

# SAFETY DATA SHEET

Date: October 18, 2022

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** 6X DNA Loading Buffer (Orange) or 6X DNA Loading Buffer (Blue)  
**Catalog Number:** 99859 or 99962  
**Unit Size:** 1.5 mL  
**Manufacturer/Supplier:** Biotium, Inc.  
46117 Landing Parkway, Fremont, CA 94538, USA  
Phone: 1-510-265-1027, Fax: 1-510-265-1352  
Web: <http://www.biotium.com>

Use as laboratory reagent. For research use only. Not for food, drug, household, or cosmetic use.

## 2. HAZARDS IDENTIFICATION

### GHS classification

**Signal word** None  
**Health hazards** None  
**Physical hazards** None  
**Hazard statements** None  
**Precautionary statements** None  
**GHS hazard pictogram** None

**WHMIS classification** None

### NFPA Rating

Health hazard: 0  
Fire: 0  
Reactivity Hazard: 0

**Classification according to Regulation (EC) No 1272/2008[CLP]** None

**Labeling according to Regulation (EC) No 1272/2008[CLP]**

**Hazard pictogram** None  
**Signal word** None  
**Hazard statements** None  
**Precautionary statements** None

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Name     | CAS No. | EC No.    | Weight % | Classification |
|----------|---------|-----------|----------|----------------|
| Glycerol | 56-81-5 | 200-289-5 | 15%      | None           |

## 4. FIRST-AID MEASURES

### General advice

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

### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

### In case of eye contact

Flush eyes with water as a precaution.

### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water.

Consult a physician.

**5. FIREFIGHTING MEASURES**
**Suitable extinguishing media**

Carbon dioxide, dry chemical extinguishers, foam extinguishers or water.

**Special protective equipment for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**6. ACCIDENTAL RELEASE MEASURES**
**Personal precautions**

Avoid breathing vapors, mist, or gas. Remove all sources of ignition.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**Methods and materials for containment and cleaning up**

Contain spillage. Soak up spilled substance with inert absorbent material. Keep in suitable, closed containers for disposal.

**7. HANDLING AND STORAGE**
**Precautions for safe handling**

Avoid inhalation of vapor or mist.

Avoid direct contact with substance.

**Conditions for safe storage**

Keep container tightly closed in a dry and well-ventilated place.

Store at -20°C.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**
**Components with workplace control parameters**

Substance Glycerol

CAS no. 56-81-5

| Country                 | Australia    | Austria | Belgium  | Canada   | Denmark | European Union | Finland  | France   |
|-------------------------|--------------|---------|----------|----------|---------|----------------|----------|----------|
| Limit value, 8hours     | 10 mg/m3 (1) | --      | 10 mg/m3 | 10 mg/m3 | --      | --             | 20 mg/m3 | 10 mg/m3 |
| Limit value, short term | --           | --      | --       | --       | --      | --             | --       | --       |

| Country                 | Germany                            | Hungary | Ireland  | Italy | Japan | Netherlands | New Zealand  | Poland   | South Korea |
|-------------------------|------------------------------------|---------|----------|-------|-------|-------------|--------------|----------|-------------|
| Limit value, 8hours     | 50 mg/m3 inhalable aerosol (1)     | --      | 10 mg/m3 | --    | --    | --          | 10 mg/m3 (1) | 10 mg/m3 | 10 mg/m3    |
| Limit value, short term | 100 mg/m3 inhalable aerosol (1)(2) | --      |          | --    | --    | --          | --           | --       | --          |

| Country             | Singapore | South Africa Mining | Spain    | Sweden | Switzerland                | United Kingdom | USA-NIOSH | USA-OSHA   |
|---------------------|-----------|---------------------|----------|--------|----------------------------|----------------|-----------|--|
| Limit value, 8hours | 10 mg/m3  | 10 mg/m3            | 10 mg/m3 | --     | 50 mg/m3 inhalable aerosol | 10 mg/m3       | --        | 15 mg/m3 inhalable dust (1)<br>5 mg/m3 respirable dust (2) |

|                         |    |    |    |    |                             |    |    |    |
|-------------------------|----|----|----|----|-----------------------------|----|----|----|
| Limit value, short term | -- | -- | -- | -- | 100 mg/m3 inhalable aerosol | -- | -- | -- |
|-------------------------|----|----|----|----|-----------------------------|----|----|----|

Australia (1) This value is for inhalable dust containing no asbestos and < 1% crystalline silica.

Germany (AGS) (1) Inhalable fraction (2) 15 minutes average value

Germany (DFG) (1) Inhalable fraction (2) 15 minutes average value

New Zealand (1) The value for inhalable dust containing no asbestos and less than 1% free silica.

USA - OSHA (1) Inhalable fraction (2) Respirable fraction

### Personal protective equipment

#### Hand protection

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.

#### Respiratory protection

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Eye protection

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|                                       |                       |
|---------------------------------------|-----------------------|
| Chemical Name                         | 6X DNA Loading Buffer |
| Appearance                            | Liquid                |
| Odor                                  | No data available     |
| Odor threshold                        | No data available     |
| pH                                    | No data available     |
| Melting point/freezing point          | No data available     |
| Boiling point                         | No data available     |
| Flash point                           | No data available     |
| Evaporate rate                        | No data available     |
| Flammability                          | No data available     |
| Explosive limits                      | No data available     |
| Vapor pressure                        | No data available     |
| Vapor density                         | No data available     |
| Relative density                      | No data available     |
| Solubility                            | Water soluble         |
| 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     |

## 10. STABILITY AND REACTIVITY

#### Chemical stability

Stable under recommended storage conditions.

#### Possibility of hazardous reactions

No data available

#### Conditions to avoid

Heat, flames and sparks.

#### Materials to avoid

No data available

**Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides  
Other decomposition products - No data available

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**11. TOXICOLOGICAL INFORMATION****Acute toxicity**

**Oral LD50 LD50 Oral** – Rat - 12,600 mg/kg (Glycerol)

**Inhalation LC50** No data available

**Dermal LD50 LD50 Dermal** – Rabbit - > 10,000 mg/kg (Glycerol)

**Other information on acute toxicity** no data available

**Skin corrosion/irritation** Skin – Rabbit Result: Mild skin irritation - 24 h (Glycerol)

**Serious eye damage/eye irritation** Eyes – Rabbit Result: Mild eye irritation - 24 h (Glycerol)

**Respiratory or skin sensitization** No data available

**Germ cell mutagenicity** No data available

**Carcinogenicity**

IARC: 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.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity** No data available

**Specific target organ toxicity - single exposure (Globally Harmonized System)**

No data available

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**

No data available

**Aspiration hazard**

No data available

**Potential health effects**

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

**Additional Information**

RTECS: Glycerol: MA8050000

Prolonged or repeated exposure may cause: Nausea, Headache, Vomiting, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Kidney – Irregularities - Based on Human Evidence

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**12. ECOLOGICAL INFORMATION**

**Toxicity** No information available

**Persistence and degradability** No information available

**Bioaccumulative potential** No information available

**Mobility in soil** No information available

**Results of PBT and vPvB assessment** No information available

**Other adverse effects** No information available

**Additional information** No information available

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**13. DISPOSAL CONSIDERATIONS**

Do not dispose product directly into sewage. Consult local, state, or national regulation for proper disposal.

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**14. TRANSPORT INFORMATION**

**IATA, IMDG, DOT (US), TDG** Not dangerous goods during transportation  
**UN number** None  
**UN proper shipping name** None  
**Transport hazard class** None  
**Packing group** None  
**Environmental hazards** None  
**Transport in bulk according to Annex II of MARPOL 73/78 and IBC Code** None  
**Special precaution for user** None

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#### 15. REGULATION INFORMATION

##### US Federal Regulations

US Toxic Substances Control Act (TSCA): Not listed  
SARA 302: No chemicals were found.  
SARA 313: No chemicals were found.  
SARA 311/312: Chronic health hazard (Glycerol)

**WHMIS Hazard Class** None

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#### 16. OTHER INFORMATION

Classification according to Regulation (EC) Nr. 1272/2008  
Refer to section 2 and section 3

Prepared by: Regulatory Department  
Biotium Inc.

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Reason for revision Update to new document template.

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