

SAFETY DATA SHEET (SDS)

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

Product Name: Prestained Protein Marker 3-245kDa
 Catalog Number: PL00002
 Chemical Name: Not applicable
REACH registration number: No registration number is given yet for this substance / substances in this mixture since the annual import quantity is less than one tonnage per annum or the transition period for its registration according to Article 23 of REACH has not yet expired.
 Company/undertaking Identification:
 Proteintech Group
 5400 Pearl Street
 STE 300
 Rosemont, IL 60018
 312-455-8498
 proteintech@ptglab.com
 Emergency telephone number: 312-455-8498, ext 802

2. HAZARDOUS IDENTIFICATION:

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)
 Classification to Regulation (EC) No 1272/2008
GHS label elements
Pictogram: Void
Signal word: Not dangerous
Hazard statements:
 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.

3. INGREDIENT COMPOSITION/INFORMATION:

Mixture of the substances listed below, and additional trade secret chemicals.

| | | |
|----------------|---------|-----------|
| Glycerol | 10-25 % | 56-81-5 |
| Sodium dodecyl | 1-3 % | 51-21-3 |
| Urea | < 25 % | 57-13-6 |
| Tris-phosphate | 1-2 % | 6992-39-8 |

Components not listed here are not dangerous or their concentrations do not exceed the limits specified in the EU directive 1272/2008/EC.

4. FIRST AID MEASURES:

General Advice No special measures required.

| | |
|--------------|--|
| | Generally, the product does not irritate the skin. If |
| Skin Contact | symptoms of irritation after prolonged exposure occur, consult a doctor. |
| Eye Contact | Wash out opened eyes with plenty of water for several minutes. 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. |
| Ingestion | If swallowed, rinse mouth and throat thoroughly with water. Consult a doctor in event of any complaints. |

5. FIRE FIGHTING MEASURES:

Suitable extinguishing media: Water spray, Carbon dioxide (CO₂), dry chemical powder or appropriate foam.
 Unsuitable extinguishing media: None
 Specific hazards arising from the chemical: Not thoroughly investigated.
 Special protective equipment: Wear self-contained breathing apparatus and protective clothing.

6. ACCIDENTAL RELEASE MEASURES:

Personal precautions, protective equipment, and emergency procedures:
 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.
 Environmental precautions: No special measures required.
 Methods and materials for containment and cleaning up:
 Absorb spillages with liquid-binding material. Ventilate and wash the area after the spillage is completely removed.

7. HANDLING AND STORAGE:

Precautions for safe 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.
 Conditions for safe storage, including any incompatibilities: Store at -20°C. No other specific requirements relating to the preparation.

8. EXPOSURE CONTROLS/PPE:

Control parameters:

Occupational exposure limits: TWA : 10 mg/m³
 Appropriate engineering controls: Ensure adequate ventilation, especially in confined areas.

Individual protection measures:

Hygiene measures: Wear rubber gloves. No special requirements to rubber.
 Eye/face 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.
 Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Physical state @ 40C: Solution
 Color: Blue
 Odor: Odorless or weak
 Threshold pH: 7.5
 Boiling point: 100C

Flash point: Not applicable.
 Burning time: Not applicable.
 Burning rate: Not applicable
 Evaporation rate: Not available.
 Flammability (solid, gas): Not applicable
 Lower and upper explosive (flammable) limits: Not applicable
 Vapor pressure: Not applicable
 Vapor density: Not applicable
 Relative density: ~1 g/cm³
 Solubility: Fully miscible
 Auto-ignition temperature: Not applicable
 Decomposition temperature: Not available.
 SADT: Not available.
 Viscosity: Not viscous.

10. CHEMICAL STABILITY AND REACTIVITY:

Reactivity: None known
Chemical stability: Stable under storage conditions
Possibility of hazardous reactions: No dangerous reactions known.
Conditions to avoid: No conditions
Incompatible materials: None in particular
Hazardous decomposition products: None

11. TOXICOLOGICAL INFORMATION:

Acute toxicity: Not hazardous.
Inhalation: Inhalation of 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.

| Chemical name | LD50 Oral | LD50 Dermal | LD50 Inhalation |
|----------------|------------------|------------------|--------------------|
| Glycerol | 12600 mg/kg(Rat) | 21900 mg/kg(Rat) | |
| Sodium dodecyl | 1288 mg/kg(Rat) | 580 mg/kg(Rat) | 3900 mg/m3 (Rat)1h |

Chronic toxicity: Product does not present a chronic toxicity hazard based on known or supplied information.
Carcinogenic effects: Product does not present a carcinogenic effects based on known or supplied information.
Mutagenic effects: Product does not present a c mutagenic effects based on known or supplied information.
Reproductive toxicity: Product does not present a reproductive toxicity hazard based on known or supplied information.
Sensitization: Product does not present a sensitization hazard based on known or supplied information.
Target organ effects: Product does not present a target organ effects based on known or supplied information.

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:

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:

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 1272/2008/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:

Full text of R-phrases referred to under sections 3: R21:
Harmful in contact with skin.
R22: Harmful if swallowed.
R36: Irritating to eyes.
R38: Irritating to skin.
Full text of physical and health hazards referred to under sections 3 H302:
Harmful if swallowed.
H312: Harmful in contact with skin.

Reason for revision: Initial release of SDS
Revision number: 0
Revision: 03/25/2021

The above information is believed to be correct but should only be used as a guide for experienced personnel. Proteintech Group Inc. will not be liable for any damage resulting from the handling of or from contact with the above product.

For lab use only, not for diagnostic or therapeutic work.