

# METTLER TOLEDO SAFETY DATA SHEET

according to the Globally Harmonized System

## Buffer solution pH 4.01

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

#### 1.1. Product identifier

**Product name** Buffer solution pH 4.01  
**Product code** 52118020, 51302069, 51302083, 51350004, 51350018, 51350032, 51350042

#### 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

**Issuing date** 29.11.2017

**Version** GHS 2

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### 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

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

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## 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
Potassium hydrogen phthalate	1% - 2.5%		CAS-No.: 877-24-7 EC-No.: 212-889-4

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

**Hazardous impurities** None known.

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## SECTION 4: First aid measures

### 4.1. Description of first aid measures

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

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## **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.

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## **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.

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## SECTION 7: Handling and storage

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

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## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

<b>Exposure limit(s)</b>	No data is available on the product itself.
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### 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.

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## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

<b>Appearance</b>	Liquid.
<b>Colour</b>	Red.
<b>Odour</b>	None.
<b>Odour Threshold</b>	Not determined.
<b>pH:</b>	4

<b>Melting point/range:</b>	Not determined.
<b>Boiling point/range:</b>	Not determined.
<b>Flash point:</b>	Not determined.
<b>Evaporation Rate:</b>	Not determined.
<b>Flammability:</b>	Not determined.
<b>Explosion limits:</b>	Not determined.
<b>Vapour pressure:</b>	Not determined.
<b>Vapor density:</b>	Not determined.
<b>Relative density:</b>	Not determined.
<b>Water solubility:</b>	completely miscible
<b>Partition coefficient (n-octanol/water):</b>	Not determined.
<b>Autoignition temperature:</b>	Not determined.
<b>Decomposition temperature:</b>	Not determined.
<b>Viscosity:</b>	Not determined.
<b>Explosive properties:</b>	not hazardous
<b>Oxidising properties:</b>	None

## 9.2. Other information

**General Product Characteristics** No information available.

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## SECTION 10: Stability and reactivity

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

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## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

<b>Acute toxicity</b>	No data is available on the product itself. <b>Deionised water (CAS 7732-18-5)</b> Oral LD50 Rat > 90 mL/kg (FOOD_JOURN) <b>Potassium hydrogen phthalate (CAS 877-24-7)</b> Oral LD50 Rat > 3200 mg/kg (NLM_CIP)
<b>Skin corrosion/irritation</b>	No skin irritation.
<b>Serious eye damage/eye irritation</b>	No eye irritation.

<b>Respiratory / Skin Sensitisation</b>	None.
<b>Carcinogenicity</b>	No data available.
<b>Germ cell mutagenicity</b>	No data available.
<b>Reproductive toxicity</b>	No data available.
<b>Specific target organ toxicity (single exposure)</b>	No data available.
<b>Specific target organ toxicity (repeated exposure)</b>	No data available.
<b>Aspiration hazard</b>	No data available.
<b>Human experience</b>	No data available.
<b>Information on likely routes of exposure</b>	dermal
<b>Other information</b>	The product contains no substances which at their given concentration, are considered to be hazardous to health.

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## SECTION 12: Ecological information

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

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## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of as unused product.

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## 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.

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## 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.

<b>Deionised water (CAS 7732-18-5)</b>	
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)
<b>Potassium hydrogen phthalate (CAS 877-24-7)</b>	
EU - REACH (1907/2006) - List of Registered Substances	Present
Inventory - United States - Section 8(b) Inventory (TSCA)	Present

**15.2. Chemical safety assessment** Not required.

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## 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** None.

**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.