1. Identification

Product identifier

Product Name  BioPlex 2200 Anti-CCP

Other means of identification

Catalog Number(s)  6653250

Recommended use of the chemical and restrictions on use

Recommended use  In vitro diagnostic

Restricted to professional users

Use according to package label instructions

Restrictions on use  No information available

Details of the supplier of the safety data sheet

Corporate Headquarters  Bio-Rad Laboratories Inc.

1000 Alfred Nobel Drive

Hercules, CA 94547

USA

Manufacturer Address  Bio-Rad Laboratories

6565-185th Ave NE

Redmond, WA 98052

USA

Legal Entity / Contact Address  Bio-Rad Laboratories (Canada) Ltd.

2403 Guenette

Montreal, Quebec H4R 2E9

Canada

Technical Service  1-800-361-1808

CSD_Techsupport@bio-rad.com

Emergency telephone number

2. Hazard(s) identification

Classification

Skin sensitization  Category 1A

Label elements

Warning

Hazard statements

May cause an allergic skin reaction
Precautionary Statements - Prevention
Avoid breathing dust/fume/gas/mist/vapors/spray
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response
Specific treatment (see .? on this label)

Skin
IF ON SKIN: Wash with plenty of water and soap
If skin irritation or rash occurs: Get medical advice/attention
Take off contaminated clothing and wash it before reuse

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Other information
Harmful to aquatic life with long lasting effects. Harmful to aquatic life.

1.49757 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
1.49757 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
10.58506 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
10.58506 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
1.49757 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Substance</th>
<th>Not applicable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixture</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEAD</td>
<td>One (1) 10 mL vial, containing dyed beads coated with Cyclic Citrullinated Peptide, plus Internal Standard beads (ISB), Serum Verification beads (SVB), and Reagent Blank beads (RBB) in buffer with glycerol and protein stabilizers (bovine). ProClin 300 (≤ 0.3%), sodium benzoate (≤ 0.1%) and sodium azide (&lt; 0.1%) as preservatives</td>
</tr>
<tr>
<td>CONJ</td>
<td>One (1) 5 mL vial, containing phycoerythrin conjugated murine monoclonal anti-human IgG antibody and phycoerythrin conjugated murine monoclonal anti-human FXIII antibody, in buffer with protein stabilizers (bovine). ProClin 300 (≤ 0.3%), sodium benzoate (≤ 0.1%) and sodium azide (&lt; 0.1%) as preservatives</td>
</tr>
<tr>
<td>DIL</td>
<td>One (1) 10 mL vial, containing buffer with protein stabilizers (bovine and murine). ProClin 300 (≤ 0.3%), sodium benzoate (≤ 0.1%) and sodium azide (&lt; 0.1%) as preservatives</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No</th>
<th>Weight-%</th>
<th>Hazardous Material Information Review Act registry number (HMIRA registry #)</th>
<th>Date HMIRA filed and date exemption granted (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2,3-Propanetriol</td>
<td>56-81-5</td>
<td>5 - 10</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Sodium azide</td>
<td>26628-22-8</td>
<td>0.3 - 0.99</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone</td>
<td>55965-84-9</td>
<td>0.001 - 0.01</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

4. First-aid measures
Description of first aid measures

**General advice**
Show this safety data sheet to the doctor in attendance.

**Inhalation**
Remove to fresh air.

**Eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

**Skin contact**
Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.

**Ingestion**
Rinse mouth thoroughly with water.

**Most important symptoms and effects, both acute and delayed**

**Symptoms**

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians**
May cause sensitization in susceptible persons. Treat symptomatically.

5. **Fire-fighting measures**

**Suitable Extinguishing Media**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media**
No information available.

**Specific hazards arising from the chemical**
Product is or contains a sensitizer. May cause sensitization by skin contact.

**Explosion data**
- Sensitivity to mechanical impact: None.
- Sensitivity to static discharge: None.

**Special protective equipment for fire-fighters**
Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. **Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions**
Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

**Methods and material for containment and cleaning up**

**Methods for containment**
Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up**
Pick up and transfer to properly labeled containers.

7. **Handling and storage**

**Precautions for safe handling**
Advice on safe handling
Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities
Storage Conditions
Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children. Store according to product and label instructions.

8. Exposure controls/personal protection

Control parameters
Exposure Limits

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Alberta</th>
<th>British Columbia</th>
<th>Ontario</th>
<th>Quebec</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2,3-Propanetriol 56-81-5</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 3 mg/m³</td>
<td>TWA: 10 mg/m³</td>
</tr>
<tr>
<td>Sodium azide 26628-22-8</td>
<td>Ceiling: 0.29 mg/m³ Ceiling: 0.11 ppm STEL: 0.3 mg/m³</td>
<td>Ceiling: 0.29 mg/m³ Ceiling: 0.11 ppm</td>
<td>CEV: 0.29 mg/m³ CEV: 0.11 ppm</td>
<td>Ceiling: 0.29 mg/m³ Ceiling: 0.11 ppm</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering controls
Shower
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection
Wear safety glasses with side shields (or goggles).

Hand protection
Wear suitable gloves.

Skin and body protection
Wear suitable protective clothing.

Respiratory protection
No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations
Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Plastic cartridge containing various bottles Dilute bead suspension in aqueous solution</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>light brown light pink light yellow</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>7-8</td>
<td></td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>No data available</td>
<td>None known</td>
</tr>
</tbody>
</table>
BioPlex 2200 Anti-CCP

Flash point: No data available
Evaporation rate: No data available
Flammability (solid, gas): No data available
Flammability Limit in Air
   Upper flammability or explosive limits: No data available
   Lower flammability or explosive limits: No data available
Vapor pressure: No data available
Vapor density: No data available
Relative density: No data available
Water solubility: No data available
Solubility in other solvents: No data available
Partition coefficient: No data available
Autoignition temperature: 215 °C / 419 °F
Decomposition temperature: None known
Kinematic viscosity: No data available
Dynamic viscosity: No data available

Other information
Explosive properties: Not applicable.
Oxidizing properties: Not applicable.
Softening point: Not applicable
Molecular weight: Not applicable
VOC content: Not applicable

10. Stability and reactivity

Reactivity: No information available.
Chemical stability: Stable under normal conditions.
Possibility of hazardous reactions: Avoid contact with metals. This product contains sodium azide. Sodium azide can react with copper, brass, lead, and solder in piping systems to form explosive compounds and toxic gases.
Conditions to avoid: None known based on information supplied.
Incompatible materials: Metals.
Hazardous decomposition products: None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation: Specific test data for the substance or mixture is not available.
Eye contact: Specific test data for the substance or mixture is not available.
Skin contact: May cause sensitization by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components).
Ingestion: Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

**Acute toxicity**

Numerical measures of toxicity

1.49757 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
1.49757 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
10.58506 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
10.58506 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
1.49757 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

### Component Information

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2,3-Propanetriol 56-81-5</td>
<td>= 12600 mg/kg (Rat)</td>
<td>&gt; 10 g/kg (Rabbit)</td>
<td>&gt; 2.75 mg/L (Rat) 4 h</td>
</tr>
<tr>
<td>Sodium azide 26628-22-8</td>
<td>= 27 mg/kg (Rat)</td>
<td>= 20 mg/kg (Rabbit)</td>
<td>0.054 - 0.52 mg/L (Rat) 4 h</td>
</tr>
<tr>
<td>5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone 55965-84-9</td>
<td>= 53 mg/kg (Rat)</td>
<td>= 87.12 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
</tbody>
</table>

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

- **Skin corrosion/irritation**: Based on available data, the classification criteria are not met.
- **Serious eye damage/eye irritation**: Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitization**: May cause sensitization by skin contact.
- **Germ cell mutagenicity**: Based on available data, the classification criteria are not met.
- **Carcinogenicity**: Based on available data, the classification criteria are not met.
- **Reproductive toxicity**: Based on available data, the classification criteria are not met.
- **STOT - single exposure**: Based on available data, the classification criteria are not met.
- **STOT - repeated exposure**: Based on available data, the classification criteria are not met.
- **Target organ effects**: Kidney, Respiratory system, Eyes, Skin.
- **Aspiration hazard**: Based on available data, the classification criteria are not met.

### 12. Ecological information

**Ecotoxicity**: Harmful to aquatic life with long lasting effects.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Toxicity to microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2,3-Propanetriol 56-81-5</td>
<td>-</td>
<td>LC50: 51 - 57mL/L (96h, Oncorhynchus mykiss)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sodium azide 26628-22-8</td>
<td>-</td>
<td>LC50: =0.8mg/L (96h, Oncorhynchus mykiss) LC50: =0.7mg/L (96h, Lepomis macrochirus) LC50: =5.46mg/L (96h, Pimephales promelas)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Persistence and degradability  No information available.
Bioaccumulation  There is no data for this product.

Component Information

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Partition coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2,3-Propanetriol 56-81-5</td>
<td>-1.75</td>
</tr>
<tr>
<td>5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone 55965-84-9</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Other adverse effects  No information available.

13. Disposal considerations

Waste treatment methods
Waste from residues/unused products  Flush pipes with water frequently if discarding solutions containing sodium azide into metal piping systems. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging  Do not reuse empty containers.

14. Transport information

TDG  Not regulated
DOT  Not regulated

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Regulations
The Montreal Protocol on Substances that Deplete the Ozone Layer  Not applicable
The Stockholm Convention on Persistent Organic Pollutants  Not applicable
The Rotterdam Convention  Not applicable

International Inventories
Contact supplier for inventory compliance status

16. Other information

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and chemical properties</th>
<th>Personal protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>0</td>
<td>0</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Physical hazards</th>
<th>Physical and chemical properties</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
Key or legend to abbreviations and acronyms used in the safety data sheet

<table>
<thead>
<tr>
<th>Legend</th>
<th>Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>TWA</td>
<td>TWA (time-weighted average)</td>
</tr>
<tr>
<td>Ceiling</td>
<td>Maximum limit value</td>
</tr>
<tr>
<td>STEL</td>
<td>STEL (Short Term Exposure Limit)</td>
</tr>
</tbody>
</table>

Key literature references and sources for data used to compile the SDS

- Agency for Toxic Substances and Disease Registry (ATSDR)
- U.S. Environmental Protection Agency ChemView Database
- European Food Safety Authority (EFSA)
- EPA (Environmental Protection Agency)
- Acute Exposure Guideline Level(s) (AEG(s))
- U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
- U.S. Environmental Protection Agency High Production Volume Chemicals
- Food Research Journal
- Hazardous Substance Database
- International Uniform Chemical Information Database (IUCLID)
- Japan GHS Classification
- Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
- NIOSH (National Institute for Occupational Safety and Health)
- National Library of Medicine's ChemID Plus (NLM CIP)
- National Library of Medicine's PubMed database (NLM PUBMED)
- National Toxicology Program (NTP)
- New Zealand's Chemical Classification and Information Database (CCID)
- Organization for Economic Co-operation and Development High Production Volume Chemicals Program
- Organization for Economic Co-operation and Development Screening Information Data Set
- RTECS (Registry of Toxic Effects of Chemical Substances)
- World Health Organization

Prepared By

Bio-Rad Laboratories, Environmental Health and Safety.

Revision date

12-Jan-2023

Revision Note

Reformatted and updated existing information.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.

End of Safety Data Sheet