KIT SAFETY DATA SHEET



Kit Product Name MP TGX Gel with Protein Standard

4561023DC, 4561024DC, 4561025DC, 4561026DC, 4561033DC, 4561034DC, 4561035DC, 4561036DC, 4561043DC, 4561044DC, 4561045DC, 4561083DC, 4561095DC Kit Catalog Number(s)

Revision date 10-May-2023

Kit Contents

Catalog Number(s)	Product Name
4561021, 4561023, 4561025, 4561026, 4561029, 4561031, 4561033,	Mini-Protean TGX Gels 7.5%, 10%, 10% MP, 12%,
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	
1610374, 1610374S, 1610394, 10022171, 1610374EDU, 1610374TGX	Precision Plus Protein Dual Color Standards

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SAFETY DATA SHEET

Legal Entity / Contact Address

1329 Meyerside Drive

Canada

Mississauga, ON L5T 1C9

This safety data sheet was created pursuant to the requirements of:

Canada WHMIS 2015 which includes the amended Hazardous Products Act (HPA) and the Hazardous Products Regulation (HPR)

Revision date 10-May-2023 Revision Number 1

1. Identification

Product identifier

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

Other means of identification

4561021, 4561023, 4561025, 4561026, 4561029, 4561031, 4561033, 4561035, 4561036, Catalog Number(s)

4561039, 4561041, 4561043, 4561045, 4561046, 4561049, 4561021S, 4561023S,

4561025S, 4561026S, 4561029S, 4561031S, 4561033S, 4561035S, 4561036S, 4561039S,

4561041S, 4561043S, 4561045S, 4561046S, 4561049S, 10016751, 10016919

Recommended use of the chemical and restrictions on use

Recommended use Laboratory chemicals

Restrictions on use No information available

Details of the supplier of the safety data sheet

Corporate Headquarters Manufacturer Address Bio-Rad Laboratories Inc. Bio-Rad Laboratories, Life Science Group Bio-Rad Laboratories (Canada) Ltd. 1000 Alfred Nobel Drive 2000 Alfred Nobel Drive

Hercules, CA 94547 Hercules, California 94547 USA

USA

Technical Service 1-800-361-1808 support@bio-rad.com

Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Canada:1 (800) 424-9300

2. Hazard(s) identification

Classification

Not classified

Label elements

Hazard statements

Not classified.

Other information

Causes mild skin irritation.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Chemical name	CAS No	Weight-%	Hazardous Material	Date HMIRA filed and
			Information Review Act date exemption gr	
			registry number (if applicable	
			(HMIRA registry #)	
1,2,3-Propanetriol	56-81-5	2.5 - 5	-	

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.

Ingestion Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed

Symptoms Prolonged contact may cause redness and irritation.

Indication of any immediate medical attention and special treatment needed

Note to physiciansTreat symptomatically.

5. Fire-fighting measures

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the

chemical

None known.

Explosion data

Sensitivity to mechanical impact None. Sensitivity to static discharge None.

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions See section 8 for more 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.

7. Handling and storage

Precautions for safe handling

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

Conditions for safe storage, including any incompatibilities

Storage Conditions Store according to product and label instructions.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

	Chemical name	Alberta	British Columbia	Ontario	Quebec
I	1,2,3-Propanetriol	TWA: 10 mg/m ³	TWA: 10 mg/m ³		TWA: 10 mg/m ³
	56-81-5	_	TWA: 3 mg/m ³		

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).

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing.

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

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

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical stateSolidAppearancegelColorclear

Odor Odorless

Odor threshold 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

Boiling point / boiling range 100 °C / 212 °F

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

Vapor pressureNo data availableNone knownVapor densityNo data availableNone knownRelative densityNo data availableNone known

Water solubility Soluble in water

Solubility in other solventsNo data availableNone knownPartition coefficientNo data availableNone knownAutoignition temperatureNo data availableNone knownDecomposition temperatureNone known

Kinematic viscosity

No data available

None known

No data available

None known

None known

Other information

Explosive propertiesNot applicable.Oxidizing propertiesNot applicable.Softening pointNot applicableMolecular weightNot applicableVOC contentNot applicable

10. Stability and reactivity

Reactivity No information available.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid None known based on information supplied.

Incompatible materialsNone known based on information supplied.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

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

Eye contact Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available. Causes mild skin irritation.

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

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms

Prolonged contact may cause redness and irritation.

Acute toxicity

Numerical measures of toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
1,2,3-Propanetriol 56-81-5	= 12600 mg/kg (Rat)	> 10 g/kg(Rabbit)	> 2.75 mg/L (Rat)4 h

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

Skin corrosion/irritation 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 sensitization 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.

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.

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

Aspiration hazard Based on available data, the classification criteria are not met.

12. Ecological information

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
1,2,3-Propanetriol	-	LC50: 51 - 57mL/L (96h,	-	-
56-81-5		Oncorhynchus mykiss)		

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient		
1,2,3-Propanetriol	-1.75		
56-81-5			

Other adverse effects No information available.

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.

14. Transport information

TDG Not regulated

DOT Not regulated

15. Regulatory information

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

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

16. Other information

NFPA Health hazards 0 Flammability 0 Instability 0 Physical and chemical

properties -

HMIS Health hazards 0 Flammability 0 Physical hazards 0 Personal protection X

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

Prepared By Bio-Rad Laboratories, Environmental Health and Safety.

Revision date 10-May-2023

Revision Note Significant changes throughout SDS. Review all sections.

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: Canada WHMIS 2015 which includes the amended Hazardous Products Act (HPA) and the Hazardous Products Regulation (HPR)

Revision date 18-Jan-2022 Revision Number 1.1

1. Identification

Product identifier

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

Other means of identification

1610374, 1610374S, 1610394, 10022171, 1610374EDU, 1610374TGX Catalog Number(s)

Recommended use of the chemical and restrictions on use

Recommended use Laboratory chemicals

No information available Restrictions on use

Details of the supplier of the safety data sheet

Corporate Headquarters Bio-Rad Laboratories Inc. 1000 Alfred Nobel Drive Hercules, CA 94547

USA

Manufacturer Address

Bio-Rad Laboratories, Life Science Group Bio-Rad Laboratories (Canada) Ltd. 2000 Alfred Nobel Drive

Hercules, California 94547

USA

Legal Entity / Contact Address

1329 Meyerside Drive Mississauga, ON L5T 1C9

Canada

Technical Service 1-800-361-1808

support@bio-rad.com

Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Canada:1 (800) 424-9300

2. Hazard(s) identification

Classification

Serious eye damage/eye irritation

Category 2A

Label elements

Warning

Hazard statements

Causes serious eye irritation



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Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Eves

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

Precautionary Statements - Disposal

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

Other information

May be harmful if inhaled. Causes mild skin irritation. Harmful to aquatic life with long lasting effects. Harmful to aquatic life.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Chemical name	CAS No	Weight-%	Hazardous Material	Date HMIRA filed and
			Information Review Act date exemption g	
			registry number	(if applicable)
			(HMIRA registry #)	
1,2,3-Propanetriol	56-81-5	20 - 35	-	
Sodium azide	26628-22-8	0.01 - 0.099	-	

4. First-aid measures

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air.

Eye contact 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.

Skin contact Wash skin with soap and water.

Ingestion Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth

to an unconscious person. Do NOT induce vomiting. Call a physician.

Self-protection of the first aider Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

Symptoms May cause redness and tearing of the eyes. Burning sensation. Prolonged contact may

cause redness and irritation.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the

chemical

None known.

Explosion data

Sensitivity to mechanical impact None. Sensitivity to static discharge None.

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Other information Refer to protective measures listed in Sections 7 and 8.

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.

7. Handling and storage

Precautions for safe handling

Advice on 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.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store according to

product and label instructions.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	Alberta	British Columbia	Ontario	Quebec
1,2,3-Propanetriol	TWA: 10 mg/m ³	TWA: 10 mg/m ³		TWA: 10 mg/m ³

56-81-5		TWA: 3 mg/m ³		
Sodium azide 26628-22-8	Ceiling: 0.29 mg/m ³ Ceiling: 0.11 ppm	Ceiling: 0.29 mg/m ³ Ceiling: 0.11 ppm	CEV: 0.29 mg/m ³ CEV: 0.11 ppm	Ceiling: 0.29 mg/m ³ Ceiling: 0.11 ppm
	STEL: 0.3 mg/m ³			

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).

Hand protection Wear suitable gloves.

Skin and body protectionWear suitable protective clothing.

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.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Liquid

Appearance No information available

Color blue Odor rotten

Odor threshold No information available

Propert	<u>y</u> <u>Values</u> l	Remark	s •	Metho	<u>bd</u>

pHMelting point / freezing pointNo data availableNone known

Boiling point / boiling range 100 °C / 212 °F

Flash point 160 °C / 320 °F

Evaporation rateNo data availableNone knownFlammability (solid, gas)No data availableNone knownFlammability Limit in AirNone known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapor pressureNo data availableNone knownVapor densityNo data availableNone knownRelative densityNo data availableNone known

Relative density
Water solubility
No data available
Miscible in water

Solubility in other solventsNo data availableNone knownPartition coefficientNo data availableNone known

Autoignition temperature No data available

Decomposition temperatureNo data availableNone knownKinematic viscosityNo data availableNone knownDynamic viscosityNo data availableNone known

Other information

Explosive propertiesNot applicable.Oxidizing propertiesNot applicable.Softening pointNot applicable

Molecular weightNot applicableVOC contentNot applicable

10. Stability and reactivity

Reactivity No information available.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions Avoid contact with metals. This product contains sodium azide. Sodium azide can react with

copper, brass, lead, and solder in piping systems to form explosive compounds and toxic

gases.

Conditions to avoid None known based on information supplied.

Incompatible materials Metals.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. May cause irritation of

respiratory tract. May be harmful if inhaled.

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye irritation.

(based on components). May cause redness, itching, and pain.

Skin contact Specific test data for the substance or mixture is not available. May cause irritation.

Prolonged contact may cause redness and irritation. Causes mild skin irritation.

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

gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms May cause redness and tearing of the eyes. Prolonged contact may cause redness and

irritation.

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

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
1,2,3-Propanetriol 56-81-5	= 12600 mg/kg (Rat)	> 10 g/kg(Rabbit)	> 2.75 mg/L (Rat)4 h
Sodium azide = 27 mg/kg (Rat) 26628-22-8		= 20 mg/kg (Rabbit)	0.054 - 0.52 mg/L (Rat) 4 h

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

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

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation.

Respiratory or skin sensitization Based on available data, the classification criteria are not met.

Germ cell mutagenicityBased on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicityBased on available data, the classification criteria are not met.

STOT - single exposureBased on available data, the classification criteria are not met.

STOT - repeated exposure Based on available data, the classification criteria are not met.

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

Aspiration hazardBased on available data, the classification criteria are not met.

12. Ecological information

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
1,2,3-Propanetriol	-	LC50: 51 - 57mL/L (96h,	-	-
56-81-5		Oncorhynchus mykiss)		
Sodium azide	-	LC50: =0.8mg/L (96h,	-	-
26628-22-8		Oncorhynchus mykiss)		
		LC50: =0.7mg/L (96h,		
		Lepomis macrochirus)		
		LC50: =5.46mg/L (96h,		
		Pimephales promelas)		

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient
1,2,3-Propanetriol	-1.75
56-81-5	

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused

products

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.

14. Transport information

TDG

DOT Not regulated

15. Regulatory information

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

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

16. Other information

NFPA Health hazards 2 Flammability 1 Instability 0 Physical and chemical

properties -

HMIS Health hazards 2 Flammability 1 Physical hazards 0 Personal protection X

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

Prepared ByBio-Rad Laboratories, Environmental Health and Safety.

Revision date 18-Jan-2022

Revision Note Reformatted and updated existing information.

Disclaimer

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End of Safety Data Sheet