SAFETY DATA SHEET
ANTIBODY PREPARATION

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

1.1. Product identifier
Product name
ANTIBODY 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

Human health
This product is harmful if swallowed.

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
ANTIBODY PREPARATION

<table>
<thead>
<tr>
<th>SUCROSE</th>
<th>&lt;10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 57-50-1</td>
<td>EC number: 200-334-9</td>
</tr>
</tbody>
</table>

Classification | Classification (67/548/EEC or 1999/45/EC) |
Not Classified | - |

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

SECTION 4: First aid measures

4.1. Description of first aid measures

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. 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 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
ANTIBODY PREPARATION

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.

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
Occupational exposure limits
SUCROSE
Long-term exposure limit (8-hour TWA): WEL 10 mg/m³
Short-term exposure limit (15-minute): WEL 20 mg/m³

SODIUM AZIDE
Long-term exposure limit (8-hour TWA): WEL 0.1 mg/m³
Short-term exposure limit (15-minute): WEL 0.3 mg/m³
as NaN₃
Sk
WEL = Workplace Exposure Limit
Sk = Can be absorbed through the skin.

8.2. Exposure controls
Protective equipment
Appropriate engineering controls
Provide adequate ventilation. Avoid inhalation of vapours and spray/mists. Observe any occupational exposure limits for the product or ingredients.

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.
ANTIBODY PREPARATION

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. 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>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Various colours.</td>
</tr>
<tr>
<td>Odour</td>
<td>No characteristic odour.</td>
</tr>
<tr>
<td>pH</td>
<td>pH (concentrated solution): 7.4</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Initial boiling point and range</td>
<td>&lt;100 °C @ 760 mm Hg</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Upper/lower flammability or</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>explosive limits</td>
<td></td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapour density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Soluble in water.</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>Not determined.</td>
</tr>
</tbody>
</table>

9.2. 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
ANTIBODY PREPARATION

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.

Other health effects
IARC Not Listed.

Acute toxicity - oral
Notes (oral LD₅₀)
Not determined.

ATE oral (mg/kg)
5,000.0

Skin corrosion/irritation
Human skin model test
Not determined.

Extreme pH
7.2

Serious eye damage/irritation
Not determined.

Germ cell mutagenicity
Genotoxicity - in vitro
Not determined.

Carcinogenicity
Carcinogenicity
Not determined.

Reproductive toxicity
Reproductive toxicity - fertility
Not determined.

Specific target organ toxicity - single exposure
STOT - single exposure
Not determined.

Specific target organ toxicity - repeated exposure
STOT - repeated exposure
Not determined.

Aspiration hazard
Not determined.

General information
Knowledge about health hazard is incomplete.

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

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

Toxicological information on ingredients.

SODIUM AZIDE

| Acute toxicity - oral | 5.0 |

SECTION 12: Ecological Information

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

12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish  Not determined.

Acute toxicity - aquatic invertebrates  EC₅₀, 48 hours: Daphnia pulex (Water flea) - 4.2 mg/l, Daphnia magna

Ecological information on ingredients.

SODIUM AZIDE

| LE(C)₅₀ | 0.1 < L(E)C₅₀ ≤ 1 |
| M factor (Acute) | 1 |

Chronic aquatic toxicity

| M factor (Chronic) | 1 |

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

Results of PBT and vPvB assessment  No information available

12.6. Other adverse effects

Other adverse effects  Not determined.

SECTION 13: Disposal considerations
### ANTIBODY PREPARATION

#### 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

<table>
<thead>
<tr>
<th>General</th>
<th>The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road transport notes</td>
<td>Not classified.</td>
</tr>
<tr>
<td>Rail transport notes</td>
<td>Not classified.</td>
</tr>
<tr>
<td>Sea transport notes</td>
<td>Not classified.</td>
</tr>
<tr>
<td>Air transport notes</td>
<td>Not classified.</td>
</tr>
</tbody>
</table>

**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**

**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>3</td>
</tr>
<tr>
<td>Supersedes date</td>
<td>17/03/2016</td>
</tr>
<tr>
<td>SDS number</td>
<td>10331</td>
</tr>
<tr>
<td>Risk phrases in full</td>
<td>R22 Harmful if swallowed.</td>
</tr>
</tbody>
</table>