SAFETY DATA SHEET
PROTEIN PREPARATION

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name
PROTEIN PREPARATION

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses
For research use only.

1.3. Details of the supplier of the safety data sheet

Supplier
Web: www.bio-rad-antibodies.com
Bio-Rad
Endeavour House
Langford Business Park
Kidlington
Oxford
OX5 1GE
Tel. +44 (0)1865 852700
antibody_safetydatasheets@bio-rad.com

Contact person
Technical Services Manager

1.4. Emergency telephone number

Emergency telephone
+1 7037415970 (CHEMTREC)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards
Not Classified

Health hazards
Not Classified

Environmental hazards
Not Classified

2.2. Label elements

Hazard statements
NC Not Classified

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Composition comments
No classified ingredients, or those having occupational exposure limits, present above the levels of disclosure.

SECTION 4: First aid measures

4.1. Description of first aid measures
PROTEIN PREPARATION

Inhalation
Due to the small packaging, the risk of inhalation is minimal. If spray/mist has been inhaled, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.

Ingestion
Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention if any discomfort continues. Due to the small packaging, the risk of ingestion is minimal.

Skin contact
Due to the small packaging, the risk of skin contact is minimal. Remove contaminated clothing and rinse skin thoroughly with water. Get medical attention if any discomfort continues.

Eye contact
Due to the small packaging, the risk of eye contact is minimal. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed
Inhalation May cause cause coughing or mild irritation.
Ingestion May cause discomfort if swallowed.
Skin contact Prolonged skin contact may cause redness and irritation.
Eye contact May cause temporary eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed
Notes for the doctor No specific recommendations.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture
Specific hazards There are no known reactivity hazards associated with this product. No unusual fire or explosion hazards noted.
Hazardous combustion products Does not decompose when used and stored as recommended.

5.3. Advice for firefighters
Protective actions during firefighting No specific firefighting precautions known.
Special protective equipment for firefighters Use protective equipment appropriate for surrounding materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Personal precautions Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate.

6.2. Environmental precautions
Environmental precautions Avoid the spillage or runoff entering drains, sewers or watercourses.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up Absorb spillage with non-combustible, absorbent material. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses.
PROTEIN PREPARATION

6.4. Reference to other sections
Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Usage precautions Avoid spilling. Avoid contact with skin and eyes. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

7.2. Conditions for safe storage, including any incompatibilities
Storage precautions Keep only in the original container. Store at specified temperature. Refer to product label.
Storage class Refer to product datasheet.

7.3. Specific end use(s)
Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

8.2. Exposure controls
Protective equipment
Appropriate engineering controls Provide adequate ventilation.

Eye/face protection Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles or face shield.

Hand protection Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible.

Other skin and body protection Wear appropriate clothing to prevent any possibility of skin contact. Wear apron or protective clothing in case of contact.

Hygiene measures Provide eyewash station. Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

Respiratory protection No specific recommendations.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties
Appearance Solid or liquid (may vary).
Colour Various colours.
Odour No characteristic odour.
Melting point Not determined.
Initial boiling point and range <100 °C @ 760 mm Hg
PROTEIN PREPARATION

Flash point  Not applicable.
Evaporation rate  Not determined.
Upper/lower flammability or explosive limits Not applicable.
Vapour pressure  Not determined.
Vapour density  Not determined.
Relative density  Not determined.
Solubility(ies) Soluble in water.
Partition coefficient  Not determined.
Auto-ignition temperature Not determined.
Decomposition Temperature Not determined.
Viscosity  Not determined.
Explosive properties  Not determined.
Oxidising properties  Not determined.

9.2. Other information
Other information None.

SECTION 10: Stability and reactivity

10.1. Reactivity
Reactivity  There are no known reactivity hazards associated with this product.

10.2. Chemical stability
Stability  Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions
Possibility of hazardous reactions  Will not polymerise.

10.4. Conditions to avoid
Conditions to avoid  Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials
Materials to avoid  Strong acids.

10.6. Hazardous decomposition products
Hazardous decomposition products  Does not decompose when used and stored as recommended.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Toxicological effects  No information available.
Acute toxicity - oral
Notes (oral LD₅₀)  Not determined.
Skin corrosion/irritation
PROTEIN PREPARATION

Human skin model test  
Not determined.

Extreme pH  
7.2

Serious eye damage/irritation  
Not determined.

Genotoxicity - in vitro  
Not determined.

Carcinogenicity  
Not determined.

Reproductive toxicity  
Not determined.

Specific target organ toxicity - single exposure  
Not determined.

Specifc target organ toxicity - repeated exposure  
Not determined.

Aspiration hazard  
Not determined.

Inhalation  
Gas or vapour in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Coughing.

Ingestion  
May cause discomfort if swallowed.

Skin contact  
Liquid may irritate skin.

Eye contact  
Vapour or spray in the eyes may cause irritation and smarting.

Acute and chronic health hazards  
Because of the product's quantity and composition, the health hazard is regarded as low.

Route of exposure  
Ingestion. Skin and/or eye contact

SECTION 12: Ecological Information

Ecotoxicity  
There are no data on the ecotoxicity of this product.

12.1. Toxicity

Acute aquatic toxicity  
Not determined.

Acute toxicity - fish  
Not determined.

12.2. Persistence and degradability

Persistence and degradability  
There are no data on the degradability of this product.

12.3. Bioaccumulative potential

Bioaccumulative potential  
No data available on bioaccumulation.

Partition coefficient  
Not determined.

12.4. Mobility in soil

Mobility  
The product is soluble in water.

12.5. Results of PBT and vPvB assessment
PROTEIN PREPARATION

Results of PBT and vPvB assessment
No information available

12.6. Other adverse effects
Other adverse effects
Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information
When handling waste, the safety precautions applying to handling of the product should be considered.

Disposal methods
Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General
The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

Road transport notes
Not classified.

Rail transport notes
Not classified.

Sea transport notes
Not classified.

Air transport notes
Not classified.

14.1. UN number
Not applicable.

14.2. UN proper shipping name
Not applicable.

14.3. Transport hazard class(es)
Not applicable.

14.4. Packing group
Not applicable.

14.5. Environmental hazards
Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user
Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable.

SECTION 15: Regulatory information

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

**Guidance**
Workplace Exposure Limits EH40.
Approved Classification and Labelling Guide (Sixth edition) L131.
Safety Data Sheets for Substances and Preparations.

### 15.2. Chemical safety assessment
No chemical safety assessment has been carried out.

### SECTION 16: Other information

<table>
<thead>
<tr>
<th>General information</th>
<th>Only trained personnel should use this material.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision date</td>
<td>20/09/2018</td>
</tr>
<tr>
<td>Revision</td>
<td>4</td>
</tr>
<tr>
<td>Supersedes date</td>
<td>08/04/2016</td>
</tr>
<tr>
<td>SDS number</td>
<td>10493</td>
</tr>
<tr>
<td>Risk phrases in full</td>
<td>Not classified.</td>
</tr>
</tbody>
</table>

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.