

# SAFETY DATA SHEET

This safety data sheet complies with the requirements of: \$\$586: 2008 (2014)

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Bio-Rad Laboratories Ltd.

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

**Product identifier** 

Product Name PROTEIN PREPARATION - #10591

Other means of identification

Safety data sheet number 10591

Pure substance/mixture Mixture

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

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# **SECTION 2: Hazards identification**

#### GHS Classification

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS): SS586: 2008 (2014)

#### Label elements

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS): SS586: 2008 (2014)

Other hazards which do not result in classification

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# SECTION 3: Composition/information on ingredients

#### **Substance**

Not applicable

## **Mixture**

Chemical name	EC No	CAS No	Weight-%
Sodium chloride	231-598-3	7647-14-5	2.5 - 5

Non-hazardous Proprietary Balance

ingredients

## **SECTION 4: First aid measures**

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

General advice No hazards which require special 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 physician.

Skin contact Wash skin with soap and water. In the case of skin irritation or allergic reactions see a

physician.

**Ingestion** Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed

**Symptoms** No information available.

For emergency responders

**Self-protection of the first aider** No information available.

Indication of any immediate medical attention and special treatment needed

**Note to physicians** Treat symptomatically.

# **SECTION 5: Firefighting measures**

**Suitable Extinguishing Media** 

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 Ensure adequate ventilation.

**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 labeled 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 Ensure adequate ventilation.

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

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place.

## SECTION 8: Exposure controls/personal protection

## **Control parameters**

Occupational exposure limits This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies.

## **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.

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.

No information available. **Environmental exposure controls** 

# 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

Hq 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

limits

Lower flammability or explosive No data available

limits

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** 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

No information available. Reactivity

Chemical stability

Stable under normal conditions. Stability

**Explosion data** 

Sensitivity to mechanical impact None. Sensitivity to static discharge

Possibility of hazardous reactions None under normal processing.

Conditions to avoid

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**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**

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**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 related to the physical, chemical and toxicological characteristics

**Symptoms** No information available.

**Acute toxicity** 

Numerical measures of toxicity

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

**ATEmix (oral)** 50,177.40 mg/kg

Oral LD50

Dermal LD50

Inhalation LC50

Inhalation LC50

No information available
No information available
No information available

**Component Information** 

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium chloride	= 3 g/kg ( Rat )	> 10000 mg/kg ( Rabbit )	> 42 mg/L (Rat) 1 h
Sodium phosphate dibasic	= 17 g/kg (Rat)		
Phosphoric acid, potassium salt (1:1)	= 3200 mg/kg (Rat)		> 0.83 mg/L (Rat) 4 h
Potassium chloride	= 2600 mg/kg (Rat)		

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

Skin corrosion/irritationBased on available data, the classification criteria are not met.Serious eye damage/eye irritationBased on available data, the classification criteria are not met.Respiratory or skin sensitizationBased on available data, the classification criteria are not met.

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**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**

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

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

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

#### Other adverse effects

Other adverse effects No information available

# **SECTION 13: Disposal considerations**

#### Waste treatment 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 No information available

Annex II of MARPOL and the IBC

Code

IATA Not regulated

# **SECTION 15: Regulatory information**

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

Singapore

#### **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

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 \* 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

Label elements

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Revision Note Significant changes throughout SDS. Review all sections.

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#### Disclaimer

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**End of Safety Data Sheet**