

SAFETY DATA SHEET

SECTION 1. Identification of the substance/mixture and of the company

1. Product identifier

Product No: BR2D102-01-D

Product Name: Buffer E3

2. Recommended use of the chemical and restrictions on use

Relevant identified uses: For research use only.

Uses advised against: Not used for diagnostic procedures.

3. Details of the supplier of the safety data sheet

Zhuhai Biori Biotechnology Co.,Ltd

No, 88, Shui an 1st Road,Xiangzhou District, Zhuhai, Guangdong, China.

Hotline: +86-0756-8699969

SECTION 2. Hazard Identification

GHS (Globally Harmonized System) Classification.

1. Signal word: Warning.

2. Hazard pictograms:



3. Hazard statements: Causes skin irritation. Causes serious eye irritation.

4. Precautionary Statements:

Prevention:

Wear protective gloves/protective clothing/eye protection/face protection.

Wash hands thoroughly after handling.

Response:

IF ON SKIN: Wash with plenty of soap and water

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

Storage: Not Applicable.

Disposal: Not Applicable.

5. Health hazards: Causes skin irritation. Causes serious eye irritation.

6. Environmental hazards: Not Applicable.

7. Other hazards: Not Applicable.

SECTION 3. Composition/information on ingredients

The product contains no substances considered harmful to health at the given concentration.

CAS#	Chemical Name	Weight(%)	EINECS#
64-19-7	Acetic acid	10~30	200-580-7
7732-18-5	H ₂ O	Balance	231-791-2

SECTION 4. First aid measures

1. Skin contact: Rinse cautiously with water for several minutes. No need urgent medical attention.
2. Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if available and accessible.
3. Ingestion: No significant ingestion hazard should be considered under conditions of normal use. Seek medical attention if feeling unwell.
4. Inhalation: No significant inhalation hazard should be considered under conditions of normal use. Consult a physician if necessary.
5. Most important symptoms and effects, both acute and delayed: May cause redness and tearing of the eyes. Burning sensation.
6. Instructions for physicians: symptomatic treatment.

SECTION 5. Fire-Fighting measures

1. Suitable extinguishing media: Carbon dioxide (CO₂), foam, dry chemical.
2. Unsuitable extinguishing media: No information available.
3. Special hazards arising from the substance or mixture: No information available.
4. Protective equipment and precautions for firefighters: Standard procedure for chemical fires.

SECTION 6. Accidental release measures

1. Personal precautions: Always wear recommended Personal Protective Equipment. Use personal protection equipment.
2. Methods for cleaning up: Absorb with inert absorbent material.
3. Environmental precautions: No special environmental precautions required. See Section 12 for more information.

SECTION 7. Handling and storage

1. Handling: Always wear recommended Personal Protective Equipment. Wear personal protective equipment.
2. Storage: Keep in a dry, cool and well-ventilated place.
3. Specific end use (s): For research use only.

SECTION 8. Exposure controls/personal protection

1. Exposure Limits: We are not aware of any national exposure limit.
2. Engineering measures: Ensure adequate ventilation, especially in confined areas.
3. Personal protective equipment: Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment of each laboratory that may use the material.

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment.

Hand Protection: Impervious gloves.

Eye protection: Safety glasses with side-shields. Skin and body protection: Lightweight protective clothing.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.

4. Environmental exposure controls: No special environmental precautions are required.

SECTION 9. Physical and chemical properties

Physical and chemical Properties	Information	Physical and chemical Properties	Information
Form	Liquid	Flammability(solid gas)	No Data
Appearance	No Data	Qxidising properties	No Data
Odour	pungent	Water solubility	No Data
Odour Threshold	No Data	Upper explosion limit	No Data
Boiling point / boiling range	No Data	Lower explosion limit	No Data
Melting point / melting range	No Data	Vapour Pressure	No Data
flash point	No Data	vapour density	No Data
Autoignition temperature	No Data	Viscosity	No Data
Evaporation rate	No Data	pH value	5

SECTION 10. Stability and reactivity

1. Chemical stability: Stable under normal conditions.
2. Reactivity: None known.
3. Possibility of hazardous reactions: Hazardous reaction has not been reported.
4. Conditions to avoid: No information available.
5. Incompatible materials: Strong acids. Strong oxidants.
6. Hazardous decomposition products: No data available

SECTION 11: Toxicological information

1. Information on toxicological effects

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Acetic acid	= 3310 mg/kg (Rat)	= 1060 mg/kg(Rabbit)	=11.4mg/L(Rat)

2. Principle Routes of exposure potential Health effects.

Skin corrosion/irritation: Skin irritation

Serious eye damage/irritation: Irritating to eyes

Respiratory or skin sensitisation: Data are conclusive but insufficient for classification.

Specific target organ toxicity (STOT)–singleexposure: Data are conclusive but insufficient for classification.

Specific target organ toxicity (STOT)–repeatedexposure: Data are conclusive but insufficient for classification.

Carcinogenicity: Data are conclusive but insufficient for classification.

Germ cell mutagenicity: Data are conclusive but insufficient for classification.

Reproductive Toxicity: Data are conclusive but insufficient for classification.

Aspiration hazard: Data are conclusive but insufficient for classification.

SECTION 12: Ecological information

1. Toxicity

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates	Toxicity to fish	Microtox Data	log Pow
Acetic acid	No data available	Daphnia magna EC50=65 mg/L (48 h)	No data available	No data available	logPow-0.31

2. Persistence and degradability: No information available.

3. Bioaccumulative potential: No information available.

4. Results of PBT and vPvB assessment: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

5. Other adverse effects: No information available.

SECTION 13: Disposal considerations

Dispose of contents/containers in accordance with local regulations.

SECTION 14: Transport information

IATA

Proper Shipping Name: Not classified as dangerous according to shipping regulations.

Hazard Class: None.

Subsidiary class: None

Packing group: None.

UN-No: None.

SECTION 15: Regulatory information

1. International Inventories:

TSCA: Contact supplier for inventory compliance status.
 DSL/NDSL: Contact supplier for inventory compliance status.
 EINECS/ELINCS: Contact supplier for inventory compliance status.
 ENCS: Contact supplier for inventory compliance status.
 IECSC: Contact supplier for inventory compliance status.
 KECL: Contact supplier for inventory compliance status.
 PICCS: Contact supplier for inventory compliance status.
 AIIC: Contact supplier for inventory compliance status.
 NZIoC: Contact supplier for inventory compliance status.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances:
 ENCS - Japan Existing and New Chemical Substances
 IECSC - China Inventory of Existing Chemical Substances
 KECL - Korean Existing Chemicals Inventory
 PICCS - Philippines Inventory of Chemicals and Chemical Substances
 AICS - Australian Inventory of Chemical Substances
 NZIoC - New Zealand Inventory of Chemicals

2. China:

Chemical Name	China - Catalogue of Occupational Hazard Factors	China - Dangerous Goods List	China - Catalog of Hypertoxic Chemicals	China - List of Dangerous Chemicals for Priority Management
Acetic acid	Present	Present (glacial or solution) Present (solid); Present (liquid; flammable; flashpoint not less than 23° C); Present	Not Listed	Not Listed

SECTION 16: Other information

1. Indication of changes: GHS aligned.
2. Training instructions: Use as instructed.
3. Further information: The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. This SDS has been prepared for use with this product only.
4. Notice to readers: The information and recommendations in this safety data sheet should be regarded as a supplement to existing regulations and relevant information that should be known before. It is the responsibility of the users to determine the applicability of this information and the suitability of the material or product for any particular purpose. The health and safety of employees while using this product should be taken responsibly by the employer. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

End of Safety Date Sheet