



# SAFETY DATA SHEET

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

**Product Name** PROTEIN PREPARATION - #10165

**Revision date** 04-Nov-2022

**Revision Number** 1

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

### Product identifier

**Product Name** PROTEIN PREPARATION - #10165

### Other means of identification

**Safety data sheet number** 10165

**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

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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**

Irritating to skin

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

### Classification of the substance or mixture

**Skin corrosion/irritation** Category 3

### Label elements

**Signal word** Warning

**Hazard statements**  
Causes mild skin irritation

**Precautionary statements**  
**Response**

If skin irritation occurs: Get medical advice/attention

**Physical and chemical hazards**  
Not applicable.

**Health hazards**  
Immediate Health Effects: Causes skin irritation (pain, redness and swelling).  
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
Acetic acid	0.3 - 0.999	64-19-7

### SECTION 4: First aid measures

**Description of necessary first aid measures**

<b>General advice</b>	No hazards which require special first aid measures.
<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 skin with soap and water.
<b>Ingestion</b>	Rinse mouth thoroughly with water.
<b><u>Most important symptoms and effects, both acute and delayed</u></b>	Prolonged contact may cause redness and irritation.
<b><u>For emergency responders</u></b>	No information available.

Note to doctors Treat symptomatically.

## SECTION 5: Firefighting measures

### 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** No information available.

**Special protective actions 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** See section 8 for more information.

**For emergency responders** Use personal protection recommended in Section 8.

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

**Methods and material for containment and cleaning up** Prevent further leakage or spillage if safe to do so. Pick up and transfer to properly labelled containers.

**Precautions to prevent secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## SECTION 7: Handling and storage

**Precautions for safe handling** Handle in accordance with good industrial hygiene and safety practice. See Section 8 for information on appropriate personal protective equipment.

**Conditions for safe storage, including any incompatibilities** Store according to product and label instructions.

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

## SECTION 8: Exposure controls/personal protection

### Occupational exposure limits

Chemical name	China	ACGIH TLV
Acetic acid - 64-19-7	TWA: 10 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>	STEL: 15 ppm TWA: 10 ppm

**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.

#### 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.
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.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.

### **SECTION 9: Physical and chemical properties**

#### Information on basic physical and chemical properties

Appearance	Clear to semi-clear
Colour	Varies
Physical state	Liquid
Odour	No information available
Odour threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	= 4.5	
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	
Vapour pressure	No data available	None known
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	463	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

#### Additional information

Explosive properties	Not applicable
Oxidising properties	Not applicable

**SECTION 10: Stability and reactivity**

**Stability** Stable under normal conditions.

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

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** None.

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

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

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

**SECTION 11: Toxicological information**

**Acute toxicity**

**Numerical measures of toxicity**

**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
Acetic acid	= 3310 mg/kg ( Rat )	= 1060 mg/kg ( Rabbit )	= 11.4 mg/L ( Rat ) 4 h

**Skin corrosion/irritation** Classification based on data available for ingredients. May cause skin irritation.

**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.

**Specific target organ toxicity — single exposure** Based on available data, the classification criteria are not met.

**Specific target organ toxicity — repeated exposure** Based on available data, the classification criteria are not met.

**Aspiration hazard** 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

Chemical name	Algae/aquatic plants	Fish	Crustacea
Acetic acid	-	LC50: =79mg/L (96h, Pimephales promelas) LC50: =75mg/L (96h, Lepomis macrochirus)	EC50: =65mg/L (48h, Daphnia magna)

**Persistence and degradability** No information available.

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

#### Component Information

Chemical name	Partition coefficient
Acetic acid	-0.17

**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 Annex II of MARPOL and the IBC Code** No information available

**IATA** Not regulated

**China** 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: Listed. Chemical hazards.  
 Catalogue of occupational diseases: Listed. Occupational poisoning.

Chemical name	Category
Acetic acid	Chemical hazards

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

#### Inventory of hazardous chemicals

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed. Weight-%  
 1

Chemical name	Inventory of hazardous chemicals
Acetic acid	Listed

GB 18218-2009 Identification of major hazard installations for dangerous chemicals Not applicable

List of hazardous chemicals under priority management 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

IECSC - China Inventory of Existing Chemical Substances Contact supplier for inventory compliance status.

#### 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

### SECTION 16: Other information

Prepared By Bio-Rad Laboratories, Environmental Health and Safety

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Revision Note 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	*	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) (AELG(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

**Disclaimer**

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**End of Safety Data Sheet**