# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Canada WHMIS 2015 which includes the amended Hazardous Products Act (HPA) and the Hazardous Products Regulation (HPR)

**Revision date** 12-Jan-2023 **Revision Number** 3

## 1. Identification

**Product identifier**

**Product Name** BioPlex 2200 Syphilis Total & RPR Reagent Pack

**Other means of identification**

**Catalog Number(s)** 12000650

**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.

1.38499 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
1.38499 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
9.8628 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
9.8628 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
1.38499 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

## 3. Composition/information on ingredients

**Substance**

Not applicable.

**Mixture**

| Chemical name | CAS No | Weight-% | Hazardous Material Information Review Act registry number (HMIRA registry #) | Date HMIRA filed and date exemption granted (if applicable) |
|---|---|---|---|---|
| 1,2,3-Propanetriol | 56-81-5 | 5 - 10 | - | |
| Sodium azide | 26628-22-8 | 0.01 - 0.099 | - | |
| 5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone | 55965-84-9 | 0.001 - 0.01 | - | |

## 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** Itching. Rashes. Hives.

**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**

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

**Appropriate engineering controls**

**Engineering controls** Showers
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**

**Physical state** Liquid
**Appearance** Plastic cartridge containing various bottles Dilute bead suspension in aqueous solution
**Color** light brown light pink light yellow
**Odor** No information available
**Odor threshold** No information available

| Property | Values | Remarks • Method |
|---|---|---|
| **pH** | 7-8 | |
| **Melting point / freezing point** | No data available | None known |
| **Boiling point / boiling range** | No data available | None known |
| **Flash point** | No data available | None known |
| **Evaporation rate** | No data available | None known |
| **Flammability (solid, gas)** | No data available | None known |
| **Flammability Limit in Air** | | None known |
| **Upper flammability or explosive limits** | No data available | |
| **Lower flammability or explosive limits** | No data available | |
| **Vapor pressure** | No data available | None known |
| **Vapor density** | No data available | None known |

| | | |
|---|---|---|
| **Relative density** | No data available | None known |
| **Water solubility** | No data available | None known |
| **Solubility in other solvents** | No data available | None known |
| **Partition coefficient** | No data available | None known |
| **Autoignition temperature** | 392.8 °C / 739 °F | None known |
| **Decomposition temperature** | | None known |
| **Kinematic viscosity** | No data available | None known |
| **Dynamic viscosity** | No data available | None known |

**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**

**Symptoms** Itching. Rashes. Hives.

**Acute toxicity**

**Numerical measures of toxicity**

1.38499 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
1.38499 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
9.8628 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

9.8628 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
1.38499 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

**Component Information**

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

**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.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

**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.

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|---|---|---|---|---|
| 1,2,3-Propanetriol<br>56-81-5 | - | LC50: 51 - 57mL/L (96h, Oncorhynchus mykiss) | - | - |
| Sodium azide<br>26628-22-8 | - | LC50: =0.8mg/L (96h, Oncorhynchus mykiss)<br>LC50: =0.7mg/L (96h, Lepomis macrochirus)<br>LC50: =5.46mg/L (96h, Pimephales promelas) | - | - |

**Persistence and degradability** No information available.

**Bioaccumulation** There is no data for this product.

**Component Information**

| Chemical name | Partition coefficient |
|---|---|
| 1,2,3-Propanetriol | -1.75 |

| | |
|---|---|
| 56-81-5 | |
| 5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone 55965-84-9 | 0.7 |

**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

| | | | | |
|---|---|---|---|---|
| **NFPA** | **Health hazards** 2 | **Flammability** 0 | **Instability** 0 | **Physical and chemical properties** - |
| **HMIS** | **Health hazards** 2 | **Flammability** 0 | **Physical hazards** 0 | **Personal protection** X |

**Key or legend to abbreviations and acronyms used in the safety data sheet**

**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

| | | | |
|---|---|---|---|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | * | Skin designation |

**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) (AEGL(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 Environment, Health, and Safety Publications
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** | Significant changes throughout SDS. Review all sections. |

**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**