# SAFETY DATA SHEET

**Legal Entity / Contact Address** 

Bio-Rad Laboratories Pty Ltd

189 Bush Road

Albany Auckland New Zealand

Revision date 10-Jan-2023 Revision Number 1

**Section 1: Identification** 

**Product identifier** 

Product Name CONJUGATED AVIDIN/ STREPTAVIDIN - #10225

Other means of identification

Safety data sheet number 10225

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 HeadquartersManufacturerBio-Rad Laboratories Inc.Bio-Rad1000 Alfred Nobel DriveEndeavour HouseHercules, CA 94547Langford Business Park

Kidlington Oxford OX5 1GE United Kingdom

e-mail:

antibody\_safetydatasheets@bio-rad.com

**Technical Service** +64 9 415 2280 or 0508 805 500

sales.nz@bio-rad.com

Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC New Zealand: 64-98010034

GHS Classification

USA

Not classified Not a hazardous substance or mixture according to the Globally Harmonised System (GHS)

Label elements

**Hazard statements** 

Not classified Not a hazardous substance or mixture according to the Globally Harmonised System (GHS)

**Precautionary Statements - Disposal** 

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

Other hazards which do not result in classification

Contains animal source material. (Cattle). Harmful to aquatic life.

## Section 3: Composition/information on ingredients

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Chemical name	CAS No	Weight-%
1,2,3-Propanetriol	56-81-5	50 - 100

Non-hazardous ingredients	Proprietary	Balance

## Section 4: First-aid measures

#### Description of first aid measures

**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 skin with soap and water.

**Ingestion** Rinse mouth.

Most important symptoms and effects, both acute and delayed

**Symptoms** No information available.

Indication of any immediate medical attention and special treatment needed

Note to doctors Treat symptomatically.

## **Section 5: Fire-fighting measures**

Suitable Extinguishing Media

surrounding environment.

**Large Fire** CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the chemical

Specific hazards arising from the

chemical

No information available.

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.

## **Section 6: Accidental release measures**

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

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**Environmental precautions** 

**Environmental precautions** See Section 12 for additional Ecological Information.

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.

Precautions to prevent secondary hazards

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

## Section 7: Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

**Storage Conditions** Store according to product and label instructions.

Incompatible materials Metals.

## Section 8: Exposure controls/personal protection

#### **Control parameters**

#### **Exposure Limits**

Chemical name	New Zealand	Australia	ACGIH TLV	United Kingdom
1,2,3-Propanetriol	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	-	TWA: 10 mg/m <sup>3</sup>
56-81-5	_	_		STEL: 30 mg/m <sup>3</sup>

**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** No special protective equipment required.

**Hand protection** No special protective equipment required.

**Skin and body protection** No special protective equipment required.

exceeded or irritation is experienced, ventilation and evacuation may be required.

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No information available. **Environmental exposure controls** 

## Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state Liquid

**Appearance** Clear to semi-clear

Colour Varies

No information available. Odour **Odour threshold** No information available

**Property** Values Remarks • Method

pН None known 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 No data available

Lower flammability or explosive

limits

No data available

limits

No data available None known Vapour pressure Vapour density No data available None known No data available Relative density None known

Water solubility No data available Soluble in water

Solubility(ies) No data available None known Partition coefficient No data available None known

**Autoignition temperature** 392.78 °C

**Decomposition temperature** None known Kinematic viscosity No data available None known Dynamic viscosity No data available None known

No information available. **Explosive properties** Oxidising properties No information available.

Other information

Softening point No information available Molecular weight No information available No information available **VOC** content **Liquid Density** No information available No information available **Bulk density** Particle characteristics No information available

## Section 10: Stability and reactivity

Reactivity

No information available. Reactivity

Chemical stability

**Stability** Stable under normal conditions.

**Explosion data** 

Sensitivity to mechanical impact None.

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Sensitivity to static discharge None.

Possibility of hazardous reactions

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

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gases

Conditions to avoid

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

Incompatible materials

Incompatible materials Metals.

Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

## **Section 11: Toxicological information**

#### **Acute toxicity**

### 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** Specific test data for the substance or mixture is not available.

**Ingestion** Specific test data for the substance or mixture is not available.

**Symptoms** No information available.

**Acute toxicity** 

**Numerical measures of toxicity** 

Oral LD50No information availableDermal LD50No information availableInhalation LC50No information availableInhalation LC50No information available

**Component Information** 

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
1,2,3-Propanetriol	= 12600 mg/kg (Rat)	> 10 g/kg(Rabbit)	> 2.75 mg/L (Rat)4 h

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

**Skin corrosion/irritation**No information available.

Serious eye damage/eye irritation No information available.

**Respiratory or skin sensitisation** No information available.

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Germ cell mutagenicity No information available.

**Carcinogenicity** No information available.

Reproductive toxicity No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure**No information available.

**Aspiration hazard** No information available.

Data used to identify the health

effects

Refer to Section 16 for Key literature references and sources for data used to compile the

SDS.

# **Section 12: Ecological information**

**Ecotoxicity** 

Aquatic ecotoxicity Harmful to aquatic life.

**Unknown aquatic toxicity** 0 % of the mixture consists of component(s) of unknown hazards to the aquatic

environment.

Chemical name Algae/aquatic plants		Fish	Crustacea	
	1,2,3-Propanetriol	=	LC50: 51 - 57mL/L (96h,	-
	•		Oncorhynchus mykiss)	

**Terrestrial ecotoxicty** There is no data for this product.

Persistence and degradability No information available.

#### Bioaccumulative potential

#### **Bioaccumulation**

**Component Information** 

		Deutities William	
Chemical name		Partition coefficient	
	1,2,3-Propanetriol	-1.75	

#### Mobility in soil

**Mobility** No information available.

Other adverse effects

No information available.

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## **Section 13: Disposal considerations**

Waste treatment methods

Waste from residues/unused

products

Not applicable. Not Hazardous.

Dispose of in accordance with local regulations.

Dispose of waste in accordance with environmental legislation.

Flush pipes with water frequently if discarding solutions containing Sodium azide into metal

piping systems.

Contaminated packaging

Not applicable. Not Hazardous.

## **Section 14: Transport information**

IMDG Not regulated

Not regulated

Transport in bulk according to Annex II of MARPOL and the IBC Code

No information available

Special precautions for user

Please refer to the applicable dangerous goods regulations for additional information

## **Section 15: Regulatory information**

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

EPA New Zealand HSNO approval code or group standard

To be determined

**National regulations** 

There are no applicable tolerable exposure limits or environmental exposure limits according to the EPA Controls for Hazardous Substances

Certified handlers, tracking and controlled substance license

requirements

Certified handlers are required for some substances. This includes substances requiring a controlled substance license, and most explosives, vertebrates toxic agents, and certain fumigants. Acutely toxic substances which are a Category 1 or 2, such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information

Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information

Controlled substance licenses are required to possess certain explosives, vertebrate toxic agents and fumigants. See Part 7 of the Health and Safety at Work Regulation 2017 for

more information

## 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** 

NZIoC Contact supplier for inventory compliance status.

TSCA Contact supplier for inventory compliance status.

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DSL/NDSL
Contact supplier for inventory compliance status.
AICS
Contact supplier for inventory compliance status.
Contact supplier for inventory compliance status.

Legend:

**NZIoC** - New Zealand Inventory of Chemicals

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

### Section 16: Other information

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**Revision Note** Significant changes throughout SDS. Review all sections.

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

C Carcinogen

#### 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)

National Institute of Technology and Evaluation (NITE)

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)

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

World Health Organization

### **Disclaimer**

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**End of Safety Data Sheet**