

SAFETY DATA SHEET

[Required under safety and health regulations for shipping and handling]

Version: 2022
Date Updated: December 31, 2022

SECTION 1. ----- PRODUCT AND COMPANY IDENTIFICATION -----

Product Name Protein Sample Loading Buffer for SDS-PAGE, 5x (NO DTT)
Product Code(s) BPSB00201
Recommended Use Strictly For Laboratory Research
 Use Only (Electrophoresis)
 Not for Human or Animal Drug Use

Supplier Bio Basic Asia Pacific Pte Ltd.
Address 2 International Business Park Road
 Strategy #01-04, Singapore 609930
Telephone (+65) 6954 2519
 (+65) 6491 5938
Email sg@biobasic-asia.com

SECTION 2. ----- HAZARDS IDENTIFICATION -----

GHS Classification in accordance with Hazardous Products Regulations (HPR) (SOR/2015-17)
 Not classified

GHS Label elements, including precautionary statements

Pictogram
Signal word None
Hazard statement(s)

Precautionary statement(s)

Prevention

None

Response

None

Storage

None

Safety Phrases

S60

This material and its container must be disposed of as hazardous waste.

Disposal

None

Hazards not otherwise classified (HNOC) or not covered by GHS - none

SECTION 3. ----- COMPOSITION/INFORMATION ON INGREDIENTS -----

Chemical Name	CAS-No.
Glycerol	56-81-5
Bromophenol Blue	115-39-9
Water	7732-18-5
Sodium dodecyl sulfate	151-21-3
Tris	77-86-1

SECTION 4. ----- FIRST-AID MEASURES -----

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

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If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

In case of skin contact

Remove contaminated clothing and shoes. Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water for 15 minutes. Check for and remove any contact lenses (if possible). Continue to wash for at least 10 minutes. Get medical attention.

If swallowed

If material has been swallowed and the exposed person is conscious, rinse mouth with water

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5. ----- FIRE FIGHTING MEASURES -----

Conditions of flammability

No data available

Suitable extinguishing media

CO₂, extinguishing powder or water spray, or use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water or foam may cause frothing.

Special hazards arising from the substance or mixture

No data available

Advice for firefighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus with a full face-piece operated in positive pressure mode. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Use water spray, alcohol-resistant foam, dry powder, carbon dioxide. In case of fire: keep drums, etc., cool by spraying with water

Further information

None

SECTION 6. ----- ACCIDENTAL RELEASE MEASURES-----

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. For personal protection see section 8.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Collect leaking and spilled liquid in covered containers as far as possible. Absorb remaining liquid in sand or inert absorbent or collect spillage using a high efficiency vacuum cleaner. Then store with appropriate label and dispose according to local regulations.

Reference to other sections

For disposal see section 13.

SECTION 7. ----- HANDLING AND STORAGE-----

Precautions for safe handling

Work under hood. Do not inhale substance/mixture.
Keep away from open flames, hot surfaces and sources of ignition.

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Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.

Conditions for safe storage, including any incompatibilities

Tightly closed. Keep locked up or in an area accessible only to qualified or authorized persons. Do not store near strong oxidants.

Specific end use(s)

Apart from the uses mentioned in section 1 no other specific uses are stipulated.

SECTION 8. - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION - - - -

Control Parameters

Components with workplace control parameters

Exposure limits

No data available

Engineering measures

Ensure adequate ventilation, local exhaust ventilation. Set up emergency exits and the risk elimination area.

Personal protective equipment

Eye/face protection

Use safety glasses/goggles. Avoid contact with eyes. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Use protective gloves. This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves

Body Protection

Wear 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

Ensure adequate ventilation

Hygiene Measures

No data available

Control of environmental exposure

Prevent product from entering drains.

SECTION 9. - - - - PHYSICAL AND CHEMICAL PROPERTIES - - - -

Information on basic physical and chemical properties

Appearance	Form: Liquid Colour: Blue
Odour	Mild Odour
Odour Threshold	No data available
pH	No data available
Melting point/freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available

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Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive 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: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

SECTION 10. -----STABILITY AND REACTIVITY -----

Reactivity

No data available

Chemical stability

Mixtures of glycerin with water, ethanol (95%), and propylene glycol are chemically stable.

Possibility of hazardous reactions

No data available

Conditions to avoid

No data available

Incompatible materials

Exothermic interaction of granular/sodium/hydride with undiluted (viscous) glycerol with inadequate stirring caused charring to occur

Hazardous decomposition products

Pure glycerin is not prone to oxidation by the atmosphere under ordinary conditions, but is decomposes on heating with the evolution of toxic acrolein

SECTION 11. ----- TOXICOLOGICAL INFORMATION -----

Acute toxicity

LD50 Oral - Rat – 5000mg/kg

LC50 Inhalation – Rat - >570mg/hr

LD50 Dermal – No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

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Germ cell mutagenicity

No data available

Carcinogenicity

No data available

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

Additional Information

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12. ----- ECOLOGICAL INFORMATION -----

Toxicity

Toxicity to fish LC50 - *Oncorhynchus mykiss* - 54000mg/l - 96h

Toxicity to *daphnia* and other aquatic invertebrates EC50 - *Daphnia magna* (Water flea) - 1955mg/l - 48h

Toxicity to microorganisms Toxicity Threshold – *Pseudomonas putida* - >10000mg/L – 16h

Persistence and degradability

AEROBIC: Glycerin, present at 100mg/L, reached 63% of its theoretical BOD in 2 weeks using an activated sludge inoculum at 30mg/L in the Japanese MITI test. Biodegradation rate constants of 0.258/day and 0.200/day in respirometric test systems employing activated sludge have also been reported, corresponding to 68% and 78% degradation, respectively.

Mobility in soil

Using a structure estimation method based on molecular connectivity indices, the Koc of glycerin can be estimated to be 1(SRC). According to a classification scheme, this estimated Koc value suggests that glycerin is expected to have very high mobility in soil.

Results of PBT and vPvB assessment

No data available

Other adverse effects

No data available

SECTION 13. ----- DISPOSAL CONSIDERATIONS -----

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials

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SECTION 14. ----- TRANSPORT INFORMATION -----

TDG

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

SECTION 15. ----- REGULATORY INFORMATION -----

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

SECTION 16. ----- OTHER INFORMATION -----

Further information: no limited for paper copy, just for internal uses.
For research use only. Not intended for human or animal diagnostic or therapeutic uses.

Disclaimer

The information provided on this MSDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

Issuing Date: 31-Dec-2022

End of SDS