

## Safety Data Sheet

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

#### 1.1 Product identifier

Product name : TOROIVD® Probe 1-step RT-qPCR 5G kit 2.0  
RT-qPCR Enzyme Mix UD  
2×5G qPCR Buffer BB  
2×5G qPCR Buffer GB

Product Code: QPR-303UD

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended use and restrictions on use: Realtime RT-PCR kit

#### 1.3 Detail of the supplier of the safety data sheet

Company: TOROIVD TECHNOLOGY COMPANY LIMITED.

Address: Building #10, 588 Tianxiong Road, Shanghai International Medical Zone,  
Pudong, Shanghai, China. 201318

Tel/Fax: +86-21-68030217

#### 1.4 Emergency telephone number

+86-21-68030217 (9:00~17:00 Beijing Time)

### SECTION 2 Hazards identification

#### 2.1 Classification of substance or mixture

Not classified or classification not possible

#### 2.2 Label elements

No label elements are required.

#### 2.3 Other hazards

Few adverse human health effects are anticipated. Glycerol whose flash point 160°C and Additive1-2 whose flash point 131°C are contained.

### SECTION 3 Composition / information on Ingredients

#### 3.1 Chemical Product

Substance or Mixture : Mixture

#### 3.2 Mixture

Chemical Nature: Aqueous solutions of enzyme, antibody and other compounds.

#### Hazardous components :

Common Chemical :	Glycerol	Potassium chloride
Synonyms:	Glycerin	KCl
Contained Parts:	RT-qPCR Enzyme Mix UD, 2×5G qPCR Buffer BB 2×5G qPCR Buffer GB	
CAS No.:	56-81-5	7447-40-7
EC No. :	200-289-5	231-211-8
Classification :	Not classified	Not classified
Concentration :	10-15%	<10%
Common Chemical :	Additive1	Additive2
Synonyms:	-	-
Contained Parts:	RT-qPCR Enzyme Mix UD, 2×5G qPCR Buffer BB 2×5G qPCR Buffer GB	

CAS No.:	-	-
Classification :	Not classified	Not classified
Concentration :	15-20%	<10%

## SECTION 4 First aid measures

### 4.1 Description of first aid measures

Inhalation : In case of irritation by inhaling this product, remove person to fresh air and keep comfortable for breathing. Seek medical attention.

Skin Contact : Wash with clean water, immediately.

Take off contaminated clothing and wash before reuse.

If skin irritation or rash occurs: Get medical advice/ attention.

Eye Contact Ingestion: Rinse cautiously with water for several minutes.

Rinse mouth. Induce vomiting.

If indisposition continues, seek medical attention.

### 4.2 Most important symptoms and effects, both acute and delayed

No information available.

### 4.3 Indication of any immediate medical attention and special treatment needed

No information available.

## SECTION 5 Firefighting measures

### 5.1 Extinguishing media

Water, Carbon Dioxide, Foam, Dry Chemical Powder

### 5.2 Special hazards arising from the substance or mixture

Exposure to decomposition products may be a hazard to health. Toxic gas (carbon monoxide, nitrogen oxides) and fumes maybe generated.

### 5.3 Advice for firefighters

Fire-fighting should be done from the windward side of fire area. Fire-fighters should wear proper protective equipment in case of large scale fire.

## SECTION 6 Accidental release measures

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

Wear protective equipment and avoid eye/skin contact and inhalation.

### 6.2 Environmental precautions

Avoid disposition to the environment.

### 6.3 Methods and material for containment and cleaning up

Use cloth, paper, or anything similar to soak up to the solution leaking out of the container.

### 6.4 Reference to other sections

For personal protection see section 8.

## SECTION 7 Handling and storage

### 7.1 Precautions for safe handling

Technical Measures : Avoid substance contact. Wear protective equipment and avoid contact with eyes and skin.

Handle with ventilation and local

Precautions: Keep the handling area always clean.

Hygiene measures: Wash hands thoroughly after handling.

### 7.2 Conditions for safe storage, including any incompatibilities

Storage Conditions: Store at about -20°C

Packaging Materials : Store in the original package

### 7.3 Specific end uses (s)

Laboratory chemicals

**SECTION 8 Exposure controls/ personal protection****8.1 Control Parameter****Occupational Exposure Limits**

Glycerol

JSOH OEL: Not Established

OSHA PEL: Total dust: 15mg/m<sup>3</sup>TWA; Respirable fr.: 5mg/m<sup>3</sup>TWADFG MAK : Inhalable fraction: 200 mg/m<sup>3</sup> ; Peak limitation category: I(2)**8.2 Exposure controls****Appropriate engineering controls**

Set up good ventilation and exhaust system in the work area.

**Personal protective Equipment**

Respiratory Protection: Wear a dust mask.

Hand Protection: Chemical safety gloves.

Eye Protection: Chemical safety goggles.

Skin and Body Protection: Long sleeves to prevent contact with skin.

**SECTION 9 Physical and chemical properties****9.1 Information on basic physical and chemical properties**

Physical State: Liquid

Colour: Colourless

Odour: None

pH: 7.0-9.0

Flash Point: No flammability due to aqueous solution, but glycerol whose flash point 160°C and Additive1 -2 whose flash point 131°C may stay behind after volatilization.

Density : 1.0-1.3(g/cm<sup>3</sup>)

Solubility : Soluble in water.

**9.2 Other data**

None

**SECTION 10 Stability and reactivity****10.1 Reactivity**

No hazardous reaction if stored and applied as directed.

**10.2 Chemical stability**

Stable at -20±5°C.

**10.3 Possibility of hazardous reactions**

Nothing particular

**10.4 Conditions to avoid**

High temperature, ignition sources

**10.5 Incompatible materials**

Strong acids, strong alkalines and strong oxidizers

**10.6 Hazardous decomposition products**

Not available

**SECTION 11 Toxicological information****11.1 Information on toxicological effects**

Acute Toxicity : Not available

Skin corrosion: May cause mild skin irritation.

Serious eye damage/irritation: May cause eye irritation.

**Toxicological information on the component of this product**

	Glycerol	KCl
Acute toxicity :	Oral-rat: LD50 12.6g/kg Dermal-rabbit: LD50 >10g/kg Inhalation-rat: LC50>570mg/m3 (1hr)	Oral-rat: LD50 2.6g/kg
Skin corrosion:	-----	Irritating to skin.
Eye damage/ irritation :	Irritating to eyes.	Irritating to eyes.
	Additive1	Additive2
Skin corrosion:	May cause irritate skin.	May cause irritate skin.
Eye damage/ irritation :	May cause irritate to eyes.	May cause irritate to eyes.

**SECTION 12 Ecological information**

**12.1 Toxicity**

	Glycerol	KCl
Acute toxicity :	Oral-rat: LD50 12.6g/kg Dermal-rabbit: LD50 >10g/kg Inhalation-rat: LC50>570mg/m3 (1hr)	Oral-rat: LD50 2.6g/kg
Skin corrosion:	-----	Irritating to skin.
Eye damage/ irritation :	Irritating to eyes.	Irritating to eyes.

**12.2 Persistence and degradability**

Glycerol, enzyme, antibody, and deoxynucleotide are biodegradable.

**12.3 Bioaccumulative potential**

Glycerol, enzyme, antibody, and deoxynucleotide are not bioaccumulative.

**12.4 Mobility in soil**

Soluble in water and diffusible into water environment.

**12.5 Results of PBT and vPvB assessment**

None

**SECTION 13 Disposal considerations**

**13.1 Waste treatment methods**

Product : Dispose of in accordance with all applicable local and national laws and regulations.

Contaminated Packaging : Dispose of in accordance with all applicable local and national laws and regulations.

**SECTION 14 Transport information**

**14.1 UN number**

No

**14.2 UN proper shipping name**

No

**14.3 Transport hazard class(es)**

No

**14.4 Packing group**

No

**14.5 Environmental hazards**

Not classified as environmental hazards.

**14.6 Special precautions for user**

To prevent packages from breaking, handle with care.

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code****SECTION 15 Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals

Not applicable

REACH - Authorization List of Substances of Very High Concern for Authorisation

Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer

Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants

Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Not applicable

**15.2 Chemical Safety Assessment**

No data available

Follow all of the laws and regulations in your respective country.

**SECTION 16 Other information****Full text of H-**

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H302: Harmful if swallowed.

H335: May cause respiratory irritation.

H411: Toxic to aquatic life with long lasting effects.

**Full text of other abbreviations**

Skin Irrit. : Skin irritation

Eye Irrit. : Eye irritation

Acute Tox.: Acute toxicity

**Notice**

STOT SE: Specific target organ toxicity - single exposure Aquatic Chronic: Chronic aquatic toxicity

The information in this SDS, to the best of our knowledge, is accurate and correct. However, TOROIVD makes no warranty and assumes no liability whatsoever in connection with any use of this information.

The SDS is subject to revision as new information becomes available.