

MATERIAL SAFETY DATA SHEET

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1- Chemical Product Information and Company Identification.

Product Name: : Buffer Solution pH 4.01 ± 0.02 @ 25°C, Traceable to NIST.
Product code: : BSPH401.
Synonym: : NA.
CAS Number: : NA.
Company Name: : Briti Scientific.
Company Address: : Plot No: 78/B/13, SY-79, Phase-VI, Jeedimetla, Hyderabad- 500 055. Telangana, India.

Section 2- Hazards Identification.

Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Not Classified

Label elements

Hazard statements NC Not Classified

Other hazards

This product does not contain any substances classified as PBT or vPvB.

Section 3- Composition / Information on Ingredients.

Proprietary:

No components need to be disclosed according to the applicable regulations.

Section 4- First Aid Measures.

General information: Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.

Inhalation: Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. Get medical attention if any discomfort continues.

Ingestion: Rinse mouth thoroughly with water. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Maintain an open airway. Get medical attention.

Skin contact: Remove affected person from source of contamination. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.

Eye contact: Rinse immediately with plenty of water. Remove contact lenses, if present and easy to

do. Continue rinsing. Continue to rinse for at least 10 minutes. Get medical attention if irritation persists after washing.

Protection of first aiders: First aid personnel should wear appropriate protective equipment during any rescue.

Section 5- Fire Fighting Measures.

Extinguishing media

Suitable extinguishing media: The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media:

Do not use water jet as an extinguisher, as this will spread the fire.

Special hazards arising from the substance or mixture:

Hazardous combustion products:

Thermal decomposition or combustion products may include the following substances:

Harmful gases or vapours

Section 6- Accidental Release Measures.

Personal precautions: protective equipment and emergency procedures

Personal precautions No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage.

Environmental precautions:

Environmental precautions Avoid discharge to the aquatic environment. Large Spillages: Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

Methods and material for containment and cleaning up:

Methods for cleaning up: Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Reuse or recycle products wherever possible. Approach the spillage from upwind. Small Spillages: If the product is soluble in water, dilute the spillage with water and mop it up. Alternatively, or if it is not water-soluble, absorb the spillage with an inert, dry material and place it in a suitable waste disposal container. Large Spillages: If leakage cannot be stopped, evacuate area. Contain and absorb spillage with sand, earth or other non-combustible material. Place waste in labelled, sealed containers. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Clean contaminated objects and areas thoroughly, observing environmental regulations. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage.

Reference to other sections:

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

Section 7- Handling and Storage.

Usage precautions: Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed when not in use. Avoid the formation of mists.

Storage precautions: Store away from incompatible materials (see Section 10). Store in accordance with local regulations. Store away from the following materials: Acids. Alkalis. Storage class Chemical storage.

Section 8- Exposure Control/Personal Protection.

Engineering Controls

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: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection:

Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. 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. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection:

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection:

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls.

Section 9- Physical and Chemical Properties.

Information on basic physical and chemical properties:

Appearance:	Clear colourless liquid.
Odour:	Odourless.
pH:	3.990-4.030 @25°C.
Melting point:	Approx. 0°C The freezing point will decrease with concentration.
Initial boiling point:	Approx. 100°C The boiling point will increase with concentration.
Flash point:	Scientifically unjustified.

Evaporation rate:	No specific test data are available.
Vapour pressure:	No specific test data are available.
Solubility:	Miscible with water.
Partition coefficient:	No specific test data are available.
Auto-ignition temperature:	Technical impossibility to obtain the data.
Decomposition Temperature:	No specific test data are available.
Viscosity:	Not determined.

Section 10- Stability and Reactivity.

Reactivity: The following materials may react with the product: Acids. Alkalis.

Stability: Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions

Conditions to avoid: Avoid heat. Avoid freezing. Avoid contact with any incompatible materials.

Hazardous decomposition: products Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours. Carbon monoxide (CO). Carbon dioxide (CO₂).

Possibility of hazardous: reactions May generate heat

Section 11- Toxicological Information.

Toxicological effects Not regarded as a health hazard under current legislation.

Acute toxicity – oral: Based on available data the classification criteria are not met.

Acute toxicity – dermal: Based on available data the classification criteria are not met.

Acute toxicity – inhalation: Based on available data the classification criteria are not met.

Skin corrosion/irritation: Based on available data the classification criteria are not met.

Animal data: Based on available data the classification criteria are not met.

Serious eye damage/irritation: Based on available data the classification criteria are not met.

Respiratory sensitisation: Based on available data the classification criteria are not met.

Skin sensitisation: Based on available data the classification criteria are not met.

Genotoxicity - in vitro: Based on available data the classification criteria are not met.

Carcinogenicity: Based on available data the classification criteria are not met.

Section 12- Ecological Information.

Ecotoxicity: Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

Toxicity: Based on available data the classification criteria are not met.

Acute toxicity - fish No specific test data are available.

Acute toxicity - aquatic

Invertebrates: No specific test data are available.

Chronic toxicity - fish early life stage: Not determine

Mobility: The product is water-soluble and may spread in water systems.
The product is non-volatile.

Bioaccumulative potential: No data available on bioaccumulation.

Partition coefficient: No specific test data are available.

Section 13- Disposal Considerations.

General information: The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.

Disposal methods: Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of the local water authority.

Section 14- Transport Information.

DOT: Not regulated

TDG: Not regulated

IATA: Not regulated

IMDG/IMO: Not regulated

Section 15- Regulatory Information.

Safety, health and environmental regulations/legislation specific for the substance or mixture
National regulations Health and Safety at Work etc. Act 1974 (as amended). The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"]. EH40/2005 Workplace exposure limits.

EU legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Commission Regulation (EU) No 2015/830 of 28 May 2015. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Section 16- Other Information.

Briti Scientific provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.