

SAFETY DATA SHEET

EC-BU-4BT, EC-BU-4BT1LIT (pH 4.01 Buffer Solution)

Last updated on 10th January 2013

1. PRODUCT IDENTIFICATION AND COMPANY INFORMATIONS

Product Name:	pH 4.01 Buffer Solution
Product Number:	01X211201, 01X211246
Chemical Family:	Mixture of inorganic chemical
Company Informations:	EUTECH INSTRUMENTS PTE LTD. THERMO FISHER SCIENTIFIC 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: 877-24-7, EC-No: 212-889-4 Formula: $C_4H_3KO_8 \cdot 2H_2O$	Potassium Hydrogen phthalate	< 1.05 %
CAS: 7732-18-5	Deionized water	>98 %
CAS: 121-54-0, EC No: 204-479-9	Benzethonium Chloride, Acute toxicity, Oral(Cat:3), Skin corrosion (Cat:1) Eye damage (Cat:1); Acute aquatic toxicity (Cat:1); Chronic aquatic toxicity (Cat:1); H301;H314;H410	<0.002 %

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.
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5. FIRE FIGHTING MEASURES

Extinguishing media:	
Suitable extinguishing media:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Special hazards arising from the substance or mixture	Fire may liberate hazardous vapors.
Advice for firefighters:	In the event of fire, wear self-contaminated apparatus. In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.
Additional information	Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency measures	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, cool and well-ventilated place. Protect against light.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:	
Appropriate engineering control measures:	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.
Skin protection	Handle with gloves. Gloves must be inspected prior to use. Chemical resistant gloves made of Butyl rubber or Nitrile rubber. Use proper glove removal technique (without touching glove's outer surface). 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:	4.01 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:	1.002 g/cm ³ 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.
Conditions to avoid	Heat
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.
Specific effects in experiment on an animal	No data is available on the product itself.
Specific target organ toxicity-single exposure	No information available
Specific target organ toxicity-repeated exposure	No information available
Further information:	The product should be handled with the usual care when dealing with chemicals.

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

16. OTHER INFORMATION

<p>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.</p> <p>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</p>	
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