physician for severe cases. |
| Skin contact | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician. |
| Eye contact | Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist. |
| Ingestion | Rinse mouth. Consult a physician for severe cases. |

4.2. Most important symptoms and effects, both acute and delayed If you feel unwell, seek medical advice (show the label where possible).

4.3. Indication of any immediate medical attention and special treatment needed None known.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Use water spray, alcohol-resistant foam, dry extinguishing agent or carbon dioxide.

Extinguishing media which must not be used for safety reasons None.

5.2. Special hazards arising from the substance or mixture The product is not flammable. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

5.3. Advice for firefighters

Special protective equipment for firefighters Standard procedure for chemical fires. In the event of fire, wear self-contained breathing apparatus. Wear protective suit.

Specific methods Water mist may be used to cool closed containers.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel Ensure adequate ventilation. Use personal protective equipment. Sweep up to prevent slipping hazard. Avoid contact with skin and eyes. Do not breathe vapours/dust.

Advice for emergency responders Handle in accordance with good industrial hygiene and safety practice. Use personal protective equipment. Sweep up to prevent slipping hazard.

6.2. Environmental precautions Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up Soak up with inert absorbent material. Keep in suitable and closed containers for disposal.

6.4. Reference to other sections See chapter 8 and 13.

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling** Wear personal protective equipment. Avoid contact with skin and eyes.
- 7.2. Conditions for safe storage, including any incompatibilities** Store at room temperature in the original container.
- 7.3. Specific end use(s)** No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit(s) No data is available on the product itself.

| disodium tetraborate decahydrate; borax decahydrate (CAS 1303-96-4) | |
|--|--|
| United Kingdom - Workplace Exposure Limits (WELs) - STELs | 15 mg/m ³ STEL (calculated) |
| United Kingdom - Workplace Exposure Limits (WELs) - TWAs | 5 mg/m ³ TWA |
| U.S. - OSHA - Vacated PELs - TWAs | 10 mg/m ³ TWA |

8.2. Exposure controls

Appropriate engineering controls Avoid contact with skin, eyes and clothing.

Personal protection equipment

Respiratory protection In case of good ventilation no personal respiratory protective equipment required.

Hand protection Gloves made of latex. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Eye protection Safety glasses with side-shields conforming to EN166.

Skin and body protection Long sleeved clothing.

Thermal hazards No special measures required.

Environmental exposure controls Prevent product from entering surface water or sewage.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|---------------------|
| Appearance | Liquid. |
| Colour | Blue. |
| Odour | None. |
| Odour Threshold | Not determined. |
| pH: | 9.2 |
| Melting point/range: | Not determined. |
| Boiling point/range: | Not determined. |
| Flash point: | Not determined. |
| Evaporation Rate: | Not determined. |
| Flammability: | Not determined. |
| Explosion limits: | Not determined. |
| Vapour pressure: | Not determined. |
| Vapor density: | Not determined. |
| Relative density: | Not determined. |
| Water solubility: | completely miscible |
| Partition coefficient (n-octanol/water): | Not determined. |
| Autoignition temperature: | Not determined. |
| Decomposition temperature: | Not determined. |
| Viscosity: | Not determined. |
| Explosive properties: | not hazardous |
| Oxidising properties: | None |

9.2. Other information

| | |
|--|---------------------------|
| General Product Characteristics | No information available. |
|--|---------------------------|

SECTION 10: Stability and reactivity

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|---|------------------------------|
| 10.1. Reactivity | No information available. |
| 10.2. Chemical stability | Stable at normal conditions. |
| 10.3. Possibility of hazardous reactions | No information available. |
| 10.4. Conditions to avoid | Not required. |
| 10.5. Incompatible materials | None. |
| 10.6. Hazardous decomposition products | None reasonably foreseeable. |

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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|---|--|
| Acute toxicity | No data is available on the product itself. Deionised water (CAS 7732-18-5) Oral LD50 Rat > 90 mL/kg (FOOD_JOURN) disodium tetraborate decahydrate; borax decahydrate (CAS 1303-96-4) Dermal LD50 Rabbit > 10000 mg/kg (JAPAN_GHS) Oral LD50 Rat = 3493 mg/kg (NZ_CCID) |
| Skin corrosion/irritation | No skin irritation. |
| Serious eye damage/eye irritation | No eye irritation. |
| Respiratory / Skin Sensitisation | None. |
| Carcinogenicity | No data available. |
| Germ cell mutagenicity | No data available. |
| Reproductive toxicity | No data available. |
| Specific target organ toxicity (single exposure) | No data available. |
| Specific target organ toxicity (repeated exposure) | No data available. |
| Aspiration hazard | No data available. |
| Human experience | No data available. |
| Information on likely routes of exposure | dermal |
| Other information | The product contains no substances which at their given concentration, are considered to be hazardous to health. |

SECTION 12: Ecological information

| | |
|---|--|
| 12.1. Toxicity | No data is available on the product itself. |
| 12.2. Persistence and degradability | Expected to be biodegradable. |
| 12.3. Bioaccumulative potential | Bioaccumulation is unlikely. |
| 12.4. Mobility in soil | No data available. |
| 12.5. Results of PBT and vPvB assessment | This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). |
| 12.6. Other adverse effects | No information available. |

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues / unused products Dispose of in accordance with local regulations.

Contaminated packaging Dispose of as unused product.

SECTION 14: Transport information

ADR/RID Not regulated.

IMDG Not regulated.

IATA Not regulated.

Further Information Not classified as dangerous in the meaning of transport regulations.

SECTION 15: Regulatory information

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

Regulatory Information In accordance with Regulation (EC) No. 1272/2008, the product does not need to be classified nor labelled.

| | |
|--|---|
| Deionised water (CAS 7732-18-5) | |
| Inventory - United States - Section 8(b) Inventory (TSCA) | Present (ACTIVE) |
| U.S. - TSCA (Toxic Substances Control Act) - Section 8(a) - Chemical Data Reporting Rule - Fully Exempt Substances | Present (listed under Certain forms of natural gas and water) |
| disodium tetraborate decahydrate; borax decahydrate (CAS 1303-96-4) | |
| EU - Biocides (98/8/EC) - Annex I - Active Substances - Expiry Dates | Expiration date: August 31, 2021 Product type 8 |
| EU - Biocides (528/2012/EU) - Active Substances | 8 - Wood preservatives (Commission Directive 2009/91/EC) |
| EU - Biocides (98/8/EC) - Annex I - Active Substances - Minimum Purity | 990 g/kg 8 |

| | |
|---|--|
| EU - Biocides (98/8/EC) - Annex I - Active Substances - Specific Provisions | When assessing the application for authorisation of a product in accordance with Article 5 and Annex VI, Member States shall assess, when relevant for the particular product, the populations that may be exposed to the product and the use or exposure scenarios that have not been representatively addressed at the Community level risk assessment. When granting product authorisation, Member States shall assess the risks and subsequently ensure that appropriate measures are taken or specific conditions imposed in order to mitigate the identified risks. Product authorisation can only be granted where the application demonstrates that risks can be reduced to acceptable levels. Member States shall ensure that authorisations are subject to the following conditions: 1. Products authorised for industrial and professional use must be used with appropriate personal protective equipment, unless it can be demonstrated in the application for product authorisation that risks to industrial and/or professional users can be reduced to an acceptable level by other means. 2. In view of the risks identified for the soil and aquatic compartments, products shall not be authorised for the in situ treatment of wood outdoors or for wood that will be exposed to weathering, unless data is submitted to demonstrate that the product will meet the requirements of Article 5 and Annex VI, if necessary by the application of appropriate risk mitigation measures. In particular, labels and/or safety-data sheets of products authorised for industrial use shall indicate that freshly treated timber must be stored after treatment under shelter and/or on impermeable hard standing to prevent direct losses to soil or water and that any losses must be collected for reuse or disposal |
| EU - Biocides (98/8/EC) - Annex I - Active Substances - Product Type | Product type 8 (details in Commission Directive 2012/40/EU) |
| EU - REACH (1907/2006) - Article 59(1) - Candidate List of Substances of Very High Concern (SVHC) for Authorisation | Reason for inclusion Toxic for reproduction, Article 57c (603-411-9) |
| EU - REACH (1907/2006) - Submitted Annex XV Dossiers for Proposals for Substances of Very High Concern (SVHC) | Annex XV dossier submitted by Denmark (CMR) |
| EU - REACH (1907/2006) - Annex XIV (Authorization List) Recommendations by ECHA | Toxic to reproduction Category 1B, Article 57c (Sixth list of Annex XIV recommendations by ECHA) |
| EU - REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | Use restricted. See item 30. |
| EU - REACH (1907/2006) - Appendix 6 - Reproductive Toxicants: Category 1B (Table 3.1) / Category 2 (Table 3.2) | Present |
| Inventory - United States - Section 8(b) Inventory (TSCA) | Present (ACTIVE) |
| U.S. - FIFRA - Listing of Pesticide Chemicals (40 CFR 180) | Section number 180.1121 |
| U.S. - California - Occupational Exposure Limits - PELs | 5 mg/m ³ PEL (listed under Borates, tetra, sodium salts) |

15.2. Chemical safety assessment

Not required.

SECTION 16: Other information

Key or legend to abbreviations and acronyms

CLP: Classification according to Regulation (EC) No. 1272/2008 (GHS)

Key literature references and sources for data

Information taken from reference works and the literature.

Classification procedure

Calculation method.

Full text of phrases referred to under sections 2 and 3

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

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release. It is not to be considered a warranty or quality specification.