

Material Safety Data Sheet  
Version No.: 4.0(2023-03-22)

# 5X Reaction buffer for M-MLV Reverse Transcriptase

---

## 1. PRODUCT AND COMPANY INFORMATION

---

**Product Name** : 5X Reaction buffer for M-MLV Reverse Transcriptase

**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

+82-42-930-8777

---

## 2. HAZARDS 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	1~3
7447-40-7	Potassium Chloride	1~3

**Note** : The CAS number listed above is for Tris. HCl (< 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

- Rinse opened eye for several minutes under running water.

#### Skin contact

- Wash skin with soap and copious amount of water.

#### Inhaled

- Move to fresh air

#### Swallowed

- If symptoms persist consult doctor.

---

### 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

- No further relevant information available.

#### Advice for firefighters

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

---

## 6. Accidental release measures

---

### Personal precautions, protective equipment and emergency procedures

- Avoid breathing or contact with vapors, mist of gas.

### Environmental precautions

- Do not let product enter drains.

### Methods and materials for containment and cleaning up

- 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.

#### 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** : 8.0

**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 sensitisation** : no data available

**skin sensitisation** : 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

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

**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 handling or from contact with the above products.