



# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
GB/T 16483-2008, GB/T 17519-2013

**Product Name** CONJUGATED AVIDIN/ STREPTAVIDIN - #20500

**Revision date** 12-Jul-2024

**Revision Number** 4

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

### Product identifier

**Product Name** CONJUGATED AVIDIN/ STREPTAVIDIN - #20500

### Other means of identification

**Safety data sheet number** 20500

**Pure substance/mixture** Mixture

### 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 Ltd.  
1st and 2nd Floor, Lumpini 1 Building  
239/2, Rajdamri Road, Lumpini,  
Pathumwan, Bangkok 10330  
Thailand

**Technical Service** +66 2 652 8313  
ctsthailand@bio-rad.com

### Emergency telephone number

**24 Hour Emergency Phone Number** CHEMTREC Hong Kong: 800-968-793

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

**Recommended use** For research use only

## SECTION 2: Hazards identification

### **Emergency Overview**

May cause allergic skin reaction

**Appearance** Clear to semi-clear **Physical state** Liquid **Odour** No information available

### Classification of the substance or mixture

**Skin sensitisation** Category 1

**Label elements**



**Signal word**

Warning

**Hazard statements**

May cause an allergic skin reaction

**Precautionary statements**

**Prevention**

Avoid breathing dust/fume/gas/mist/vapours/spray  
Contaminated work clothing should not be allowed out of the workplace  
Wear protective gloves/protective clothing/eye protection/face protection  
IF ON SKIN: Wash with plenty of water and soap  
If skin irritation or rash occurs: Get medical advice/attention  
Take off all contaminated clothing and wash it before reuse

**Disposal**

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

**Physical and chemical hazards**

Not applicable.

**Health hazards**

Immediate Health Effects: Allergic reactions (sensitiser). Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing.  
Chronic effects: Not applicable.

**Environmental hazards**

Not applicable

**Other hazards which do not result in classification**

Not applicable

## SECTION 3: Composition/information on ingredients

**Substance**

Not applicable.

**Mixture**

Chemical name	Weight-%	CAS No.
3(2H)-Isothiazolone, 2-methyl-	0.001 - 0.01	2682-20-4

## SECTION 4: First aid measures

### **Description of necessary first aid measures**

<b>General advice</b>	Show this safety data sheet to the doctor in attendance.
<b>Inhalation</b>	Remove to fresh air.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor.
<b>Skin contact</b>	Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a doctor.
<b>Ingestion</b>	Rinse mouth thoroughly with water.
<b><u>Most important symptoms and effects, both acute and delayed</u></b>	Itching. Rashes. Hives.
<b><u>For emergency responders</u></b>	No information available.
<b><u>Note to doctors</u></b>	May cause sensitisation in susceptible persons. Treat symptomatically.

## **SECTION 5: Firefighting measures**

### **Extinguishing media**

<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Unsuitable extinguishing media</b>	No information available.
<b><u>Specific hazards arising from the chemical</u></b>	Product is or contains a sensitiser. May cause sensitisation by skin contact.
<b><u>Special protective actions for fire-fighters</u></b>	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**

<b>Personal precautions</b>	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.
<b>For emergency responders</b>	Use personal protection recommended in Section 8.
<b><u>Environmental precautions</u></b>	See Section 12 for additional Ecological Information.
<b><u>Methods and material for containment and cleaning up</u></b>	Prevent further leakage or spillage if safe to do so. Pick up and transfer to properly labelled containers.
<b><u>Precautions to prevent secondary hazards</u></b>	Clean contaminated objects and areas thoroughly observing environmental regulations.

## SECTION 7: Handling and storage

<b><u>Precautions for safe handling</u></b>	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 it before reuse. See Section 8 for information on appropriate personal protective equipment.
<b><u>Conditions for safe storage, including any incompatibilities</u></b>	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.
<b><u>Incompatible materials</u></b>	None known based on information supplied.

## SECTION 8: Exposure controls/personal protection

### **Occupational exposure limits**

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

**Note** See section 16 for terms and abbreviations

### **Biological occupational exposure limits**

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

### **Monitoring and observation processes**

No applicable information was found.

<b><u>Engineering controls</u></b>	Showers Eyewash stations Ventilation systems.
------------------------------------	---

### **Individual protection measures, such as personal protective equipment**

<b><u>Eye/face protection</u></b>	Wear safety glasses with side shields (or goggles).
<b><u>Skin and body protection</u></b>	Wear suitable protective clothing.
<b><u>Hand protection</u></b>	Wear suitable gloves.
<b><u>Respiratory protection</u></b>	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
<b><u>General hygiene considerations</u></b>	Handle in accordance with good industrial hygiene and safety practice.

## SECTION 9: Physical and chemical properties

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

<b><u>Appearance</u></b>	Clear to semi-clear
<b><u>Colour</u></b>	Varies
<b><u>Physical state</u></b>	Liquid
<b><u>Odour</u></b>	No information available
<b><u>Odour threshold</u></b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
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	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
<u>Additional information</u>		
Explosive properties	Not applicable	
Oxidising properties	Not applicable	

## SECTION 10: Stability and reactivity

<u>Stability</u>	Stable under normal conditions.
<u>Possibility of hazardous reactions</u>	None under normal processing.
Sensitivity to mechanical impact	None.
Sensitivity to static discharge	None.
<u>Conditions to avoid</u>	None known based on information supplied.
<u>Incompatible materials</u>	None known based on information supplied.
<u>Hazardous decomposition products</u>	None known based on information supplied.

## SECTION 11: Toxicological information

### Acute toxicity

#### Numerical measures of toxicity

No information available

Oral LD50	No information available
Dermal LD50	No information available
Inhalation LC50	No information available
Inhalation LC50	No information available

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
---------------	-----------	-------------	-----------------

3(2H)-Isothiazolone, 2-methyl-	232 - 249 mg/kg ( Rat ) = 120 mg/kg ( Rat )	= 200 mg/kg ( Rabbit )	= 0.11 mg/L ( Rat ) 4 h
--------------------------------	--	------------------------	-------------------------

<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 sensitisation</b>	May cause sensitisation 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>Specific target organ toxicity — single exposure</b>	Based on available data, the classification criteria are not met.
<b>Specific target organ toxicity — 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.

## SECTION 12: Ecological information

### Ecotoxicity

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

**Persistence and degradability** No information available.

**Bioaccumulative potential** There is no data for this product.

### **Component Information**

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

**Mobility in soil** No information available.

## SECTION 13: Disposal considerations

**Waste chemicals** 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

**IMDG** Not regulated  
**Transport in bulk according to** No information available

**Annex II of MARPOL and the IBC  
Code**

IATA Not regulated

JT/T 617 Not regulated

**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**

**National regulations**

**Law of the People's Republic of China on Prevention and Control of Occupational Diseases**

Catalogue of occupational hazard factors:	Not applicable.
Catalogue of occupational diseases:	Not applicable.

**Regulations on the Control over Safety of Hazardous Chemicals**

<u>Inventory of hazardous chemicals</u>	Not applicable.
---	-----------------

<u>GB 18218-2009 Identification of major hazard installations for dangerous chemicals</u>	Not applicable
---	----------------

<b>List of hazardous chemicals under priority management</b>	Not applicable
--	----------------

**Regulations on Labour Protection in Workplaces Where Toxic Substances Are Used**

Inventory of highly toxic goods	Not applicable
---------------------------------	----------------

**Regulations for Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals**

List of toxic chemicals severely restricted for import and export in China	Not applicable
--	----------------

**Measures for the Environmental Management of New Chemical Substances**

<b>IECSC - China Inventory of Existing Chemical Substances</b>	Contact supplier for inventory compliance status.
--	---

**International Regulations**

<b>The Montreal Protocol on Substances that Deplete the Ozone Layer</b>	Not applicable
---	----------------

<b>The Stockholm Convention on Persistent Organic Pollutants</b>	Not applicable
--	----------------

<b>The Rotterdam Convention</b>	Not applicable
---------------------------------	----------------

## SECTION 16: Other information

<b>Prepared By</b>	Bio-Rad Laboratories, Environmental Health and Safety
--------------------	---

<b>Revision date</b>	12-Jul-2024
----------------------	-------------

<b>Revision Note</b>	Significant changes throughout SDS. Review all sections.
----------------------	--

**Abbreviations and acronyms**

**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
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)  
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

**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**