

**Material Safety Data Sheet** 

Version No.: 4.0(2023-03-22)

# Enzyme dilution buffer for Top DNA polymerase

# 1. PRODUCT AND COMPANY INFOMATION

Product Name: Enzyme dilution buffer for Top DNA polymerase

Product Number: N/A(buffer)

Product Use: For research use only and are not intended for human or animal diagnostics,

therapeutic, or other clinical uses, unless otherwise stated.

#### Company

Bioneer corporation

8-11, Munpyeongseo-ro, Daedeok-gu, Daejeon 306-220, Republic of Korea

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### 2. HAZADS IDENTIFICATION

GHS - None

Pictogram: None

Signal Word: None

Hazard statements: None

Precautionary statements: None



# 3. Composition/Information on Ingredient

CAS No.	Component name	weight(%)
77-86-1	TRIS Base	1~2
56-81-5	Glycerol	40~70

Note: The CAS number listed above is for Tris. HCI (<1%) was added to the Tris to alter the pH level.

The ingredients listed in this section include only those items that have more than 1% of a component classified as hazardous and 0.1% of a component classified as carcinogenic.

# 4. FIRST AID MEASURES

# Eye contact

- Flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating eyelids.

#### Skin contact

- Wash off immediately with plenty of water.

#### Inhaled

- Move to fresh air

#### Swallowed

- If the person is conscious, wash out mouth with water. Call a physician.

# 5. Firefighting measures

### Suitable extinguishing media

- Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### Special hazards arising from the substance or mixture

- Carbon oxides, nitrogen oxides (NOx), Sulphur oxides

## Advice for firefighters

- Wear self contained breathing apparatus for fire fighting if necessary.

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# 6. Accidental release measures

# Personal precautions, protective equipment and emergency procedures

- Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

#### Environmental precautions

- Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

#### Methods and materials for containment and cleaning up

- Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

# 7. Handling and storage

#### Precautions for safe handling

- No special measures required.
- Provide appropriate exhaust ventilation at places where dust is formed.
- Normal measures for preventive fire protection.

### Conditions for safe storage, including any incompatibilities

- Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
- Recommended storage temperature: -20 °C

# 8. Exposure controls/personal protection

## 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

## Respiratory protection

- Respiratory protection not required.

#### Eye/face protection

- Goggles recommended during refilling.

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# Skin protection

- Handle with gloves.

# **Body Protection**

- impervious clothing

# 9. Physical and chemical properties

Appearance: form - liquid

colour - colorless

Odour: odourless

Odour Threshold: no data available

**pH**: 8.2

Melting point/freezing point : no data available

Initial boiling point and boiling range: no data available

Flash point : no data available

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

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



# 10. Stability and reactivity

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions : no data available

Conditions to avoid: no data available

Incompatible materials: no data available

Hazardous decomposition products : no data available

# 11. Toxicological information

Acute toxicity: no data available

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation : no data available

Respiratory sensitization: no data available

skin sensitization: no data available

Carcinogenicity: No component of this product present at levels greater than or equal to 0.1% is

identified as probable, possible or confirmed human carcinogen by IARC

Germ cell mutagenicity: 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



# 12. Ecological information

Toxicity: no data available

Persistence and degradability: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available

# 13. Disposal considerations

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 : no data available

UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

Transport hazard class: no data available

Packaging group : no data available

Environmental hazards : no data available

Special precautions for user : no data available



# 15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

no data available

# Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

# 16. Other information

#### Material source

Korea Occupational Safety and Health Agency, National Chemicals Information System

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#### Further information

This information is based on our present knowledge and shall be used only as a guide. However, this shall not constitute a guarantee for any specific product features. BIONEER is not held liable for any damage resulting from handing or from contact with the above products.