ThermoFisher SCIENTIFIC

SAFETY DATA SHEET

EC-BU-1BT
(pH 1.68 Buffer Solution)

Last updated on 7th December 2012

1. PRODUCT IDENTIFICATION AND COMPANY INFORMATIONS

Product Name:	pH 1.68 Buffer Solution
Product Number:	01X211211
Chemical Family:	Mixture of inorganic chemical
Company Informations:	EUTECH INSTRUMENTS PTE LTD. THERMO FISHER SCIETIFIC Blk 55, Ayer Rajah Crescent, #04-16/24, Singapore 139949, Website: http://www.eutechinst.com E-mail: eutech@thermofisher.com
Telephone No:	(65) 6778 6876
Fax No:	(65) 6773 0836
Product Use:	Laboratory and Industrial Reagent for analysis

2. HAZARD IDENTIFICATION

Classification of the substance or mixture:	The product is not classified dangerous according to European Union Legislation.
Label elements:	Not a dangerous substance according to GHS
Labeling (67/548/EEC or 1999/45/EC)	The product does not need to be labeled in accordance with EC directives or respective national laws.
Other Hazards	None known

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterization: Mixtures		
Components:		
CAS: 6100-20-5, EC-No: 204-874-6 Formula: $C_4H_3KO_8 \cdot 2H_2O$	Potassium Tetraoxalate dihydrate Acute toxicity, Dermal Cat 4, Acute toxicity, Oral Cat 4 H302, H312, Xn R/21/22	< 1.5 %
CAS: 7732-18-5	Deionized water	>98.5 %

4. FIRST AID MEASURES

Description of first aid measures:	
After inhalation:	Remove to fresh air. Call a physician if breathing becomes difficult.
After skin contact:	Wash off with soap and plenty of water. Consult a physician.
After eye contact:	Rinse out with plenty of water for at least 15 minutes. If pain persists, summon medical advice.
After swallowing:	Wash out mouth with plenty of water, provided person is conscious. Obtain medical attention if feeling unwell.

5. FIRE FIGHTING MEASURES

Extinguishing media:	
Suitable extinguishing media:	Water Spray, Foam, Dry Powder, Carbon Dioxide
Special hazards arising from the substance or mixture	Non-combustible. Development of hazardous combustion gases or vapors possible in the event of fire.
Protective equipment:	Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus.
Further information	No data available.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas.
Environmental precautions:	Prevent further leakage or spillage if safe to do so.
Methods and material for containment and cleaning up:	Soak up with inert absorbent material and dispose of properly. Clean up affected area.

7. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes.
Conditions for safe storage, including any incompatibilities	Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS/PERSIONAL PROTECTION

Control parameters:	
Appropriate engineering controls	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Personal Protective Equipment:	
Eye/face protection	Safety glasses with side-shields. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Body Protection:	Protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection	Required when vapors/aerosols are generated.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Liquid, colorless
Odor:	Odorless
Odour threshold:	No data available
pH-value:	1.68 at 25 °C
Melting point/Melting range:	Not applicable

Boiling point:	>100 deg C
Flash point:	Not applicable
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Lower Explosion limits:	No data available
Upper Explosion limits:	No data available
Vapour pressure	No data available
Vapour density	No data available
Density:	1.0 g/cm³ at 25°C
Water solubility	Soluble
Partition coefficient: noctanol/water	No data available
Autoignition temperature	No data available
Decomposition temperature	Not applicable
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Other information	No further relevant information available

10. STABILITY AND REACTIVITY

Reactivity	No data available.
Chemical stability	Stable under standard ambient conditions
Possibility of hazardous reactions	Not to be expected because of low concentration of the dissolved substances, exception: substances undergoing a hazardous reaction with water.
Conditions to avoid	Heating
Incompatible materials	No data available.
Hazardous decomposition products	No data available

11. TOXICOLOGICAL INFORMATION

Product toxicity	Quantitative data on the toxicity of this product is not available.
Potential Health Effects:	
Inhalation:	Mucosal irritations.
Skin Contact:	Slight irritations.
Eye Contact:	Slight irritations.
Ingestion:	Nausea, vomiting, spasms.
Specific target organ toxicity-single exposure	The substance or mixture is not classified as specific target organ toxicant, single exposure.
Specific target organ toxicity-repeated exposure	The substances or mixture is not classified as specific target organ toxicant, repeated exposure.
Further Data:	The product should be handled with the usual care when dealing with chemicals. Other information: The following applies to oxalates in general, nausea and vomiting after swallowing. Mucosal irritations, coughing and dyspnoea after inhalation. Systematic effect: drop in the blood calcium level, toxic effect on kidneys, cardiovascular disorders.

12. ECOLOGICAL INFORMATION

Toxicity:	No data available
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
Results of PBT and vPvB assessment	No data available
Other adverse effects	No further relevant information available.
Additional ecological information:	No ecological problems are to be expected when the product is handled and used with due care and attention.

13. DISPOSAL CONSIDERATION

Waste disposal:	Chemical residues are generally classified as special waste and thus covered by local regulations. Contact local authorities or disposal companies for advice. Handle contaminated packaging in the same way as the substance itself.
Recommended cleaning agent:	Water.

14. TRANSPORT INFORMATION

UN-Number ADR/RID, IMDG, IATA	Not regulated
UN proper shipping name · ADR/RID, IMDG, IATA	Not dangerous goods
Transport hazard class(es) ADR, IMDG, IATA	Not regulated
Packing group ADR, IMDG, IATA	Not regulated
Environmental hazards- Marine pollutant:	No
Transport/Additional information:	Not dangerous according to the above specifications

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.	
According to Directives 67/548/EEC and 1999/45/EC:	Non- hazardous
Chemical safety assessment:	A chemical safety assessment has not been carried out.

16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Company will not be held liable for any damage resulting from handling or from contact with the above product.

Relevant phrase:
H302: Harmful if swallowed
H315: Harmful in contact with skin.

R 21/22: Harmful in contact with skin and if swallowed.
Abbreviations and acronyms:
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
RID: Regulations Concerning the International Transport of Dangerous Goods by Rail
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labeling of Chemicals

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