

# Material Safety Data Sheet

Cat No. MWP04

## BlueStar PLUS Prestained Protein Ladder

### 1. IDENTIFICATION OF THE PREPARATION/SUBSTANCE AND OF THE COMPANY

*Preparation Name:*

BlueStar PLUS Prestained Protein Ladder, Broad Range (11-245 kDa) – buffered aqueous solution.

*Use of the preparation:*

For laboratory use. Suitable for use as molecular weight standards for SDS-PAGE electrophoresis.

*Company identification:* NIPPON GENETICS EUROPE GmbH

Site: <http://www.nippongenetics.eu>

### 2. COMPOSITION/ INFORMATION ON INGREDIENTS

*Ingredients:*

Water:	>50% (v/v)	EC#231-791-2	CAS#7732-18-5
Glycerol:	10-25% (v/v)	EC#200-289-5	CAS#56-81-5
SDS	1-3%	EC#205-788-1	CAS#151-21-3
Urea	< 25%	EC#200-315-5	CAS#57-13-6
Tris- Phosphate	1-2%	EC#230-260-2	CAS#6992-39-8

*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.

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

### 3. HAZARDS IDENTIFICATION

The preparation is not classified as dangerous according to Directive 1999/45/EC or Directive 67/548/EC, and is not labeled with danger symbols or indications of danger.

*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.

### 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

The preparation cannot cause fire. Suitable extinguishing agents:  
Water spray, Carbon Dioxide, dry chemical powder or appropriate foam.  
Not suitable extinguishing agents: None.

Special exposure hazards from decomposition products:  
Not thoroughly investigated.

Protective equipment:  
Wear self-contained breathing apparatus and protective clothing.

## 6. ACCIDENTAL RELEASE MEASURES

*Personal precautions:*

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

*Environmental precautions:*

No special measures required.

*Methods for cleaning up:*

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

*Additional information:* No dangerous substances are released.

## 7. HANDLING AND STORAGE

*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.

*Storage:* Store at - 20°C. None other specific requirements relating to the preparation.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that need to be monitored at the workplace.

*General protective and hygienic measures:*

The usual precautionary measures are the same as for chemicals handling.

*Engineering measures:* None specific requirements relating to the preparation.

*Personal protection:*

- Respiratory protection: No special measures required.

- Hand protection: Wear rubber gloves. None special requirements to rubber.

- Eye protection: No need to wear glasses (goggles) when ordinary operations with the preparation.

Safety glasses are recommended during certain operations when aerosol formation is possible.

- Skin protection: The usual precautionary measures accepted in research laboratories, e.g. protective clothes (gowns). None specific requirements.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

*Appearance:* Liquid.

*Colour:* Blue

*Odour:* Odourless 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.

*Vapour 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.

*Vapour density:* Not applicable. Evaporation rate: Not applicable.

*Conductivity:* Not applicable.

*Viscosity:* Not viscous.

## **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**

*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.

*Persistence and degradability:* The preparation is readily biodegradable.

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

*Other adverse effects:* Not applicable.

## **13. DISPOSAL CONSIDERATIONS**

The disposal of the product does not present a danger. No special disposal methods required, except to be in accordance with current local environmental regulations.

## **14. TRANSPORT INFORMATION**

*Special precautions:* None known.

*Proper shipping name:* Not dangerous goods according to transport regulations.

*Transport regulations:* No additional transport regulations are known to the supplier.

*IMDG:* Non-hazardous for sea freight.

*ADR:* Non-hazardous for road transport.

*RID:* Non-hazardous for rail transport.

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

*Other information:* The preparation may be stored in ice during the transportation.

## **15. 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 88/379/ECC, 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**

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