# SAFETY DATA SHEET

This safety data sheet complies with the requirements of:
SS586: 2008 (2014)

**Revision date** 11-Jul-2024 **Revision Number** 3

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

**Product identifier**

**Product Name** ANTIBODY PREPARATION - #20487

**Other means of identification**

**Safety data sheet number** 20487

**Pure substance/mixture** Mixture

Contains Sodium azide

**Recommended use of the chemical and restrictions on use**

**Recommended use** For research use only

**Uses advised against** 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**
Bio-Rad
Endeavour House
Langford Business Park
Kidlington
Oxford
OX5 1GE
United Kingdom
e-mail:
antibody_safetydatasheets@bio-rad.com

**Legal Entity / Contact Address**
Bio-Rad Laboratories (Singapore) PTE LTD
3A International Business Park #11-10/16
ICON@IBP
Singapore 609935

For further information, please contact

**Technical Service** 6424 0262
ctssingapore@bio-rad.com

**Emergency telephone number**

**24 Hour Emergency Phone Number** CHEMTREC Singapore: 65-31581349

## SECTION 2: Hazards identification

**GHS Classification**

| | |
|---|---|
| **Acute toxicity - Oral** | Category 4 |
| **Acute toxicity - Dermal** | Category 4 |

**Label elements**

**Signal word**
Danger

**Hazard statements**
H302 - Harmful if swallowed
H311 - Toxic in contact with skin

**Precautionary Statements - Prevention**
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
**Precautionary Statements - Response**
Call a POISON CENTRE or doctor if you feel unwell
Take off immediately all contaminated clothing and wash it before reuse
IF ON SKIN: Wash with plenty of water and soap
Rinse mouth
IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
**Precautionary Statements - Storage**
Store locked up

**Other hazards which do not result in classification**
Flammable chemical under pressure: May explode if heated May cause endocrine disruption in the environment

## SECTION 3: Composition/information on ingredients

**Substance**

Not applicable

**Mixture**

| Chemical name | EC No (EU Index No) | CAS No. | Weight-% |
|---|---|---|---|
| Sucrose | 200-334-9 | 57-50-1 | 50 - 100 |
| Sodium chloride | 231-598-3 | 7647-14-5 | 5 - 10 |
| Sodium azide | 247-852-1<br>(011-004-00-7) | 26628-22-8 | 1 - 2.5 |
| Non-hazardous ingredients | Proprietary | | Balance |

## SECTION 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 doctor.

| | |
|---|---|
| **Skin contact** | Wash off immediately with plenty of water for at least 15 minutes. If symptoms persist, call a doctor. |
| **Ingestion** | Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a doctor. |

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

| | |
|---|---|
| **Symptoms** | No information available. |

**For emergency responders**

| | |
|---|---|
| **Self-protection of the first aider** | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Wear personal protective clothing (see section 8). |

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

| | |
|---|---|
| **Note to doctors** | Treat symptomatically. |

## SECTION 5: Firefighting measures

**Suitable Extinguishing Media**

| | |
|---|---|
| **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**

| | |
|---|---|
| **Specific hazards arising from the chemical** | None known. |

**Special protective actions for fire-fighters**

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

## SECTION 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. |
| **Other information** | Refer to protective measures listed in Sections 7 and 8. |
| **For emergency responders** | Use personal protection recommended in Section 8. |

**Environmental precautions**

| | |
|---|---|
| **Environmental precautions** | Prevent further leakage or spillage if safe to do so. |

**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 labelled containers.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

**Reference to other sections** See section 8 for more information. See section 13 for more information.

## SECTION 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.

**General hygiene considerations** Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store locked up.

## SECTION 8: Exposure controls/personal protection

**Control parameters**

**Occupational exposure limits**

| Chemical name | Singapore | ACGIH TLV |
|---|---|---|
| Sucrose<br>57-50-1 | PEL: 10 mg/m³ | TWA: 10 mg/m³ |
| Sodium azide<br>26628-22-8 | STEL: 0.29 mg/m³<br>STEL: 0.11 ppm | Ceiling: 0.29 mg/m³ Sodium azide<br>Ceiling: 0.11 ppm Hydrazoic acid vapor |

**Biological occupational exposure limits**
This product, as supplied, does not contain any hazardous materials with biological 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).

**Skin and body protection** Wear suitable protective clothing. Long sleeved clothing.

**Hand protection** Wear suitable gloves.

**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.

**Environmental exposure controls** No information available.

## SECTION 9: Physical and chemical properties

**Information on basic physical and chemical properties**

| | |
|---|---|
| **Physical state** | Solid |
| **Appearance** | powder or cake, lyophilised |
| **Colour** | Varies |
| **Odour** | No information available. |
| **Odour threshold** | No information available |

| **Property** | **Values** | **Remarks • Method** |
|---|---|---|
| **pH** | | None known |
| **Melting point / freezing point** | No data available | None known |
| **Initial boiling point and boiling range** | No data available | None known |
| **Flash point** | No data available | None known |
| **Evaporation rate** | No data available | None known |
| **Flammability** | 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 | |
| **Vapour pressure** | No data available | None known |
| **Relative vapour density** | No data available | None known |
| **Relative density** | No data available | None known |
| **Water solubility** | Soluble in water | |
| **Solubility(ies)** | No data available | None known |
| **Partition coefficient** | No data available | None known |
| **Autoignition temperature** | No data available | None known |
| **Decomposition temperature** | | None known |
| **Kinematic viscosity** | No data available | None known |
| **Dynamic viscosity** | No data available | None known |

**Other information** No information available

## SECTION 10: Stability and reactivity

**Reactivity**

**Reactivity** No information available.

**Chemical stability**

**Stability** Stable under normal conditions.

**Explosion data**

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** None.

**Possibility of hazardous reactions** None under normal processing.

**Conditions to avoid**

**Conditions to avoid** None known based on information supplied.

**Incompatible materials**

**Incompatible materials** None known based on information supplied.

**Hazardous decomposition products**

**Hazardous decomposition products** None known based on information supplied.

## SECTION 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 be absorbed through the skin in harmful amounts. Harmful in contact with skin (based on components). |
| **Ingestion** | Specific test data for the substance or mixture is not available. Harmful if swallowed (based on components). |

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

**Symptoms** No information available.

**Acute toxicity**

**Numerical measures of toxicity**
No information available

**The following values are calculated based on chapter 3.1 of the GHS document**

| | |
|---|---|
| **ATEmix (oral)** | 1,706.50 mg/kg |
| **ATEmix (dermal)** | 1,346.30 mg/kg |

12.49 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
12.49 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

| | |
|---|---|
| **Oral LD50** | No information available |
| **Dermal LD50** | No information available |
| **Inhalation LC50** | No information available |
| **Inhalation LC50** | **No information available** |

**Component Information**

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| Sucrose | = 29700 mg/kg ( Rat ) | | |
| Sodium chloride | = 3550 mg/kg ( Rat ) | > 10000 mg/kg ( Rabbit ) | > 42 mg/L ( Rat ) 1 h |
| Sodium phosphate dibasic | = 17 g/kg ( Rat ) | | |
| Sodium azide | = 27 mg/kg ( Rat ) | = 20 mg/kg ( Rabbit ) | 0.054 - 0.52 mg/L ( Rat ) 4 h |
| Potassium chloride | = 2600 mg/kg ( Rat ) | | |
| Phosphoric acid, potassium salt (1:1) | = 3200 mg/kg ( Rat ) | | > 0.83 mg/L ( Rat ) 4 h |

**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 sensitisation** Based on available data, the classification criteria are not met.

**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.

**Aspiration hazard** Classification not possible.

## SECTION 12: Ecological information

**Ecotoxicity**

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

**Unknown aquatic toxicity** Contains 0 % of components with unknown hazards to the aquatic environment

| Chemical name | Algae/aquatic plants | Fish | Crustacea |
|---|---|---|---|
| Sodium chloride | - | LC50: 5560 - 6080mg/L (96h, Lepomis macrochirus)<br>LC50: =12946mg/L (96h, Lepomis macrochirus)<br>LC50: 6020 - 7070mg/L (96h, Pimephales promelas)<br>LC50: =7050mg/L (96h, Pimephales promelas)<br>LC50: 6420 - 6700mg/L (96h, Pimephales promelas)<br>LC50: 4747 - 7824mg/L (96h, Oncorhynchus mykiss) | EC50: =1000mg/L (48h, Daphnia magna)<br>EC50: 340.7 - 469.2mg/L (48h, Daphnia magna) |
| Sodium azide | - | 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**

**Persistence and degradability** No information available.

**Bioaccumulative potential**

**Bioaccumulation** No information available.

**Mobility**

**Mobility in soil** No information available.

**PBT and vPvB assessment** No information available

| Chemical name | PBT and vPvB assessment |
|---|---|
| Sodium chloride | The substance is not PBT / vPvB |
| Sodium azide | The substance is not PBT / vPvB |

**Other adverse effects**

**Other adverse effects** No information available

## SECTION 13: Disposal considerations

**Disposal methods**

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

## SECTION 14: Transport information

**ADR** Not regulated

**IMDG** Not regulated

**Transport in bulk according to Annex II of MARPOL and the IBC Code** No information available

**IATA** Not regulated

## SECTION 15: Regulatory information

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

**Singapore**

**Environmental Protection and Management (Hazardous Substances) Regulations**
Verify that licence requirements are met.

| Chemical name | Hazardous Substances | transport |
|---|---|---|
| Sodium azide | Exclusions: Air bag devices in motor vehicles | 0kg |

**Environmental Public Health Act**
Dispose of waste product or used containers according to local regulations.

**Hazardous Waste (Control of Export, Import and Transit) Act**
It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Take note that wastes may be subject to export, import, or transit controls pursuant to the Basel convention and/or local regulations implementing the Basel convention.

**Poison**
None Listed
**Workplace Safety and Health Act**
See section 8 for national exposure control parameters. Comply with the health and safety at work laws.

**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

## SECTION 16: Other information

**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 | Sk* | 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)
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
Australian 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)
U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
Organisation for Economic Co-operation and Development Screening Information Data Set
RTECS (Registry of Toxic Effects of Chemical Substances)
World Health Organization

**Label elements**
P264 - Wash face, hands and any exposed skin thoroughly after handling
P273 - Avoid release to the environment
P312 - Call a POISON CENTER or doctor if you feel unwell
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable
P280 - Wear protective gloves/protective clothing/eye protection/face protection

| | |
|---|---|
| **Issuing Date** | Bio-Rad Laboratories, Environmental Health and Safety |
| **Revision date** | 11-Jul-2024 |
| **Revision Note** | Significant changes throughout SDS. Review all sections. |

**This safety data sheet complies with the requirements of: SS586: 2008 (2014)**

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**End of Safety Data Sheet**