

## SAFETY DATA SHEET

### EC-BU-12BT (pH 12.45 Buffer Solution)

Last updated on 7<sup>th</sup> December 2012

#### 1. PRODUCT IDENTIFICATION AND COMPANY INFORMATIONS

Product Name:	pH 12.45 Buffer Solution
Product Number:	01X211212
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: <a href="http://www.eutechinst.com">http://www.eutechinst.com</a> E-mail: <a href="mailto:eutech@thermofisher.com">eutech@thermofisher.com</a>
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: 1305-62-0, EC-No:215-137-3 Formula : H <sub>2</sub> CaO <sub>2</sub>	Calcium hydroxide Skin irritation Cat 2, Eye irritation Cat 1, H315, H318, H335, R37/38, R41	< 0.2 %
CAS: 7732-18-5	Deionized water	>99.8 %

#### 4. FIRST AID MEASURES

Description of first aid measures:	
General advice:	Consult a physician. Show this safety data sheet to the doctor in attendance
After inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
After skin contact:	Wash off with soap and plenty of water. Consult a physician.
After eye contact:	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
After swallowing:	Never give anything by mouth to an unconscious person.

	Rinse mouth with water. Consult a physician.
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### 5. FIRE FIGHTING MEASURES

Extinguishing media:	
Suitable extinguishing agents:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special hazards arising from the substance or mixture	Calcium oxide
Protective equipment:	Wear self contained breathing apparatus for firefighting if necessary.
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. Do not let product enter drains.
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. Provide appropriate exhaust ventilation at places where dust is formed.
Conditions for safe storage, including any incompatibilities	Store in cool place. 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	If the respirator is the sole means of protection, use a full-face supplied air respirator.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Liquid, whitish
Odor:	Odourless
Odour threshold:	No data available
pH-value:	12.45 at 25 °C
Melting point/Melting range:	Not applicable
Boiling point/Boiling range:	No data available
Flash point:	No data available
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
Relative density:	No data available
Water solubility	No data available
Partition coefficient: noctanol/water	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
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	No data available
Possibility of hazardous reactions	No data available
Conditions to avoid	No data available
Incompatible materials	Strong acids
Hazardous decomposition products	Other decomposition products -no data available

### 11. TOXICOLOGICAL INFORMATION

Acute toxicity	No data available
Skin corrosion/irritation	Skin-rabbit- irritation to skin
Serious eye damage/eye irritation	Eyes-rabbit- eye irritation
Respiratory or skin sensitization	No data available
Germ cell mutagenicity	No data available
Carcinogenicity	
IARC:	No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity	No data available
Specific target organ toxicity -single exposure	No data available
Specific target organ toxicity -repeated exposure	No data available
Aspiration hazard	No data available

Potential health effects:	
Inhalation, Ingestion, Skin, Eyes	May be harmful if inhaled. May cause respiratory tract irritation. May be harmful if swallowed. May be harmful if absorbed through skin. May cause skin irritation. May cause eye irritation.
Signs and Symptoms of Exposure	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

## 12. ECOLOGICAL INFORMATION

Toxicity:	Toxicity to fish
Persistence and degradability	No data available
Mobility in soil	No data available
Bioaccumulative potential	No data available
Results of PBT and vPvB assessment	No data available
Other adverse effects	No further relevant information available.

## 13. DISPOSAL CONSIDERATION

Waste treatment methods:	Offer surplus and non-recyclable solutions to a licensed disposal company
Contaminated packaging:	Dispose of as unused product.

## 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/RID, IMDG, IATA	Not regulated
Packing group ADR, IMDG, IATA	Not regulated
Environmental hazards- Marine pollutant:	No
Special precautions for user	No data available
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	
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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:

H315: Causes skin irritation.

H318: Causes serious eye damage.

H335: May cause respiratory irritation.

R37/38: Irritating to respiratory system. Irritating to skin

R41: Risk of serious damage to eyes

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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