

# Safety Data Sheet

## HiQ™ Blueye Prestained Protein Marker

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### 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1 Identification of the substance/preparation

**Product name :** HiQ™ Blueye Prestained Protein Marker

**Product code :** HQM14500/HQM14505

**Recommended use :** For research use only. Suitable for use as molecular weight standards for SDS-PAGE electrophoresis.

#### 1.2 Company/Undertaking identification

BioD Co., LTD.

A-1102 Gwangmyeong Technopark, 60, Hann-ro, Gwangmyeong Si, Gyeonggi-do, 14322  
Republic of Korea

Tel : 82. 2. 6264. 3399

Fax : 82. 2. 6264. 3400

E-mail : [techservice@bio-d.co.kr](mailto:techservice@bio-d.co.kr)

#### 1.3 Emergency telephone number

**Emergency telephone :** 82. 2. 6264. 3399

### 2. Hazards identification

#### 2.1 Classification of the substance or mixture

**GHS/GLP :** Classification to Regulation (EC) No 1272/2008

**DSD/DPD :** Classification to according to EU Directives 67/548/EC or 1999/45/EC

#### 2.2 Label elements

**Symbol(s) :** Void

**Signal Word :** Not dangerous

#### 2.3 Other information

**Hazards deriving from physical-chemical properties :** The data available do not support any physical or chemical hazard.

**Human health hazards :** Inappropriate handling may cause formation of aerosols.

Inhalation of aerosols may cause allergic type reactions in sensitized individuals.

Prolonged skin contact may cause minor irritation.

\*Caution: Avoid inhalation, ingestion, and skin contacts.

**Environmental hazards :** The data available do not support any environmental hazard.

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## 3. Composition/information on ingredient

### 3.1 Ingredients

| <u>Chemical name</u>   | <u>Concentration</u> | <u>EC No.</u> | <u>CAS No.</u> | <u>Classification</u>                  |
|------------------------|----------------------|---------------|----------------|--|
| Glycerol               | 10-25 %              | 200-289-5     | 56-81-5        | Not classified                         |
| Sodium dodecyl sulfate | 1-3 %                | 205-788-1     | 51-21-3        | Xn;R21/22-36/38, Acute Tox.4;H302/H312 |
| Urea                   | < 25 %               | 200-315-5     | 57-13-6        | Not classified                         |
| Tris-phosphate         | 1-2 %                | 230-260-2     | 6992-39-8      | Not classified                         |

### 3.2 Other components

Components not listed here are not dangerous or their concentrations do not exceed the limits specified in the EU directive 1999/45/EC.

### 3.3 Additional information

For the wording of the listed risk phrases refer to section 16.

## 4. First aid measures

### 4.1 General information

No special measures required.

### 4.2 Description of first aid measures

**In case of ingestion :** If swallowed, rinse mouth and throat thoroughly with water.

Consult a doctor in event of any complaints.

**In case of inhalation :** If inhaled, remove victim from area of exposure. If symptoms of irritation or respiratory allergy occur, consult a doctor.

**In case of skin contact :** Generally, the product does not irritate the skin. If symptoms of irritation after prolonged exposure occur, consult a doctor.

**In case of eye contact :** Wash out opened eyes with plenty of water for several minutes. Consult a doctor in event of any complaints.

## 5. Fire fighting measures

### 5.1 Suitable extinguishing agents

Water spray, Carbon dioxide(CO<sub>2</sub>), dry chemical powder or appropriate foam.

### 5.2 Not suitable extinguishing agents

None.

### 5.3 Special exposure hazards from decomposition products

Not thoroughly investigated.

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## **5.4 Protective equipment**

Wear self-contained breathing apparatus and protective clothing.

## **6. Accidental release measures**

### **6.1 Personal precautions**

Wear appropriate gloves (see Section 8), safety glasses to clean small releases/spillage.  
In case of vapor/aerosol formation, wear suitable respiratory protection means. Ventilate the area.

### **6.2 Environmental precautions**

No special measures required.

### **6.3 Methods for cleaning up**

Absorb spillages with liquid-binding material. Ventilate and wash the area after the spillage is completely removed.

### **6.4 Additional information**

No dangerous substances are released.

## **7. Handling and storage**

### **7.1 Handling**

No further requirements. Use appropriate personal protection measures (see Section 8).  
Avoid any contact with the liquid. Avoid the formation of aerosols. Ventilate area.

### **7.2 Storage**

Store at - 20°C. No other specific requirements relating to the preparation.

## **8. Exposure controls/personal protection**

### **8.1 Control parameters**

| <u>Chemical name</u>   | <u>CAS No.</u> | <u>Exposure limits</u>     |
|------------------------|----------------|----------------------------|
| Glycerol               | 56-81-5        | TWA : 10 mg/m <sup>3</sup> |
| Sodium dodecyl sulfate | 151-21-3       | No data available          |
| Urea                   | 57-13-6        | No data available          |
| Tris-phosphate         | 6992-39-8      | No data available          |

### **8.2 Exposure controls**

**Engineering measures** : Ensure adequate ventilation, especially in confined areas.

### **8.3 Personal protection**

**Respiratory protection** : No special measures required.

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**Hand protection :** Wear rubber gloves. No special requirements to rubber.

**Eye protection :** Safety glasses (goggles) are recommended during ordinary operations with the preparation.

**Skin protection :** The usual precautionary measures accepted in research laboratories, e.g. protective clothes (gowns). No specific requirements.

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

**Appearance:** Liquid.

**Color:** Blue.

**Odor:** Odorless or weak.

**pH-value at 25°C:** 7.5.

**Boiling point:** 100°C.

**Flash Point:** Not applicable.

**Flammability / autoflammability:** The preparation is not flammable/self-igniting.

**Explosive properties:** The preparation does not possess explosive properties.

**Oxidizing properties:** Not applicable.

**Vapor pressure:** Not applicable.

**Relative density at 20°C:** ~1 g/cm<sup>3</sup>.

**Solubility in/miscibility with water:** Fully miscible.

**Fat solubility:** Not applicable.

**Vapor density:** Not applicable.

**Evaporation rate:** Not applicable.

**Conductivity:** Not applicable.

**Viscosity:** Not viscous.

### 9.2 Other information

No further relevant information available.

## 10. Stability and reactivity

### 10.1 Stability

Stable under storage conditions(see section 7).

### 10.2 Reactivity

No information available.

### 10.3 Possibility of hazardous reactions

No dangerous reactions known.

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## **10.4 Conditions to avoid**

No conditions which may cause dangerous reactions.

## **10.5 Incompatible materials**

No in particular.

## **10.6 Hazardous decomposition products**

No dangerous decomposition products known.

## **11. Toxicological information**

### **11.1 Information on toxicology effects**

#### **Acute toxicity:**

**Inhalation:** Aerosols may cause allergic type reactions in sensitized individuals.

**Ingestion:** Repeated ingestion or excessive dosage may cause irritation of the gastrointestinal tract.

**Skin and eye contact:** Generally, the product does not irritate the skin and eyes. Prolonged skin or eye contact may cause minor irritation.

| <u>Chemical name</u>   | <u>LD50 Oral</u> | <u>LD50 Dermal</u> | <u>LD50 Inhalation</u>         |
|------------------------|------------------|--------------------|--------------------------------|
| Glycerol               | 12600 mg/kg(Rat) | 21900 mg/kg(Rat)   |                                |
| Sodium dodecyl sulfate | 1288 mg/kg(Rat)  | 580 mg/kg(Rat)     | 3900 mg/m <sup>3</sup> (Rat)1h |

#### **Chronic toxicity :**

Product does not present a chronic toxicity hazard based on known or supplied information.

## **12. Ecological information**

### **12.1 Ecotoxicity**

The preparation is considered not dangerous to the environment with respect to mobility, persistence and degradability, bioaccumulation, aquatic toxicity and other data relating to ecotoxicity.

### **12.2 Persistence and degradability**

The preparation is readily biodegradable.

### **12.3 Bioaccumulative potential**

It is considered that the preparation does not accumulate in biota, and does not pass through the food chain.

### **12.4 Other adverse effects**

Not applicable.

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## 13. Disposal consideration

### 13.1 Waste treatment methods

**Waste from residues / unused products:** Dispose of in accordance with local regulation.

**Contaminated packaging:** Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. Transport information

**IMDG/IMO:** Non-hazardous for sea freight.

**RID:** Non-hazardous for rail transport.

**ARD:** Non-hazardous for road transport.

**ICAO/IATA:** Non-hazardous for air transport.

## 15. Regulatory information

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

No information available.

### 15.2 Chemical safety assessment

No information available.

### 15.3 Regulatory information

**US :**

**Labelling according to US Regulations:** Caution: Avoid contact and inhalation.

**US Regulatory information:** SARA LISTED: No.

**EU :**

**Labelling according to EU Guidelines:** The preparation is not dangerous within the meaning of Directives 67/548/EC, 1999/45/EC, and is not labelled with danger symbols or indications of danger.

**Canada :**

**WHMIS classification:** This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

**DSL:** No.

**NDSL:** No.

## 16. Other information

### 16.1 Full text of R-phrases referred to under sections 3

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R21 : Harmful in contact with skin.

R22 : Harmful if swallowed.

R36 : Irritating to eyes.

R38 : Irritating to skin.

## **16.2 Full text of physical and health hazards referred to under sections 3**

H302 : Harmful if swallowed.

H312 : Harmful in contact with skin.

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Bio-D shall not be held liable for any damage resulting from handling or from contact with the above product.