

METTLER TOLEDO SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006
(amended by Regulation (EU) 2020/878)

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, 52118127, 52118103, 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

Revision date 28.10.2022

Version GHS 4 (Previous versions: GHS 3)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 Reproductive toxicity, Cat. 1B (FD), H360FD

The product is classified and labelled according to Regulation (EC) No. 1272/2008 (CLP).

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

2.2. Label elements



Signal Word	Danger
Hazard Statements	H360FD: May damage fertility. May damage the unborn child.
Precautionary statements	P201: Obtain special instructions before use. P280: Wear protective gloves, protective clothing, eye protection and face protection. P308+P313: IF exposed or concerned: Get medical advice/ attention. P405: Store locked up. P501: Dispose of contents/ container to an approved waste disposal plant.
Supplemental information	None.
Product identifier	disodium tetraborate decahydrate; borax decahydrate, CAS-No. 1303-96-4, EC-No. 215-540-4

Contents of package < 125 ml



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

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)	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.

Unsuitable extinguishing media 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. During a fire, smoke may contain the original material in addition to unidentified toxic and/or irritating compounds.

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

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.
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 (Plastic container of HDPE).
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. Store in a place accessible by authorized persons only.
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)	
UK - Workplace Exposure Limits (WELs) - STELs	15 mg/m ³ STEL (calculated)
UK - Workplace Exposure Limits (WELs) - TWAs	5 mg/m ³ TWA

8.2. Exposure controls

Appropriate engineering controls Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice.

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 Regulation (EU) No. 2016/425 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. Choose body protection according to the amount and concentration of the dangerous substance at the work place.
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

Physical state	Liquid.
Colour	Blue.
Odour	None.
Melting point/ freezing point:	Not determined.
Boiling point or initial boiling point / range:	Not determined.
Flammability:	Not determined.
Lower and upper explosion limit:	Not determined.
Flash point:	Not determined.
Auto-ignition temperature:	Not determined.
Decomposition temperature:	Not determined.
pH:	9.2
Kinematic viscosity:	Not determined.
Solubility:	completely miscible (Water)
Partition coefficient n-octanol/water (log value):	Not determined.
Vapour pressure:	Not determined.
Density and/or relative density:	Not determined.
Relative vapour density:	Not determined.
Particle characteristics:	Not applicable.

9.2. Other information

Other safety characteristics	No information available.
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SECTION 10: Stability and reactivity

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	Vapours in contact with fire or red-hot surfaces may form decomposition products with highly irritating and warning effects.
10.5. Incompatible materials	None.
10.6. Hazardous decomposition products	None reasonably foreseeable.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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) Inhalation LC50 Rat > 2 mg/m ³ 4 h(NLM_HSDDB) Oral LD50 Rat = 3493 mg/kg (NZ_CCID)
Skin corrosion/irritation	No skin irritation.
Serious eye damage/eye irritation	Contact with eyes may cause irritation.
Respiratory / Skin Sensitisation	None.
Carcinogenicity	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	May damage fertility or the unborn child.
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.

11.2. Information on other hazards

Information on likely routes of exposure	dermal
Other information	No data available.

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. Endocrine disrupting properties	Endocrine disrupting chemical(s): Disodium tetraborate
12.7. Other adverse effects	No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues / unused products	Dispose of as hazardous waste in compliance with local and national regulations.
Contaminated packaging	Dispose of as unused product.

SECTION 14: Transport information

14.1. UN number or ID number	Not applicable.
14.2. UN proper shipping name	Not applicable.
14.3. Transport hazard class(es)	Not applicable.
14.4. Packing group	Not applicable.
14.5. Environmental hazards	Not applicable.
14.6. Special precautions for user	Not applicable.
14.7. Maritime transport in bulk according to IMO instruments	Not applicable.

UN Model Regulations

ADR/RID	Not regulated.
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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	The product is classified and labelled according to Regulation (EC) No. 1272/2008. Take note of Dir 94/33/EC on the protection of young people at work. Take note of Dir 92/85/EEC on the safety and health at work of pregnant workers.
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disodium tetraborate decahydrate; borax decahydrate (CAS 1303-96-4)	
TEDX (The Endocrine Disruption Exchange) - Potential Endocrine Disruptors	Present
EU - Cosmetics (1223/2009) - Annex II - Prohibited Substances	Prohibited
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. Use restricted. See item 75.
EU - REACH (1907/2006) - Appendix 6 - Reproductive Toxicants: Category 1B (Table 3.1) / Category 2 (Table 3.2)	Present
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) - List of Registered Intermediates	Present ([215-540-4])
EU - REACH (1907/2006) - List of Registered Substances	Present

15.2. Chemical safety assessment	Not required.
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SECTION 16: Other information

Revision Note	This data sheet contains changes from the previous version in section(s): 2, 3, 8, 11, 12, 15.
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.

Instructions for use

Restricted to professional users.

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 and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.