

# KIT SAFETY DATA SHEET



**Kit Product Name** MP TGX Gel with Protein Standard  
**Kit Catalogue Number(s)** 4561023DC, 4561024DC, 4561025DC, 4561026DC, 4561033DC, 4561034DC, 4561035DC, 4561036DC, 4561043DC, 4561044DC, 4561045DC, 4561046DC, 4561083DC, 4561095DC

**Revision date** 10-May-2023

## Kit Contents

| Catalogue Number(s)                                                                                                                                                                                                                                                                                             | Product Name                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| 4561021, 4561023, 4561025, 4561026, 4561029, 4561031, 4561033, 4561035, 4561036, 4561039, 4561041, 4561043, 4561045, 4561046, 4561049, 4561021S, 4561023S, 4561025S, 4561026S, 4561029S, 4561031S, 4561033S, 4561035S, 4561036S, 4561039S, 4561041S, 4561043S, 4561045S, 4561046S, 4561049S, 10016751, 10016919 | Mini-Protean TGX Gels 7.5%, 10%, 10% MP, 12%, |
| 1610374, 1610374S, 1610394, 10022171, 1610374EDU, 1610374TGX                                                                                                                                                                                                                                                    | Precision Plus Protein Dual Color Standards   |



# SAFETY DATA SHEET

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

**Product Name** Mini-Protean TGX Gels 7.5%, 10%, 10% MP, 12%,

**Revision date** 10-May-2023

**Revision Number** 1

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

### Product identifier

**Product Name** Mini-Protean TGX Gels 7.5%, 10%, 10% MP, 12%,

**Catalogue Number(s)** 4561021, 4561023, 4561025, 4561026, 4561029, 4561031, 4561033, 4561035, 4561036, 4561039, 4561041, 4561043, 4561045, 4561046, 4561049, 4561021S, 4561023S, 4561025S, 4561026S, 4561029S, 4561031S, 4561033S, 4561035S, 4561036S, 4561039S, 4561041S, 4561043S, 4561045S, 4561046S, 4561049S, 10016751, 10016919

### Other means of identification

**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 Laboratories, Life Science Group  
2000 Alfred Nobel Drive  
Hercules, California 94547  
USA

#### 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** Laboratory chemicals

## SECTION 2: Hazards identification

### **Emergency Overview**

Irritating to skin

**Appearance** gel **Physical state** Solid **Odour** Odourless

### Classification of the substance or mixture

**Skin corrosion/irritation** Category 3

### Label elements

**Signal word** Warning

**Hazard statements**

**Product Name** Mini-Protean TGX Gels 7.5%, 10%, 10%  
MP, 12%,

**Revision date** 10-May-2023

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  |
|-------------------------|------------|---------|
| 1,2,3-Propanetriol      | 2.5 - 5    | 56-81-5 |
| Acetic acid, 2-hydroxy- | 0.3 - 0.99 | 79-14-1 |

### 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.<br>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.                                                                                            |
| <b><u>Note to doctors</u></b>                                             | 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>   | No information available.                                                                                                             |
| <b><u>Special protective actions for fire-fighters</u></b> | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.<br>Use personal protection equipment. |

## SECTION 6: Accidental release measures

### **Personal precautions, protective equipment and emergency procedures**

|                                                                    |                                                                                                             |
|--------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| <b>Personal precautions</b>                                        | See section 8 for more information.                                                                         |
| <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. See Section 8 for information on appropriate personal protective equipment. |
| <b><u>Conditions for safe storage, including any incompatibilities</u></b> | Store according to product and label instructions.                                                                                                 |
| <b>Incompatible materials</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.

### **Engineering controls**

Showers  
Eyewash stations  
Ventilation systems.

**Product Name** Mini-Protean TGX Gels 7.5%, 10%, 10%  
MP, 12%,

**Revision date** 10-May-2023

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

|                                       |                                                                                                                                                                          |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Eye/face protection</b>            | Wear safety glasses with side shields (or goggles).                                                                                                                      |
| <b>Skin and body protection</b>       | Wear suitable protective clothing.                                                                                                                                       |
| <b>Hand protection</b>                | Wear suitable gloves.                                                                                                                                                    |
| <b>Respiratory protection</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>General hygiene considerations</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>Appearance</b>      | gel                      |
| <b>Colour</b>          | clear                    |
| <b>Physical state</b>  | Solid                    |
| <b>Odour</b>           | Odourless                |
| <b>Odour threshold</b> | No information available |

| <b><u>Property</u></b>                        | <b><u>Values</u></b> | <b><u>Remarks • Method</u></b> |
|-----------------------------------------------|----------------------|--------------------------------|
| <b>pH</b>                                     |                      | None known                     |
| <b>Melting point / freezing point</b>         | No data available    | None known                     |
| <b>Boiling point / boiling range</b>          | 100 °C               |                                |
| <b>Flash point</b>                            | No data available    | None known                     |
| <b>Evaporation rate</b>                       | No data available    | None known                     |
| <b>Flammability (solid, gas)</b>              | No data available    | None known                     |
| <b>Flammability Limit in Air</b>              |                      | None known                     |
| <b>Upper flammability or explosive limits</b> | No data available    |                                |
| <b>Lower flammability or explosive limits</b> | No data available    |                                |
| <b>Vapour pressure</b>                        | No data available    | None known                     |
| <b>Vapour density</b>                         | No data available    | None known                     |
| <b>Relative density</b>                       | No data available    | None known                     |
| <b>Water solubility</b>                       | Soluble in water     |                                |
| <b>Solubility(ies)</b>                        | No data available    | None known                     |
| <b>Partition coefficient</b>                  | No data available    | None known                     |
| <b>Autoignition temperature</b>               | No data available    | None known                     |
| <b>Decomposition temperature</b>              | No data available    | None known                     |
| <b>Kinematic viscosity</b>                    | No data available    | None known                     |
| <b>Dynamic viscosity</b>                      | No data available    | None known                     |

#### **Additional information**

|                             |                |
|-----------------------------|----------------|
| <b>Explosive properties</b> | Not applicable |
| <b>Oxidising properties</b> | Not applicable |

### **SECTION 10: Stability and reactivity**

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

**Product Name** Mini-Protean TGX Gels 7.5%, 10%, 10%  
MP, 12%,

**Revision date** 10-May-2023

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

## SECTION 11: Toxicological information

### Acute toxicity

### Numerical measures of toxicity

#### 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                          |
| Acetic acid, 2-hydroxy- | = 1950 mg/kg ( Rat )  | -                    | > 5.2 mg/L ( Rat ) 4 h<br>= 3.6 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.

**Target organ effects** Kidney. Respiratory system. Eyes. Skin.

**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 |
|-------------------------|----------------------|-------------------------------------------------|-----------|
| 1,2,3-Propanetriol      | -                    | LC50: 51 - 57mL/L (96h,<br>Oncorhynchus mykiss) | -         |
| Acetic acid, 2-hydroxy- | -                    | LC50: >5000mg/L (96h,<br>Brachydanio rerio)     | -         |

**Persistence and degradability** No information available.

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

#### Component Information

| Chemical name | Partition coefficient |
|---------------|-----------------------|
|---------------|-----------------------|

**Product Name** Mini-Protean TGX Gels 7.5%, 10%, 10%  
MP, 12%,

**Revision date** 10-May-2023

|                         |       |
|-------------------------|-------|
| 1,2,3-Propanetriol      | -1.75 |
| Acetic acid, 2-hydroxy- | 0.3   |

**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

**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, 2-hydroxy- | Chemical hazards |

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

**Inventory of hazardous chemicals** Not applicable.

**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

**Product Name** Mini-Protean TGX Gels 7.5%, 10%, 10%  
MP, 12%,

**Revision date** 10-May-2023

**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

**Revision date** 10-May-2023

**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) (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)  
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**





# SAFETY DATA SHEET

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

**Product Name** Precision Plus Protein Dual Color Standards

**Revision date** 18-Jan-2022

**Revision Number** 1.1

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

### Product identifier

**Product Name** Precision Plus Protein Dual Color Standards

**Catalogue Number(s)** 1610374, 1610374S, 1610394, 10022171, 1610374EDU, 1610374TGX

### Other means of identification

**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 Laboratories, Life Science Group  
2000 Alfred Nobel Drive  
Hercules, California 94547  
USA

#### 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** Laboratory chemicals

## SECTION 2: Hazards identification

### **Emergency Overview**

Irritating to skin  
Irritating to eyes

**Appearance** No information available

**Physical state** Liquid

**Odour** Rotten

### Classification of the substance or mixture

|                                                              |             |
|--------------------------------------------------------------|-------------|
| <b>Acute toxicity - Inhalation (Dusts/Mists)</b>             | Category 5  |
| <b>Skin corrosion/irritation</b>                             | Category 3  |
| <b>Serious eye damage/eye irritation</b>                     | Category 2A |
| <b>Hazardous to the Aquatic Environment - Acute Hazard</b>   | Category 3  |
| <b>Hazardous to the Aquatic Environment - Chronic Hazard</b> | Category 3  |

**Label elements**



**Signal word**

Warning

**Hazard statements**

May be harmful if inhaled

Causes mild skin irritation

Causes serious eye irritation

Harmful to aquatic life with long lasting effects

**Precautionary statements**

**Prevention**

Wash face, hands and any exposed skin thoroughly after handling

Avoid release to the environment

Wear protective gloves/protective clothing/eye protection/face protection

**Response**

IF INHALED: Call a POISON CENTER or doctor if you feel unwell

If skin irritation occurs: Get medical advice/attention

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

**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: If symptoms persist, call a doctor. Causes skin irritation (pain, redness and swelling). Causes severe irritation (tears, blurred vision and redness). Irritating, but will not permanently injure eye tissue.

Chronic effects: Not applicable.

**Environmental hazards**

This material is a water pollutant. Keep out of drains, sewers, ditches and waterways. Minimise use of water to prevent environmental contamination

**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   |
|-----------------------|----------|----------|
| 1,2,3-Propanetriol    | 20 - 35  | 56-81-5  |
| Sodium lauryl sulfate | 1 - 2.5  | 151-21-3 |

## **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. If breathing has stopped, give artificial respiration. Get medical attention immediately. Get medical attention immediately if symptoms occur.                                                                                                                 |
| <b>Eye contact</b>                                                        | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists. |
| <b>Skin contact</b>                                                       | Wash skin with soap and water.                                                                                                                                                                                                                                                      |
| <b>Ingestion</b>                                                          | Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get medical attention.                                                                                                                  |
| <b><u>Most important symptoms and effects, both acute and delayed</u></b> | May cause redness and tearing of the eyes. Burning sensation. Prolonged contact may cause redness and irritation. Coughing and/ or wheezing.                                                                                                                                        |
| <b><u>For emergency responders</u></b>                                    | Avoid contact with skin, eyes or clothing. Avoid breathing vapours or mists. Use personal protective equipment as required. See section 8 for more information.                                                                                                                     |
| <b><u>Note to doctors</u></b>                                             | 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>   | No information available.                                                                                                          |
| <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. Use personal protective equipment as required. Ensure adequate ventilation. Avoid breathing vapours or mists. |
| <b>Other information</b>                                           | Refer to protective measures listed in Sections 7 and 8.                                                                                                 |
| <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

### Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Avoid breathing vapours or mists. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. See Section 8 for information on appropriate personal protective equipment.

### Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store according to product and label instructions.

#### **Incompatible materials**

Metals.

## 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.

### 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**

Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

#### **Appearance**

##### **Colour**

blue

##### **Physical state**

Liquid

#### **Odour**

Rotten

#### **Odour threshold**

No information available

| <u>Property</u>                        | <u>Values</u>     | <u>Remarks • Method</u> |
|----------------------------------------|-------------------|-------------------------|
| pH                                     |                   |                         |
| Melting point / freezing point         | No data available | None known              |
| Boiling point / boiling range          | 100 °C            |                         |
| Flash point                            | 160 °C            |                         |
| 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                       | Miscible in water |                         |
| Solubility(ies)                        | No data available | None known              |
| Partition coefficient                  | No data available | None known              |
| Autoignition temperature               | No data available |                         |
| 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> | 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 gases. |
| <u>Sensitivity to mechanical impact</u>   | None.                                                                                                                                                                                     |
| <u>Sensitivity to static discharge</u>    | None.                                                                                                                                                                                     |
| <u>Conditions to avoid</u>                | Excessive heat.                                                                                                                                                                           |
| <u>Incompatible materials</u>             | Metals.                                                                                                                                                                                   |
| <u>Hazardous decomposition products</u>   | None known based on information supplied.                                                                                                                                                 |

## SECTION 11: Toxicological information

### Acute toxicity

#### Numerical measures of toxicity

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

|                               |                 |
|-------------------------------|-----------------|
| ATEmix (oral)                 | 64,400.00 mg/kg |
| ATEmix (inhalation-dust/mist) | 48.70 mg/l      |

#### Unknown acute toxicity

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

#### 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 |

|                       |                      |                        |                                      |
|-----------------------|----------------------|------------------------|--------------------------------------|
| Sodium lauryl sulfate | = 1288 mg/kg ( Rat ) | = 200 mg/kg ( Rabbit ) | > 3900 mg/m <sup>3</sup> ( Rat ) 1 h |
|-----------------------|----------------------|------------------------|--------------------------------------|

|                                                           |                                                                                        |
|-----------------------------------------------------------|----------------------------------------------------------------------------------------|
| <b>Skin corrosion/irritation</b>                          | May cause skin irritation. Classification based on data available for ingredients.     |
| <b>Serious eye damage/eye irritation</b>                  | Classification based on data available for ingredients. Causes serious eye irritation. |
| <b>Respiratory or skin sensitisation</b>                  | Based on available data, the classification criteria are not met.                      |
| <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>Target organ effects</b>                               | Kidney. Respiratory system. Eyes. Skin.                                                |
| <b>Aspiration hazard</b>                                  | Based on available data, the classification criteria are not met.                      |

## SECTION 12: Ecological information

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

**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, <i>Oncorhynchus mykiss</i> )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | -                                           |
| Sodium lauryl sulfate | EC50: =53mg/L (72h, <i>Desmodesmus subspicatus</i> )<br>EC50: 30 - 100mg/L (96h, <i>Desmodesmus subspicatus</i> )<br>EC50: =117mg/L (96h, <i>Pseudokirchneriella subcapitata</i> )<br>EC50: 3.59 - 15.6mg/L (96h, <i>Pseudokirchneriella subcapitata</i> ) | LC50: 15 - 18.9mg/L (96h, <i>Pimephales promelas</i> )<br>LC50: 8 - 12.5mg/L (96h, <i>Pimephales promelas</i> )<br>LC50: 22.1 - 22.8mg/L (96h, <i>Pimephales promelas</i> )<br>LC50: 4.3 - 8.5mg/L (96h, <i>Oncorhynchus mykiss</i> )<br>LC50: =4.62mg/L (96h, <i>Oncorhynchus mykiss</i> )<br>LC50: =4.2mg/L (96h, <i>Oncorhynchus mykiss</i> )<br>LC50: =7.97mg/L (96h, <i>Brachydanio rerio</i> )<br>LC50: 9.9 - 20.1mg/L (96h, <i>Brachydanio rerio</i> )<br>LC50: 4.06 - 5.75mg/L (96h, <i>Lepomis macrochirus</i> )<br>LC50: 4.2 - 4.8mg/L (96h, <i>Lepomis macrochirus</i> )<br>LC50: =4.5mg/L (96h, <i>Lepomis macrochirus</i> )<br>LC50: 5.8 - 7.5mg/L (96h, <i>Pimephales promelas</i> )<br>LC50: 10.2 - 22.5mg/L (96h, | EC50: =1.8mg/L (48h, <i>Daphnia magna</i> ) |

|  |  |                                                                                                                                                                                                                                     |  |
|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|  |  | Pimephales promelas<br>LC50: 6.2 - 9.6mg/L (96h,<br>Pimephales promelas)<br>LC50: 13.5 - 18.3mg/L (96h,<br>Poecilia reticulata)<br>LC50: 10.8 - 16.6mg/L (96h,<br>Poecilia reticulata)<br>LC50: =1.31mg/L (96h, Cyprinus<br>carpio) |  |
|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

**Persistence and degradability** No information available.

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

**Component Information**

| Chemical name         | Partition coefficient |
|-----------------------|-----------------------|
| 1,2,3-Propanetriol    | -1.75                 |
| Sodium lauryl sulfate | 1.6                   |

**Mobility in soil** No information available.

**SECTION 13: Disposal considerations**

**Waste chemicals** Flush pipes with water frequently if discarding solutions containing Sodium azide into metal piping systems. 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

**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: Not applicable.  
Catalogue of occupational diseases: Not applicable.

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

Inventory of hazardous chemicals Not applicable.

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

**List of hazardous chemicals under priority management** Not applicable

**Product Name** Precision Plus Protein Dual Color Standards

**Revision date** 18-Jan-2022

**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

**Revision date** 18-Jan-2022

**Revision Note** Reformatted and updated existing information.

**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  
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  
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



**Product Name** Precision Plus Protein Dual Color  
Standards

**Revision date** 18-Jan-2022

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materials or in any process, unless specified in the text

**End of Safety Data Sheet**