SAFETY DATA SHEET
LYNX LYOPHILIZED HRP MIX

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

1.1. Product identifier

Product name  LYNX LYOPHILIZED HRP MIX

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
          Kidlington 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  Tel. +44 (0) 1865 852700 (9.00 a.m. - 5.00 p.m. Mon-Fri)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards  Not Classified
Health hazards  Resp. Sens. 1 - H334
Environmental hazards  Not Classified

Classification (67/548/EEC or 1999/45/EC)  R42.

2.2. Label elements

Pictogram

Signal word  Danger
Hazard statements  H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
LYNX LYOPHILIZED HRP MIX

Precautionary statements
P261 Avoid breathing vapour/spray.
P284 [In case of inadequate ventilation] wear respiratory protection.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
P501 Dispose of contents/container in accordance with national regulations.

Contains
HORSERADISH PEROXIDASE

2.3. Other hazards
This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

<table>
<thead>
<tr>
<th>HORSERADISH PEROXIDASE</th>
<th>1-10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 9003-99-0</td>
<td></td>
</tr>
<tr>
<td>EC number: 232-668-6</td>
<td></td>
</tr>
</tbody>
</table>

Classification
Resp. Sens. 1 - H334
Classification (67/548/EEC or 1999/45/EC)
R42.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition comments
The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation
Move affected person to fresh air at once. May cause respiratory system irritation. If throat irritation or coughing persists, proceed as follows. Get medical attention. Show this Safety Data Sheet to the medical personnel.

Ingestion
Rinse mouth thoroughly with water. Get medical attention if any discomfort continues. Give plenty of water to drink.

Skin contact
Remove affected person from source of contamination. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.

Eye contact
Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing. Show this Safety Data Sheet to the medical personnel.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation
May cause an asthma-like shortness of breath. May cause sensitisation or allergic reactions in sensitive individuals.

Ingestion
No specific symptoms known.

Skin contact
No specific symptoms known.

Eye contact
No specific symptoms known.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor
No specific recommendations. Treat symptomatically.

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.
LYNX LYOPHILIZED HRP MIX

5.2. Special hazards arising from the substance or mixture

Specific hazards
No unusual fire or explosion hazards noted.

Hazardous combustion products
No known hazardous decomposition products.

5.3. Advice for firefighters

Protective actions during firefighting
No specific firefighting precautions known.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions
For personal protection, see Section 8.

6.2. Environmental precautions

Environmental precautions
Not considered to be a significant hazard due to the small quantities used.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up
Avoid generation and spreading of dust. Absorb spillage with inert, damp, non-combustible material. Flush contaminated area with plenty of water. Provide adequate ventilation.

6.4. Reference to other sections

Reference to other sections
For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions
Avoid inhalation of dust. Avoid spilling. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions
Refer to product label.

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

Ingredient comments
No exposure limits known for ingredient(s).

8.2. Exposure controls

Protective equipment

Appropriate engineering controls
No specific ventilation requirements. This product must not be handled in a confined space without 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.

Hand protection
No specific hand protection recommended. Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible.
LYNX LYOPHILIZED HRP MIX

Hygiene measures
When using do not eat, drink or smoke. Wash hands at the end of each work shift and before eating, smoking and using the toilet.

Respiratory protection
Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Powder, Lyophilised</td>
</tr>
<tr>
<td>Colour</td>
<td>Light brown.</td>
</tr>
<tr>
<td>Odour</td>
<td>Odourless.</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Melting point</td>
<td>No information required.</td>
</tr>
<tr>
<td>Initial boiling point and range</td>
<td>No information required.</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Vapour density</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not relevant.</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Not available. Soluble in water.</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>Not available.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

9.2. Other information
Other information
No information required.

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
Not applicable.
LYNX LYOPHILIZED HRP MIX

10.4. Conditions to avoid

Conditions to avoid

There are no known conditions that are likely to result in a hazardous situation.

10.5. Incompatible materials

Materials to avoid

No specific material or group of materials is likely to react with the product to produce a hazardous situation.

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

May cause sensitisation or allergic reactions in sensitive individuals. Avoid inhalation of dust.

Inhalation

May cause sensitisation or allergic reactions in sensitive individuals.

Ingestion

May cause discomfort if swallowed.

Skin contact

Powder may irritate skin.

Eye contact

Particles in the eyes may cause irritation and smarting.

SECTION 12: Ecological Information

Ecotoxicity

Not regarded as dangerous for the environment.

12.1. Toxicity

Toxicity

No data available

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 available.

12.4. Mobility in soil

Mobility

The product is soluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment

This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects

Not applicable.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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
LYNX LYOPHILIZED HRP MIX

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 classified for transportation.

14.2. UN proper shipping name
Not classified for transportation.

14.3. Transport hazard class(es)
Not classified for transportation.

14.4. Packing group
Not classified for transportation.

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

14.6. Special precautions for user
Not classified for transportation.

14.7. Transport in bulk according to Annex II of MARPOL73/78 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

Guidance Safety Data Sheets for Substances and Preparations.

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

SECTION 16: Other information

Revision date 04/05/2016
Revision 2
Supersedes date 22/12/2015
SDS number 10543
Risk phrases in full R42 May cause sensitisation by inhalation.
LYNX LYOPHILIZED HRP MIX

Hazard statements in full

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.