# **KIT SAFETY DATA SHEET**



ddPCR System Demonstration Kit 1863029 **Kit Product Name** 

Kit Catalogue Number(s)

**Revision date** 22-Feb-2023

# Kit Contents

| Catalogue Number(s)          | Product Name                         |
|------------------------------|--------------------------------------|
| 10044157, 10041458, 10041117 | Primer/Probe Mix                     |
| 29011679                     | ddPCR Template DNA for FAM/HEX Assay |

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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 Primer/Probe Mix Revision date 22-Feb-2023 Revision Number 1

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

**Product identifier** 

**Product Name** Primer/Probe Mix

10044157, 10041458, 10041117 Catalogue Number(s)

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** Primer/Probe Mix

Revision date 22-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

Not applicable

## SECTION 3: Composition/information on ingredients

Substance

Not applicable.

Mixture

Not classified.

### **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.

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Eye contact

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** 

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the

<u>chemical</u>

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.

**Product Name** Primer/Probe Mix Revision date 22-Feb-2023

#### SECTION 6: Accidental release measures

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

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

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.

**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.

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

Product Name Primer/Probe Mix Revision date 22-Feb-2023

# SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance aqueous solution colourless
Physical state Liquid

Odour Odourless

Odour threshold No information available

Property Values Remarks • Method

pH 8

Melting point / freezing point No data available 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

No data available None known Vapour pressure Vapour density No data available None known Relative density No data available None known Water solubility Miscible in water Solubility(ies) No data available None known Partition coefficient No data available None known

Partition coefficientNo data availableNone knownAutoignition temperatureNo data availableNone knownDecomposition temperatureNo data availableNone knownKinematic viscosityNo data availableNone knownDynamic viscosityNo data availableNone known

Additional information

**Explosive properties**Oxidising properties
Not applicable
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.

<u>Incompatible materials</u> 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

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.

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

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.

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

## **SECTION 12: Ecological information**

**Ecotoxicity** 

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

No information available. Persistence and degradability

Bioaccumulative potential No information available.

No information available. Mobility in soil

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

Dispose of in accordance with local regulations. Dispose of waste in accordance with Waste chemicals

environmental legislation.

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

# **SECTION 14: Transport information**

Not regulated

Transport in bulk according to No information available

Annex II of MARPOL and the IBC

Code

China

IATA Not regulated Not regulated

Special precautions for user

Please refer to the applicable dangerous goods regulations for additional information

# **SECTION 15: Regulatory information**

**Product Name** Primer/Probe Mix Revision date 22-Feb-2023

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

#### **National regulations**

#### Law of the People's Republic of China on Prevention and Control of Occupational Diseases

Catalogue of occupational hazard factors: Not applicable. Catalogue of occupational diseases: Not applicable.

Regulations on the Control over Safety of Hazardous Chemicals

Inventory of hazardous chemicals Not applicable.

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

List of hazardous chemicals under priority management Not applicable

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

22-Feb-2023 **Revision date** 

**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

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)

**Product Name** Primer/Probe Mix

Revision date 22-Feb-2023

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 ddPCR Template DNA for FAM/HEX Assay

Revision date 22-Feb-2023

**Revision Number** 1

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

**Product identifier** 

**Product Name** ddPCR Template DNA for FAM/HEX Assay

Catalogue Number(s) 29011679

Other means of identification

7732-18-5 **CAS No** 

Pure substance/mixture 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

+66 2 652 8313 **Technical Service** 

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

Appearance aqueous solution Physical state Liquid **Odour** Odourless

Classification of the substance or mixture

Not classified

Label elements

Hazard statements

Review Date 22-Feb-2023

Assay

Revision date 22-Feb-2023

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.

**CAS No** 7732-18-5

**Mixture** 

Not classified.

# **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.

Assay

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.

Revision date 22-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.

**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.

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 22-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

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

Odour Odourless

**Odour threshold** No information available

Remarks • Method Property Values

pН 8

No data available None known Melting point / freezing point

100 °C Boiling point / boiling range

No data available Flash point 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

limits

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

No data available

Water solubility Miscible in water

Solubility(ies) No data available None known No data available Partition coefficient None known **Autoignition temperature** No data available None known **Decomposition temperature** No data available None known 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.

<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.

Assay

Revision date 22-Feb-2023

# **SECTION 11: Toxicological information**

Acute toxicity

Numerical measures of toxicity

**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.

**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

Persistence and degradability No information available.

Bioaccumulative potential No information available.

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.

## **SECTION 14: Transport information**

**IMDG** Not regulated

Transport in bulk according to No information available Annex II of MARPOL and the IBC

Code

Assay

Revision date 22-Feb-2023

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.

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The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

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### **SECTION 16: Other information**

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Revision date 22-Feb-2023

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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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Revision date 22-Feb-2023

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Acute Exposure Guideline Level(s) (AEGL(s))

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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)

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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

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**End of Safety Data Sheet**