



# 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 15-Jun-2023

Revision Number 1

## 1. Identification

### Product identifier

**Product Name** BioPlex 2200 25-OH Vitamin D Control Set

### Other means of identification

**Catalog Number(s)** 12006554

### 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

**24 Hour Emergency Phone Number** CHEMTREC Canada:1 (800) 424-9300

## 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

**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 in accordance with local, regional, national, and international regulations as applicable

**Other information**

Harmful to aquatic life.

### 3. Composition/information on ingredients

**Substance**

Not applicable.

**Mixture**

The product contains no substances which at their given concentration, are considered to be hazardous to health

Component	Description
Level 1 Control	BioPlex 2200 25-OH Vitamin D Level 1 Control – Two (2) 1.5 mL vials. The Level 1 controls are provided in a human serum matrix. All Controls contain preservatives including < 0.1% 5-Bromo-5-nitro-1,3-dioxane, ≤ 0.3% ProClin 950, ≤ 0.1% sodium benzoate
Level 2 Control	BioPlex 2200 25-OH Vitamin D Level 2 Control – Two (2) 1.5 mL vials. The Level 2 controls are provided in a human serum matrix. All Controls contain preservatives including < 0.1% 5-Bromo-5-nitro-1,3-dioxane, ≤ 0.3% ProClin 950, ≤ 0.1% sodium benzoate

Chemical name	CAS No	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
3(2H)-Isothiazolone, 2-methyl-	2682-20-4	0.01 - 0.099	-	

### 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	Contains human source material and / or potentially infectious components. 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. Wash skin with soap and water.
Ingestion	Call a physician. Contains human source material and / or potentially infectious components.

**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. Contains human source material and / or potentially infectious components.
--------------------	---

**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	Do not allow into any sewer, on the ground or into any body of water.
Methods for cleaning up	Clean contaminated surface thoroughly. Use: Disinfectant.

**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** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### **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** Follow universal and standard precautions for handling potentially infectious materials.

## **9. Physical and chemical properties**

### **Information on basic physical and chemical properties**

**Physical state** Liquid  
**Appearance** aqueous solution  
**Color** amber  
**Odor** No information available  
**Odor threshold** No information available

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
<b>pH</b>		
<b>Melting point / freezing point</b>	No data available	None known
<b>Boiling point / boiling range</b>	No data available	None known
<b>Flash point</b>	No data available	None known
<b>Evaporation rate</b>	No data available	None known
<b>Flammability (solid, gas)</b>	No data available	None known
<b>Flammability Limit in Air</b>		None known
<b>Upper flammability or explosive limits</b>	No data available	

<b>Lower flammability or explosive limits</b>	No data available	
<b>Vapor pressure</b>	No data available	None known
<b>Vapor density</b>	No data available	None known
<b>Relative density</b>	No data available	None known
<b>Water solubility</b>	Miscible in water	
<b>Solubility in other solvents</b>	No data available	None known
<b>Partition coefficient</b>	No data available	None known
<b>Autoignition temperature</b>	No data available	None known
<b>Decomposition temperature</b>		None known
<b>Kinematic viscosity</b>	No data available	None known
<b>Dynamic viscosity</b>	No data available	None known

**Other information**

<b>Explosive properties</b>	Not applicable.
<b>Oxidizing properties</b>	Not applicable.
<b>Softening point</b>	Not applicable
<b>Molecular weight</b>	Not applicable
<b>VOC content</b>	Not applicable

**10. Stability and reactivity**

<b>Reactivity</b>	No information available.
<b>Chemical stability</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions</b>	None under normal processing.
<b>Conditions to avoid</b>	None known based on information supplied.
<b>Incompatible materials</b>	None known based on information supplied.
<b>Hazardous decomposition products</b>	None known based on information supplied.

**11. Toxicological information****Information on likely routes of exposure****Product Information**

<b>Inhalation</b>	Specific test data for the substance or mixture is not available.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available.
<b>Skin contact</b>	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).
<b>Ingestion</b>	Specific test data for the substance or mixture is not available.

**Symptoms related to the physical, chemical and toxicological characteristics**

<b>Symptoms</b>	Itching. Rashes. Hives.
-----------------	-------------------------

**Acute toxicity****Numerical measures of toxicity**

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
3(2H)-Isothiazolone, 2-methyl- 2682-20-4	232 - 249 mg/kg ( Rat )  = 120 mg/kg ( Rat )	= 200 mg/kg ( Rabbit )	= 0.11 mg/L ( Rat ) 4 h

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

<b>Skin corrosion/irritation</b>	Based on available data, the classification criteria are not met.
<b>Serious eye damage/eye irritation</b>	Based on available data, the classification criteria are not met.
<b>Respiratory or skin sensitization</b>	May cause sensitization by skin contact.
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met.
<b>Carcinogenicity</b>	Based on available data, the classification criteria are not met.
<b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met.
<b>STOT - single exposure</b>	Based on available data, the classification criteria are not met.
<b>STOT - repeated exposure</b>	Based on available data, the classification criteria are not met.
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.

**12. Ecological information**

<b>Ecotoxicity</b>	Harmful to aquatic life.
<b>Persistence and degradability</b>	No information available.
<b>Bioaccumulation</b>	There is no data for this product.

**Component Information**

Chemical name	Partition coefficient
3(2H)-Isothiazolone, 2-methyl- 2682-20-4	-0.26

<b>Other adverse effects</b>	No information available.
------------------------------	---------------------------

**13. Disposal considerations****Waste treatment methods**

<b>Waste from residues/unused products</b>	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
<b>Contaminated packaging</b>	Do not reuse empty containers.

**14. Transport information**

<b><u>TDG</u></b>	Not regulated
-------------------	---------------

DOT Not regulated

IATA 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

<u>NFPA</u>	Health hazards 2	Flammability 0	Instability 0	Physical and chemical properties -
<u>HMIS</u>	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 15-Jun-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**