



## Blu12 Prestained Protein Ladder

Document Type: Global Master SDS (International Use)

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### 1. Identification

Prepared in accordance with:

United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

Intended use:

This Global Master SDS is intended for international hazard communication and may be supplemented by country- or region-specific addenda to meet local regulatory requirements.

Product Name: Blu12 Prestained Protein Ladder

Catalog Number: PMB12-0500(N)~PMB12-B050ML

Recommended Use: Laboratory research use only

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### 2. Hazard(s) Identification

Classification according to GHS: Skin Corrosion/Irritation: Category 2, Serious Eye Damage/Eye Irritation: Category 2A

Signal word: Warning

Hazard pictogram: Exclamation mark



Hazard statements:

H315: Causes skin irritation

H319: Causes serious eye irritation.

Precautionary statements:

P264: Wash skin thoroughly after handling.

P280: Wear protective gloves/eye protection/face protection.

P302+P352: IF ON SKIN: Wash with plenty of water.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

# Material Safety Data Sheet



## 3. Composition / Information on Ingredients

Ingredients:

| Substance              | CAS No.   | Concentration |
|------------------------|-----------|---------------|
| Water                  | 732-18-5  | > 50 % (v/v)  |
| Glycerol               | 56-81-5   | 10-25 % (v/v) |
| Sodium Dodecyl Sulfate | 151-21-3  | 1-3 % (w/v)   |
| Urea                   | 57-13-6   | <25 % (w/v)   |
| Tris- Phosphate        | 6992-39-8 | 1-2 % (w/v)   |
| Dithiothreitol         | 3483-12-3 | 3%~16% (w/v)  |

## 4. First-Aid Measures

**Ingestion:** If swallowed, rinse mouth and throat thoroughly with water. Consult a doctor in event of any complaints.

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

**Skin contact:** If symptoms of irritation after prolonged exposure occur, consult a doctor.

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

## 5. Fire-Fighting Measures

**Suitable extinguishing media:** Water, dry chemical powder, or appropriate foam.

**Unsuitable extinguishing media:** None

**Specific hazards:** May emit nitrogen oxides upon combustion.

**Protective equipment:** Firefighters should wear self-contained breathing apparatus.

## 6. Accidental Release Measures

**Personal precautions:** Remove ignition sources. No smoking.

**Environmental precautions:** Prevent release into the environment.

**Cleanup methods:** Wet with water and collect mechanically.

## 7. Handling and Storage

**Handling:** Avoid heat, shock, friction, and static discharge.

**Storage:** Store at -20°C in original packaging. Keep away from combustible materials and oxidizers.

## 8. Exposure Controls / Personal Protection

**Control parameters**

Glycerol (Mist): Taiwan PEL-TWA: 10 mg/m<sup>3</sup>; OSHA PEL: 15 mg/m<sup>3</sup> (Total dust).

**Individual protection measures**

**Hand protection:** Wear protective Nitrile rubber gloves (complying with EN 374 or equivalent).

**Eye protection:** Safety glasses with side-shields or chemical goggles (complying with EN 166 or ANSI Z87.1).





## 9. Physical and Chemical Properties

**Appearance:** blue liquid.

**pH value (25°C):** ~7.5

**Melting/Freezing point:** < 0°C (approximate)

**Boiling point:** ~ 100°C.

**Flash Point:** No flash point detected up to boiling point.

**Vapor pressure:** ~ 2.3 kPa (at 20°C, similar to water).

**Relative density:** ~ 1.1 g/cm<sup>3</sup> (at 20°C).

**Solubility:** Fully miscible with water.

**Viscosity:** Low viscosity (aqueous solution).

## 10. Stability and Reactivity

**Stability:** Stable under storage conditions (see Section 7).

**Conditions to avoid:** No conditions which may cause dangerous reactions.

**Possibility of hazardous reactions:** No dangerous reactions known.

**Materials to avoid:** Strong oxidizing agents, strong bases.

**Hazardous decomposition products:** No dangerous decomposition products known.

**Hazardous polymerization:** Will not occur.

## 11. Toxicological Information

**Routes of exposure:**

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

**Ingestion:** Repeated ingestion or excessive dosage may be irritating.

**Skin and eye contact:** Prolonged contact may cause irritation.

**Additional toxicological information:**

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

## 12. Ecological Information

No data available. The product is not expected to be acutely toxic to aquatic organisms.

## 13. Disposal Considerations

Dispose of contents and container in accordance with local, regional and national regulations.

## 14. Transport Information

**UN number:** Not applicable.

**Proper shipping name:** Not regulated as dangerous goods.

**Transport hazard class:** Not applicable.

**Packing group:** Not applicable.

**Environmental hazards:** Not a marine pollutant.



## 15. Regulatory Information

This product is classified and labeled in accordance with the United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

This Safety Data Sheet is intended to serve as a Global Master SDS. Compliance with specific regional or national regulations may require additional information or adaptations.

## 16. Other Information

### Revision history:

Version 1.0

### Disclaimer:

The information provided in this Safety Data Sheet is believed to be accurate and represents the best information currently available to BIO-HELIX Co., Ltd. at the time of issue. It is intended solely as guidance for safe handling, use, processing, storage, transportation, disposal and release of the product. It does not constitute a warranty, express or implied.

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