miRNAssayTM qPCR RT Master Mix

First issue: May. 25, 2023 Revised: Jun. 10, 2024 SDS No.2428F

Safety Data Sheet

1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name miRNAssay TM qPCR RT Master Mix

Product Code MIR-101, 101T

SUPPLIER

Name TOYOBO Co., Ltd.

Address Osaka Umeda Twin Towers South,

1-13-1 Umeda, Kita-ku, Osaka 530-0001, Japan

Department Biotechnology Overseas Sales and Marketing Department

Emergency Telephone No. +81-6-6348-3846 Fax No. +81-6-6348-3833

Recommended use and cDNA Synthesis Kit for Real-Time PCR

restrictions on use (Reagent for research)

2 HAZARDS IDENTIFICATION

Most Important Hazards Few adverse human health effects are anticipated.

Specific Hazards Not available

GHS Classification Classification not possible

3 COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Product Mixture

(Substance/Mixture)

Chemical Nature Aqueous solution of enzyme, substrate, etc.

Parts Name Main components CAS No.

5×RT Master Mix Tris(Hydroxymethyl)aminomethane 77-86-1:1-10%

 $\begin{array}{lll} \mbox{Deoxyadenosine triphosphate} & 1927\text{-}31\text{-}7:<1\% \\ \mbox{Deoxycytidine triphosphate} & 102783\text{-}51\text{-}7:<1\% \\ \mbox{Deoxyguanosine triphosphate} & 93919\text{-}41\text{-}6:<1\% \\ \mbox{Deoxythymidine triphosphate} & 18423\text{-}43\text{-}3:<1\% \\ \end{array}$

Polyoxyethylene (20) sorbitan

monolaurate 9005-64-5: 0.05-0.2%

Glycerol 56-81-5 : Approx. 40% Reverse transcriptase 9068-38-6 : <0.1%

Ribonuclease Inhibitor -: <0.1%

5×RT Master Mix (the same as 5×RT Master Mix but no Reverse transcriptase

no-RT Control contained)
Nuclease-free Water
Water

Components Contributing to the Hazard

Common Chemical Name Glycerol

(or Generic Name)

Synonyms Glycerin
Contained Parts 5×RT Master Mix,

5×RT Master Mix no-RT Control

Chemical formula CH₂OHCHOHCH₂OH

CAS No. 56-81-5 Concentration 40%

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4 FIRST-AID MEASURES

Inhalation In case of irritation by inhaling this product, move affected person to

fresh air and await recovery. If irritation persists, seek immediate

medical attention.

Skin Contact Wash with clean water, immediately.

Eye Contact Flush eyes with clean water for more than 15 minutes, and seek medical

attention.

Ingestion Induce vomiting.

If indisposition continues, seek medical attention.

5 FIRE-FIGHTING MEASURES

Extinguishing Media Water, Carbon Dioxide, Foam, Dry Chemical Powder

Protection of fire-fighters 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.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions Wear protective gear to avoid eye/skin contact and inhalation.

Environmental Precautions Avoid disposition to the environment.

Methods for Cleaning up Use cloth, paper or anything similar to soak up the solution leaking out

of the container. Take up under vacuum using dust collecting filter.

7 HANDLING AND STORAGE

HANDLING

Technical Measures Wear protective equipments and avoid contact with eyes and skin.

Handle with ventilation and local exhaust system.

Precautions Avoid substance contact. After handling, wash with clean water.

Safe Handling Advice Good laboratory technique should be used when handling this product.

STORAGE

Safe Storage Conditions Keep away from fire and heat sources.

Keep away from wind, rain and direct Store away from strong oxidizers. Keep container tightly closed.

Store at below -20°C

Packaging Materials Store in the original package

8 EXPOSURE CONTROLS/ PERSONAL PROTECTION

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

Control Parameter

Limit Values Glycerol

JSOH OEL Not established

ACGIH TLV -

OSHA PEL total dust:15mg/m³TWA respirable fr.: 5mg/m³TWA

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.

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9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State 5×RT Master Mix, 5×RT Master Mix no-RT Control: Liquid at -20°C.

Colour None
Odour None
pH 6.0-9.0

Flash Point No flammability due to aqueous solution, but glycerol whose flash point

160°C may stay behind after volatilization 5×RT Master Mix, 5×RT

Master Mix no-RT Control.

Boiling Point Not available
Melting Point Not available
Decomposition Temperature Not available

Density None

Solubility Soluble in water

10 STABILITY AND REACTIVITY

Stability Stable at below -20°C.

Possible Hazardous Reactions None

Conditions to Avoid High temperature, ignition sources, direct sunlight

Material to Avoid Strong oxidizers, strong reducers

Hazardous Decomposition Not available

Product

11 TOXICOLOGICAL INFORMATION

Acute Toxicity Not available

Local Effects May cause eye and skin irritation. May cause respiratory and digestive

tract irritation.

12 ECOLOGICAL INFORMATION

Mobility Soluble in water and diffusible into water environment.

Persistence/Degradability Not available Bioaccumulation Not available

13 DISPOSAL CONSIDERATIONS

Waste from Residues 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.

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14 TRANSPORT INFORMATION

International Regulations

UN Classification Number Not classified

Specific Precautions To prevent packages from breaking, handle with care.

When transporting, transport at temperatures below -20°C.

15 REGULATORY INFORMATION

Follow all of the laws and regulations in your country.

16 OTHER INFORMATION

Notice The information in this SDS, to the best of our knowledge, is accurate

and correct. However, TOYOBO 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.