# KIT SAFETY DATA SHEET



Small UView DNA Electrophoresis Reagent Pack 1660462, 1660462EDU **Kit Product Name** 

Kit Catalog Number(s)

**Revision date** 05-Apr-2023

# Kit Contents

Catalog Number(s)	Product Name
1613100, 1613101, 1613102, 1613100EDU, 1613101EDU,	Certified Molecular Biology Agarose
1613102EDU	
1610743, 1610773, 1660742, 1610773EDU, 1610743EDU,	50X Tris/Acetic Acid/EDTA Buffer
1660742EDU, 9703685	
10028897, 1665111, 10032074, 1665112, 1665111EDU, 1665112EDU	UView 6X Loading Dye

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# 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 30-Nov-2021 Revision Number 1.1

1. Identification

**Product identifier** 

Certified Molecular Biology Agarose **Product Name** 

Other means of identification

1613100, 1613101, 1613102, 1613100EDU, 1613101EDU, 1613102EDU 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

2000 Alfred Nobel Drive

Hercules, California 94547

USA

**Legal Entity / Contact Address** 

Bio-Rad Laboratories, Life Science Group Bio-Rad Laboratories (Canada) Ltd.

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

Not classified

Label elements

**Hazard statements** 

Not classified.

Other information

# 3. Composition/information on ingredients

#### Substance

Chemical name	CAS No	Weight-%	Hazardous Material	Date HMIRA filed and
			Information Review Act date exemption gran	
			registry number	(if applicable)
			(HMIRA registry #)	
Agarose	9012-36-6	50 - 100	-	

### 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** No information available.

Indication of any immediate medical attention and special treatment needed

# 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.

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**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 This product, as supplied, does not contain any hazardous materials with occupational

exposure 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).

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 state Solid
Appearance Powder
Color white
Odor Odorless

Odor threshold No information available

<u>Property</u>	<u>Values</u>	Remarks • Method
pH		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

limits

Lower flammability or explosive No data available

limits

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

Water solubility Insoluble in water

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

No data available

Kinematic viscosityNo data availableNone knownDynamic viscosityNo data availableNone 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 materials**None 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.

**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**

No information available

Skin corrosion/irritation

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

Serious eye damage/eye irritation

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

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

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

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

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

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

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

# 12. Ecological information

**Ecotoxicity** The environmental impact of this product has not been fully investigated.

Persistence and degradability

No information available.

Bioaccumulation

No information available.

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

TDGNot regulatedDOTNot regulatedMEXNot regulatedIATANot regulatedIMDGNot 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

Health hazards 0 NFPA Flammability 0 Instability 0 Physical and chemical

properties -

Revision date 30-Nov-2021

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 (Short Term Exposure Limit) STEL

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

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

**Revision date** 30-Nov-2021

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

**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.



# 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 04-Apr-2022 **Revision Number** 2.1

1. Identification

**Product identifier** 

50X Tris/Acetic Acid/EDTA Buffer **Product Name** 

Other means of identification

1610743, 1610773, 1660742, 1610773EDU, 1610743EDU, 1660742EDU, 9703685 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

Not classified

Label elements

**Hazard statements** 

Not classified.

Other information

# 3. Composition/information on ingredients

#### Substance

Not applicable.

<u>Mixture</u>

Chemical name	CAS No	Weight-%	Hazardous Material	Date HMIRA filed and
			Information Review Act	date exemption granted
			registry number	(if applicable)
			(HMIRA registry #)	
Sodium acetate	127-09-3	10 - 20	-	
Glycine, N,N-1,2-ethanediylbis[N-(carboxymethyl)-,	6381-92-6	1 - 2.5	-	
disodium salt, dihydrate				

# 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** No information available.

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** 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 This product, as supplied, does not contain any hazardous materials with occupational

exposure 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).

**Hand protection** Wear suitable gloves.

**Skin and body protection** Wear suitable protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

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

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

# 9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Liquid

Appearance aqueous solution
Color colorless
Odor Odorless

Odor threshold No information available

Property Values Remarks • Method

**pH** 7-8

None known

Melting point / freezing pointNo data availableBoiling point / boiling range100 °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 Miscible in water

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

Kinematic viscosityNo data availableNone knownDynamic viscosityNo data availableNone 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 materials

None 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.

**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)
 11,575.9186 mg/kg

 ATEmix (dermal)
 16,140.00 mg/kg

 ATEmix (inhalation-dust/mist)
 40.70 mg/l

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium acetate	= 3530 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 30 g/m³(Rat)1 h
127-09-3			

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

**Skin corrosion/irritation**Based on available data, the classification criteria are not met.

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.

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

# 12. Ecological information

### **Ecotoxicity**

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Sodium acetate	-	LC50: >100mg/L (96h,	-	EC50: >1000mg/L (48h,
127-09-3		Danio rerio)		Daphnia magna)

Persistence and degradability No information available.

**Bioaccumulation** No information available.

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 1 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 04-Apr-2022

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

**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 08-Apr-2021 Revision Number 1

1. Identification

Product identifier

Product Name UView 6X Loading Dye

Other means of identification

**Catalog Number(s)** 10028897, 1665111, 10032074, 1665112, 1665111EDU, 1665112EDU

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

USA

Manufacturer Address

Bio-Rad Laboratories, Life Science Group

2000 Alfred Nobel Drive Hercules, California 94547

USA

**Legal Entity / Contact Address** 

Bio-Rad Laboratories (Canada) Ltd. 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

Not classified

Label elements

**Hazard statements** 

Not classified.

**Precautionary Statements - Disposal** 

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

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#### Other information

Harmful to aquatic life.

# 3. Composition/information on ingredients

#### **Substance**

Not applicable.

Mixture

Chemical name	CAS No	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Water	7732-18-5	50 - 100	-	
1,2,3-Propanetriol	56-81-5	20 - 35	-	
Phenol,	34725-61-6	0.1 - 0.299	-	
4,4-(3H-2,1-benzoxathiol-3-ylidene)bis[2,6-dibromo-, S,S-dioxide, monosodium salt				
1,3-Benzenedisulfonic acid, 4-[[4-(ethylamino)-3-methylphenyl][4-(ethylimino)-3-methyl-2,5-cyclohexadien-1-ylidene]methyl]-, monosodium salt	2650-17-1	0.1 - 0.299	-	

## 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** No information available.

Indication of any immediate medical attention and special treatment needed

# 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
1,2,3-Propanetriol	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>		TWA: 10 mg/m <sup>3</sup>
56-81-5		TWA: 3 mg/m <sup>3</sup>		_

## **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 state Liquid

Appearance aqueous solution
Color dark green
Odor Odorless

Odor threshold No information available

Property Values Remarks • Method

**pH** 4.5-5.5

Melting point / freezing point No data available None 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

No data available None known Vapor pressure Vapor density No data available None known No data available Relative density None known Water solubility Miscible in water Solubility in other solvents No data available None known Partition coefficient No data available None known

Autoignition temperature

No data available

None known

Decomposition temperature

None known

Kinematic viscosityNo data availableNone knownDynamic viscosityNo data availableNone 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 materials**None 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.

**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** 

**Component Information** 

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Water	> 90 mL/kg (Rat)	-	-
7732-18-5	-		
1,2,3-Propanetriol	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 2.75 mg/L (Rat) 4 h
56-81-5			

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

**Skin corrosion/irritation**Based on available data, the classification criteria are not met.

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** Harmful to aquatic life.

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 1 Instability 0 Physical and chemical properties -

Health hazards 0 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

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

Disclaimer

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**End of Safety Data Sheet**