METTLER TOLEDO SAFETY DATA SHEET

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

Buffer solution pH 1.679 NIST/DIN

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

1.1. Product identifier

Product name Buffer solution pH 1.679 NIST/DIN

Product code 52118007, 30458274, 30667828

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 18.06.2021

Version GHS 3 (Previous versions: GHS 2)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 Skin corrosion/irritation, Cat. 1, H314

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 H314: Causes severe skin burns and eye damage.

Precautionary statements P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Supplemental information None.

Product identifier Potassium tetraoxalate, dihydrate, CAS-No. 6100-20-5, EC-No. 612-064-2

2.3. Other hazards

None known.

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 tetraoxalate, dihydrate	1% - 2.5%	Acute Tox. 4 H302, Acute Tox. 4 H312, Skin Corr. 1A H314	CAS-No.: 6100-20-5 EC-No.: 612-064-2

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. Call a physician or poison control centre immediately.

Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.
Eye contact	Rinse thoroughly with plenty of water, also under the eyelids. Consult an ophthalmologist.
Ingestion	Rinse mouth. Immediately give large quantities of water to drink. Induce vomiting if person is conscious. If swallowed, seek medical advice immediately and show this container or label.
4.2. Most important symptoms and effects, both acute and delayed	Causes burns. Inhaled corrosive substances can lead to a toxic oedema of the lungs.
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	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. Evacuate personnel to safe areas. 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	Neutralize with chalk, alkali solution or ammonia. 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. Ingestion, exposure to skin and eyes and inhalation of any generated vapours should be avoided.
7.2. Conditions for safe storage, including any incompatibilities	Store at room temperature in the original container. Storage class 8.
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.

8.2. Exposure controls

Appropriate engineering controls	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing.
Personal protection equipment	
Respiratory protection	In case of insufficient ventilation wear suitable respiratory equipment. Respirator with combination filter for vapour/particulate (EN 14387).
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	Colourless.
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:	1.7
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.

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	Direct sources of heat.
10.5. Incompatible materials	Oxidizing agents. Reducing agents. Strong bases.

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) **Potassium tetraoxalate, dihydrate (CAS 6100-20-5)** LDLO/oral/rat = 375 mg/kg.
Skin corrosion/irritation	Causes severe skin burns and eye damage.
Serious eye damage/eye irritation	Causes serious eye damage.
Respiratory / Skin Sensitisation	None.
Carcinogenicity	Contains no ingredient listed as a carcinogen.
Germ cell mutagenicity	Contains no ingredient listed as a mutagen.
Reproductive toxicity	Contains no ingredient listed as toxic to reproduction.
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
Symptoms related to the physical, chemical and toxicological characteristics	For Oxalate (IUPAC: ethanedioate) in general: Nausea. Vomiting. Irritating to skin and mucous membranes. Cough. Blood disorder may occur after ingestion. Kidney injury may occur. Circulatory collapse.
Other information	No data available.

SECTION 12: Ecological information

12.1. Toxicity	May change pH of waters.

12.2. Persistence and degradability	No data available.
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	No information available.
12.7. 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

14.1. UN number or ID number	UN 3265
14.2. UN proper shipping name	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S., SOLUTION (Potassium tetraoxalate, dihydrate)
14.3. Transport hazard class(es)	8
14.4. Packing group	III
14.5. Environmental hazards	Marine pollutant: No.
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	UN 3265. Proper shipping name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S., SOLUTION (Potassium tetraoxalate, dihydrate). Class 8. Packing group III. ADR/RID-Labels 8. Classification code C3. Hazard identification no. 80. Limited quantity 5 L. Excepted quantity E1. Transport category 3. Tunnel restriction code (E).
IMDG	UN 3265. Proper shipping name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S., Solution (Potassium tetraoxalate, dihydrate). Class 8. Packing group III. IMDG-Labels 8. Limited quantity 5 L. Excepted quantity E1. EmS F-A, S-B. Marine pollutant: Marine pollutant: No..
IATA	UN 3265. Proper shipping name: Corrosive liquid, acidic, organic, n.o.s., Solution (Potassium tetraoxalate, dihydrate). Class 8. Packing group III. IATA label 8. Packing instruction (passenger aircraft): 852 (5 L). Packing instruction (LQ): Y841 (1 L). Packing instruction (cargo aircraft): 856 (60 L).
Inland navigation ADN	UN 3265. Proper shipping name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S., SOLUTION (Potassium tetraoxalate, dihydrate). Class 8. Packing group III. ADN labels 8. Classification code C3. Limited quantity 5 L. Excepted quantity E1.
Further Information	None.

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.

15.2. Chemical safety assessment	Not required.

SECTION 16: Other information

Revision Note	Safety datasheet sections which have been updated: 3, 11, 13, 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	H302: Harmful if swallowed. H312: Harmful in contact with skin. H314: Causes severe skin burns and eye damage.
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.