# **KIT SAFETY DATA SHEET**



VINEO Brettanomytest PCR Kit 3548101 **Kit Product Name** 

Kit Catalogue Number(s)

**Revision date** 08-Feb-2023

# Kit Contents

Catalogue Number(s)	Product Name
12001979	VINEO Brettanomytest Fluorescent Probes
12001977	VINEO Brettanomytest Positive Qs PCR Control
10044097, 10044290	iQ-Check Amplification Solution
10044102, 10044291	iQ-Check Negative Control

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# SAFETY DATA SHEET

**Legal Entity / Contact Address** 

Pathumwan, Bangkok 10330

Thailand

1st and 2nd Floor, Lumpini 1 Building 239/2, Rajdamri Road, Lumpini,

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

Product Name VINEO Brettanomytest Fluorescent Probes

Revision date 08-Feb-2023

**Revision Number** 1

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

**Product identifier** 

**Product Name** VINEO Brettanomytest Fluorescent Probes

Catalogue Number(s) 12001979

Other means of identification

Mixture Pure substance/mixture

Details of the supplier of the safety data sheet

**Corporate Headquarters** Manufacturer Bio-Rad Laboratories Inc. Bio-Rad Laboratories, Life Science Group Bio-Rad Laboratories Ltd.

1000 Alfred Nobel Drive 2000 Alfred Nobel Drive Hercules, CA 94547 Hercules, California 94547

USA USA

**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**

No significant adverse health effects

Odour Odourless Physical state Liquid Appearance aqueous solution

#### Classification of the substance or mixture

Not classified

Label elements

### **Hazard statements**

Not classified

#### Physical and chemical hazards

Not applicable.

Product Name VINEO Brettanomytest Fluorescent

Probes

Revision date 08-Feb-2023

**Health hazards** 

Immediate Health Effects: Not applicable.

Chronic effects: Not applicable.

**Environmental hazards** 

Not applicable

Other hazards which do not result in classification

Contains animal source material (Cattle)

### SECTION 3: Composition/information on ingredients

#### Substance

Not applicable.

Mixture

Not classified.

Chemical name	Weight-%	CAS No
1,2,3-Propanetriol	2.5 - 5	56-81-5

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

#### Description of necessary 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 doctor.

**Skin contact** Wash skin with soap and water.

**Ingestion** Rinse mouth thoroughly with water.

Most important symptoms and

effects, both acute and delayed

No information available.

For emergency responders No information available.

Note to doctors Treat symptomatically.

### **SECTION 5: Firefighting measures**

**Extinguishing media** 

surrounding environment.

**Unsuitable extinguishing media** No information available.

Specific hazards arising from the

chemical

No information available.

**Product Name** VINEO Brettanomytest Fluorescent

Special protective actions for

fire-fighters

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

Revision date 08-Feb-2023

Use personal protection equipment.

#### SECTION 6: Accidental release measures

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

Personal precautions See section 8 for more information.

For emergency responders Use personal protection recommended in Section 8.

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

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

containers.

hazards

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

### SECTION 7: Handling and storage

Precautions for safe handling Handle in accordance with good industrial hygiene and safety practice. See Section 8 for

information on appropriate personal protective equipment.

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

Incompatible materials None known based on information supplied.

### SECTION 8: Exposure controls/personal protection

#### Occupational exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

See section 16 for terms and abbreviations Note

### **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

Wear safety glasses with side shields (or goggles). Eye/face protection

Skin and body protection Wear suitable protective clothing.

Hand protection Wear suitable gloves. Product Name VINEO Brettanomytest Fluorescent

Probes

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

Revision date 08-Feb-2023

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

### SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance aqueous solution
Colour colourless
Physical state Liquid
Odour Odourless

Odour threshold No information available

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

pH 8.3

Melting point / freezing point None known

Boiling point / boiling range > 100 °C

Flash point No data available None known Evaporation rate No data available None known Flammability (solid, gas) No data available None known Flammability Limit in Air None known

**Upper flammability or explosive** No data available

limits

Lower flammability or explosive No data available

limits

Vapour pressureNo data availableNone knownVapour densityNo data availableNone knownRelative densityNo data availableNone 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 None known No data available None known **Decomposition temperature** Kinematic viscosity No data available None known No data available Dynamic viscosity None known

Additional information

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> None under normal processing.

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

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

Incompatible materials None known based on information supplied.

Hazardous decomposition products None known based on information supplied.

### SECTION 11: Toxicological information

Acute toxicity

Numerical measures of toxicity

Probes

**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

**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 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,	-
·		Oncorhynchus mykiss)	

Persistence and degradability No information available.

<u>Bioaccumulative potential</u> There is no data for this product.

**Component Information** 

Chemical name	Partition coefficient
1,2,3-Propanetriol	-1.75

Mobility in soil No information available.

### **SECTION 13: Disposal considerations**

<u>Waste chemicals</u> Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

Product Name VINEO Brettanomytest Fluorescent

Probes

Revision date 08-Feb-2023

### **SECTION 14: Transport information**

IMDG Not regulated

Transport in bulk according to No information available

Annex II of MARPOL and the IBC

Code

<u>IATA</u> Not regulated

<u>China</u> 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:

Catalogue of occupational diseases:

Not applicable.

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

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 08-Feb-2023

**Revision Note** Significant changes throughout SDS. Review all sections.

Abbreviations and acronyms

Product Name VINEO Brettanomytest Fluorescent

Probes

Revision date 08-Feb-2023

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** 



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Thailand

1st and 2nd Floor, Lumpini 1 Building 239/2, Rajdamri Road, Lumpini,

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

Product Name VINEO Brettanomytest Positive Qs PCR Control

Revision date 11-Oct-2022

**Revision Number** 1

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

**Product identifier** 

**Product Name** VINEO Brettanomytest Positive Qs PCR Control

Catalogue Number(s) 12001977

Other means of identification

Mixture Pure substance/mixture

Details of the supplier of the safety data sheet

**Corporate Headquarters** Manufacturer Bio-Rad Laboratories Inc. Bio-Rad Laboratories, Life Science Group Bio-Rad Laboratories Ltd.

1000 Alfred Nobel Drive 2000 Alfred Nobel Drive Hercules, CA 94547 Hercules, California 94547

USA USA

**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**

No significant adverse health effects

Odour Negligible Appearance aqueous solution Physical state Liquid

#### Classification of the substance or mixture

Not classified

Label elements

### **Hazard statements**

Not classified

**Precautionary statements** 

Physical and chemical hazards

Contro

Revision date 11-Oct-2022

Not applicable.

**Health hazards** 

Immediate Health Effects: Not applicable.

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

Not classified.

Chemical name	Weight-%	CAS No
Trade secret	0.1 - 0.299	-

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

#### **Description of necessary 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 doctor.

**Skin contact** Wash skin with soap and water.

**Ingestion** Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed

No information available.

For emergency responders No information available.

Note to doctors Treat symptomatically.

### **SECTION 5: Firefighting measures**

#### **Extinguishing media**

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the

No information available.

chemical

Contro

Special protective actions for

fire-fighters

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

Revision date 11-Oct-2022

Use personal protection equipment.

### **SECTION 6: Accidental release measures**

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

**Personal precautions** See section 8 for more information.

For emergency responders

Use personal protection recommended in Section 8.

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

Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Pick up and transfer to properly labelled

containers.

Precautions to prevent secondary

hazards

Clean contaminated objects and areas thoroughly observing environmental regulations.

### **SECTION 7: Handling and storage**

Precautions for safe handling Handle in accordance with good industrial hygiene and safety practice. See Section 8 for

information on appropriate personal protective equipment.

Conditions for safe storage, including any incompatibilities

Store according to product and label instructions.

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

### SECTION 8: Exposure controls/personal protection

#### Occupational exposure limits

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.

Contro

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.

Revision date 11-Oct-2022

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

### SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

Appearance aqueous solution

Colour yellow
Physical state Liquid
Odour Negligible

Odour threshold No information available

Property Values Remarks • Method

pH8.3Melting point / freezing pointNo data availableNone known

Boiling point / boiling range 100 °C

Flash point No data available None known Evaporation rate No data available None known Flammability (solid, gas) No data available None known Flammability Limit in Air None known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapour pressureNo data availableNone knownVapour densityNo data availableNone knownRelative densityNo data availableNone known

Water solubility Miscible in water No data available Solubility(ies) None known No data available **Partition coefficient** None known **Autoignition temperature** No data available None known No data available None known **Decomposition temperature** Kinematic viscosity No data available None known No data available None known Dynamic viscosity

Additional information

Explosive properties Not applicable Oxidising properties Not applicable

### SECTION 10: Stability and reactivity

Stability Stable under normal conditions.

<u>Possibility of hazardous reactions</u> None under normal processing.

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

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

Incompatible materials None known based on information supplied.

<u>Hazardous decomposition products</u> None known based on information supplied.

## **SECTION 11: Toxicological information**

Acute toxicity

Contro

Revision date 11-Oct-2022

#### Numerical measures of toxicity

**Component Information** 

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Trade secret	= 1800 mg/kg (Rat)	-	-

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. Respiratory or skin sensitisation Based on available data, the classification criteria are not met. Germ cell mutagenicity Carcinogenicity Based on available data, the classification criteria are not met. 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 Specific target organ toxicity — Based on available data, the classification criteria are not met. repeated exposure Based on available data, the classification criteria are not met. **Aspiration hazard** 

### **SECTION 12: Ecological information**

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

Unknown aquatic toxicity 0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

<u>Persistence and degradability</u> No information available.

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

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

Contro

Revision date 11-Oct-2022

IATA Not regulated

<u>China</u> 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:

Catalogue of occupational diseases:

Not applicable.

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

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 11-Oct-2022

**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)

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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**

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**End of Safety Data Sheet** 



# SAFETY DATA SHEET

**Legal Entity / Contact Address** 

Pathumwan, Bangkok 10330

Thailand

1st and 2nd Floor, Lumpini 1 Building 239/2, Rajdamri Road, Lumpini,

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

Product Name iQ-Check Amplification Solution

Revision date 05-Feb-2021

**Revision Number** 1

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

**Product identifier** 

**Product Name** iQ-Check Amplification Solution

Catalogue Number(s) 10044097, 10044290

Other means of identification

Mixture Pure substance/mixture

Details of the supplier of the safety data sheet

**Corporate Headquarters** Manufacturer Bio-Rad Laboratories Inc. Bio-Rad Laboratories, Life Science Group Bio-Rad Laboratories Ltd.

1000 Alfred Nobel Drive 2000 Alfred Nobel Drive Hercules, CA 94547 Hercules, California 94547

USA USA

**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**

No significant adverse health effects

Odour Odourless Physical state Liquid Appearance aqueous solution

#### Classification of the substance or mixture

Not classified

Label elements

### **Hazard statements**

Not classified

#### Physical and chemical hazards

Not applicable.

#### **Health hazards**

Immediate Health Effects: Not applicable.

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.

#### <u>Mixture</u>

Not classified.

Chemical name	Weight-%	CAS No
Water	50 - 100	7732-18-5
1,2,3-Propanetriol	20 - 35	56-81-5
1,3-Propanediol, 2-amino-2-(hydroxymethyl)-	0.3 - 0.99	77-86-1
1,3-Propanediol, 2-amino-2-(hydroxymethyl)-,	0.3 - 0.99	1185-53-1
hydrochloride		
Potassium chloride	0.1 - 0.299	7447-40-7
CHAPS	0.1 - 0.299	75621-03-3
Diammonium sulfate	0.01 - 0.099	7783-20-2
Magnesium chloride (MgCl2), hexahydrate	0.01 - 0.099	7791-18-6
2'-deoxyuridine-5'-triphosphate	0.01 - 0.099	37289-34-2
Nucleotidyltransferase, deoxyribonucleate	0.01 - 0.099	9012-90-2
1-Piperazineethanesulfonic acid, 4-(2-hydroxyethyl)-	0.001 - 0.01	7365-45-9
Guanosine 5-(tetrahydrogen triphosphate),	0.001 - 0.01	93919-41-6
2-deoxy-, trisodium salt		
2-Deoxyadenosine 5-(tetrahydrogen triphosphate)	0.001 - 0.01	1927-31-7
Cytidine 5-(tetrahydrogen triphosphate), 2-deoxy-,	0.001 - 0.01	102783-51-7
disodium salt		
2,3-Butanediol, 1,4-dimercapto-, (R*,R*)-	0.001 - 0.01	3483-12-3
Uracil DNA glycosylase	< 0.001	59088-21-0

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

### **Description of necessary 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 doctor.

**Skin contact** Wash skin with soap and water.

**Ingestion** Rinse mouth thoroughly with water.

Most important symptoms and No information available.

effects, both acute and delayed

For emergency responders No information available.

Note to doctors Treat symptomatically.

### **SECTION 5: Firefighting measures**

Extinguishing media

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the

chemical

No information available.

Special protective actions for

fire-fighters

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

Use personal protection equipment.

### SECTION 6: Accidental release measures

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

**Personal precautions** See section 8 for more information.

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

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

Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Pick up and transfer to properly labelled

containers.

Precautions to prevent secondary

<u>hazards</u>

Clean contaminated objects and areas thoroughly observing environmental regulations.

### SECTION 7: Handling and storage

<u>Precautions for safe handling</u> Handle in accordance with good industrial hygiene and safety practice. See Section 8 for

information on appropriate personal protective equipment.

Conditions for safe storage, including any incompatibilities

Store according to product and label instructions.

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

# SECTION 8: Exposure controls/personal protection

### **Occupational exposure limits**

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.

Showers **Engineering controls** 

Eyewash stations Ventilation systems.

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

Wear safety glasses with side shields (or goggles). Eye/face protection

Skin and body protection Wear suitable protective clothing.

Hand protection Wear suitable gloves.

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

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

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

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

#### Information on basic physical and chemical properties

**Appearance** aqueous solution Colour colourless Physical state Liquid

Odourless Odour

**Odour threshold** No information available

**Property** Values Remarks • Method

8-9 pН

Melting point / freezing point None known No data available

**Boiling point / boiling range** > 100 °C 160 °C Flash point

No data available None known **Evaporation rate** Flammability (solid, gas) No data available None known Flammability Limit in Air None known

Upper flammability or explosive No data available limits

Lower flammability or explosive

No data available

limits

Vapour pressure No data available None known Vapour density No data available None known No data available Relative density None known

Water solubility Miscible in water

Solubility(ies) No data available None known No data available None known Partition coefficient

392.78 °C **Autoignition temperature** 

No data available None known **Decomposition temperature** Kinematic viscosity No data available None known **Dynamic viscosity** No data available None known

Additional information

**Explosive properties** Not applicable **Oxidising properties** Not applicable

# SECTION 10: Stability and reactivity

**Stability** Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

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

Conditions to avoid None known based on information supplied.

Incompatible materials None known based on information supplied.

Hazardous decomposition products None known based on information supplied.

# **SECTION 11: Toxicological information**

Acute toxicity

Numerical measures of toxicity

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

**Component Information** 

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Water	> 90 mL/kg (Rat)	-	-
1,2,3-Propanetriol	= 12600 mg/kg (Rat)	> 10 g/kg(Rabbit)	> 2.75 mg/L (Rat)4 h
1,3-Propanediol, 2-amino-2-(hydroxymethyl)-	= 5900 mg/kg (Rat)	> 5000 mg/kg (Rat)	-
Potassium chloride	= 2600 mg/kg (Rat)	-	-
Diammonium sulfate	= 2840 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
Magnesium chloride (MgCl2), hexahydrate	= 8100 mg/kg (Rat)	-	-
1-Piperazineethanesulfonic acid, 4-(2-hydroxyethyl)-	> 2000 mg/kg (Rat)	> 2000 mg/kg (Rat)	-

**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 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	<del>-</del>	LC50: 51 - 57mL/L (96h,	-
·		Oncorhynchus mykiss)	
Potassium chloride	EC50: =2500mg/L (72h,	LC50: =1060mg/L (96h, Lepomis	EC50: =825mg/L (48h, Daphnia
	Desmodesmus subspicatus)	macrochirus)	magna)
		LC50: 750 - 1020mg/L (96h,	EC50: =83mg/L (48h, Daphnia
		Pimephales promelas)	magna)
Diammonium sulfate	-	LC50: =250mg/L (96h,	LC50: =14mg/L (48h, Daphnia
		Brachydanio rerio)	magna)
		LC50: =480mg/L (96h,	
		Brachydanio rerio)	
		LC50: =420mg/L (96h,	
		Brachydanio rerio)	
		LC50: =18mg/L (96h, Cyprinus	
		carpio)	
		LC50: 32.2 - 41.9mg/L (96h,	
		Oncorhynchus mykiss)	
		LC50: 5.2 - 8.2mg/L (96h,	
		Oncorhynchus mykiss)	
		LC50: >100mg/L (96h,	
		Pimephales promelas)	
		LC50: 123 - 128mg/L (96h,	
		Poecilia reticulata)	
		LC50: =126mg/L (96h, Poecilia	
		reticulata)	
1-Piperazineethanesulfonic acid,	<del>-</del>	LC50: >100mg/L (96h, Danio	-
4-(2-hydroxyethyl)-		rerio)	

<u>Persistence and degradability</u> No information available.

Bioaccumulative potential There is no data for this product.

**Component Information** 

	Chemical name	Partition coefficient
	1,2,3-Propanetriol	-1.75
1,3	3-Propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride	-3.6
	Diammonium sulfate	-5.1
	1-Piperazineethanesulfonic acid, 4-(2-hydroxyethyl)-	-3.85

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.

<u>Contaminated packaging</u> Do not reuse empty containers.

### **SECTION 14: Transport information**

MDG 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:

Catalogue of occupational diseases:

Not applicable.

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

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 05-Feb-2021

**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) (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

**Legal Entity / Contact Address** 

Pathumwan, Bangkok 10330

Thailand

1st and 2nd Floor, Lumpini 1 Building 239/2, Rajdamri Road, Lumpini,

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

Product Name iQ-Check Negative Control

Revision date 05-Feb-2021

**Revision Number** 1

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

**Product identifier** 

**Product Name** iQ-Check Negative Control

Catalogue Number(s) 10044102, 10044291

Other means of identification

Mixture Pure substance/mixture

Details of the supplier of the safety data sheet

**Corporate Headquarters** Manufacturer Bio-Rad Laboratories Inc. Bio-Rad Laboratories, Life Science Group Bio-Rad Laboratories Ltd.

1000 Alfred Nobel Drive 2000 Alfred Nobel Drive Hercules, CA 94547 Hercules, California 94547

USA USA

**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**

No significant adverse health effects

Odour Negligible Physical state Liquid Appearance aqueous solution

Classification of the substance or mixture

Hazardous to the Aquatic Environment - Chronic Hazard Category 3

Label elements

**Hazard statements** 

Harmful to aquatic life with long lasting effects

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#### **Precautionary statements**

Prevention

Avoid release to the environment

Disposal

Dispose of contents/container to an approved waste disposal plant

#### Physical and chemical hazards

Not applicable.

**Health hazards** 

Immediate Health Effects: Not applicable.

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.

#### <u>Mixture</u>

Chemical name	Weight-%	CAS No
Water	50 - 100	7732-18-5
Polyoxyethylene sorbitan monolaurate	0.3 - 0.99	9005-64-5
Trade secret	0.3 - 0.99	-
1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride	0.01 - 0.099	1185-53-1
1,3-Propanediol, 2-amino-2-(hydroxymethyl)-	0.01 - 0.099	77-86-1
Modified Glycol	0.01 - 0.099	NO-CAS-54
Glycine, N,N-1,2-ethanediylbis[N-(carboxymethyl)-,	0.01 - 0.099	6381-92-6
disodium salt, dihydrate		
C.I. Acid Yellow 23	0.001 - 0.01	1934-21-0
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with	< 0.001	55965-84-9
2-methyl-3(2H)-isothiazolone		
Modified alkyl carboxylate	< 0.001	NO-CAS-53

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

#### **Description of necessary 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 doctor.

**Skin contact** Wash skin with soap and water.

**Ingestion** Rinse mouth thoroughly with water.

<u>Most important symptoms and</u> No information available.

effects, both acute and delayed

For emergency responders No information available.

Note to doctors Treat symptomatically.

### **SECTION 5: Firefighting measures**

Extinguishing media

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the

chemical

No information available.

Special protective actions for

fire-fighters

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

Use personal protection equipment.

### SECTION 6: Accidental release measures

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

**Personal precautions** See section 8 for more information.

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

Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Pick up and transfer to properly labelled

containers.

Precautions to prevent secondary

<u>hazards</u>

Clean contaminated objects and areas thoroughly observing environmental regulations.

### SECTION 7: Handling and storage

Precautions for safe handling Handle in accordance with good industrial hygiene and safety practice. See Section 8 for

information on appropriate personal protective equipment.

Conditions for safe storage, including any incompatibilities

Store according to product and label instructions.

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

## SECTION 8: Exposure controls/personal protection

### **Occupational exposure limits**

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.

Showers **Engineering controls** 

Eyewash stations Ventilation systems.

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

Wear safety glasses with side shields (or goggles). Eye/face protection

Skin and body protection Wear suitable protective clothing.

Hand protection Wear suitable gloves.

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

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

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

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

#### Information on basic physical and chemical properties

**Appearance** aqueous solution

Colour yellow Physical state Liquid Negligible Odour

**Odour threshold** No information available

**Property** Values\_ Remarks • Method

8-9 pН

Melting point / freezing point No data available None known

100 °C Boiling point / boiling range

No data available Flash point None known No data available None known **Evaporation rate** Flammability (solid, gas) No data available None known Flammability Limit in Air None known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapour pressure No data available None known Vapour density No data available None known No data available Relative density None known

Miscible in water Water solubility

Solubility(ies) No data available None known No data available **Partition coefficient** None known No data available None known **Autoignition temperature** None known No data available **Decomposition temperature** Kinematic viscosity No data available None known **Dynamic viscosity** No data available None known

Additional information

**Explosive properties** Not applicable **Oxidising properties** Not applicable

# SECTION 10: Stability and reactivity

**Stability** Stable under normal conditions.

Possibility of hazardous reactions 
None under normal processing.

Sensitivity to mechanical impact None. Sensitivity to static discharge

Conditions to avoid None known based on information supplied.

Incompatible materials None known based on information supplied.

Hazardous decomposition products None known based on information supplied.

# **SECTION 11: Toxicological information**

Acute toxicity

Numerical measures of toxicity

**Component Information** 

Skin corrosion/irritation

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Water	> 90 mL/kg (Rat)	-	-
Polyoxyethylene sorbitan monolaurate	= 37000 mg/kg ( Rat )	-	> 5.1 mg/L (Rat)4 h
Trade secret	= 1800 mg/kg (Rat)	-	-
1,3-Propanediol, 2-amino-2-(hydroxymethyl)-	= 5900 mg/kg (Rat)	> 5000 mg/kg (Rat)	-
C.I. Acid Yellow 23	> 2000 mg/kg (Rat)	-	-
5-Chloro-2-methyl-3(2H)-isothia zolone, mixture with 2-methyl-3(2H)-isothiazolone	= 53 mg/kg (Rat)	= 87.12 mg/kg ( Rabbit )	-

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

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

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.

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

Specific target organ toxicity repeated exposure

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

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

# **SECTION 12: Ecological information**

**Ecotoxicity** 

Harmful to aquatic life with long lasting effects.

Revision date 05-Feb-2021

**Unknown aquatic toxicity** 0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

<u>Persistence and degradability</u> No information available.

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

Chemical name	Partition coefficient	
1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride	-3.6	
C.I. Acid Yellow 23	-1.572	
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with	0.7	
2-methyl-3(2H)-isothiazolone		

Mobility in soil No information available.

Other adverse effects

### 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

<u>IATA</u> Not regulated

<u>China</u> 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:

Catalogue of occupational diseases:

Not applicable.

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

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**

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#### Abbreviations and acronyms

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TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value \* Skin designation

C Carcinogen

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Food Research Journal

Hazardous Substance Database

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Japan GHS Classification

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

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**End of Safety Data Sheet**