



ReverTra Ace® qPCR RT Kit
First issue : Jun. 11, 2014

SDS No.880F

Safety Data Sheet

1 PRODUCT AND COMPANY IDENTIFICATION

Product Name ReverTra Ace® qPCR RT Kit
Product Code FSQ-101,101S
SUPPLIER
Name TOYOBO Co., Ltd.
Address 2-8 Dojima Hama 2-chome, Kita-Ku OSAKA 530-8230 JAPAN
Department Life Science Department
Emergency Telephone No. +81-6-6348-3786
Fax No. +81-6-6348-3833
Recommended use and restrictions on use cDNA Synthesis Kit for Real-Time PCR (Reagent for research)

2 HAZARDS IDENTIFICATION

Most Important Hazards Few adverse human health effects are anticipated.
Specific Hazard Not available
GHS Classification Classification not possible

3 COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Product Mixture
(Substance/Mixture)
Chemical Nature Aqueous solution

Parts Name	Main Component	CAS No.	Concentration
<5x RT Buffer>	Tris(hydroxymethyl)	77-86-1	<1%
	Potassium chloride	7791-18-6	<1%
	Magnesium chloride	7447-40-7	<1%
	deoxyadenosine 5'triphosphate	1927-31-7	<1%
	deoxycytidine 5'triphosphate	102783-51-7	
	deoxyguanosine 5'triphosphate	93919-41-6	
	deoxythymidine 5'triphosphate	18423-43-3	
<Enzyme Mix>	Reverse Transcriptase	(EC 2.7.7.49)	<1%
	RNase Inhibitor	-	<1%
	Glycerol	56-81-5	50%
<Primer Mix>	DNA	-	<1%

Components Contributing to the Hazard

Common Chemical Name	Glycerol
Synonyms	Glycerin
Contained Parts	Enzyme Mix
Chemical formula	CH ₂ OHCHOHCH ₂
CAS No.	56-81-5
Concentration	50%



Safety Data Sheet

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 plenty of clean water, immediately.
Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention
Ingestion	Try to get the affected person to vomit as much as possible. Seek medical attention, immediately.

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 equipments and 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 to 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 hands completely.
Safe Handling Advice	Keep the handling area always clean.

STORAGE

Proper Storage Conditions	Keep tightly closed and store at -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. Provide washing facilities nearby.
----------------------	--

Control Parameter

Limit Values	Glycerol
JSOH OEL	not established
ACGIH TLV	10mg/m ³
OSHA PEL	total dust: 15mg/m ³ TWA respirable fr.: 5mg/m ³ TWA

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection	Wear a dust mask when needed.
Hand Protection	Wear chemical safety gloves.
Eye Protection	Wear protective eyeglasses or chemical safety goggles.
Skin and Body Protection	Wear lab coat when needed.



Safety Data Sheet

9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid. 5xRT Buffer and Primer Mix freeze at -20°C.
Colour	Colourless
Odour	None
pH	7.0-8.0
Flash Point	Not flammable due to aqueous solution, but glycerol whose flash point 160°C may stay behind after volatilization.
Explosion limit	Not explosible
Density	1.0~1.2(g/cm ³)
Solubility	Soluble in water

10 STABILITY AND REACTIVITY

Stability	Stable at below -20°C.
Possible Hazardous	Nothing particular
Reactions	
Conditions to Avoid	High temperature, ignition sources, direct sunlight
Material to Avoid	Strong oxidizer, strong reducers
Hazardous Decomposition Product	Not available

11 TOXICOLOGICAL INFORMATION

Acute Toxicity	Not Available
Local Effects	May cause eye and skin irritation.
Toxicological information on the component of this product	Glycerol
Skin corrosion/Irritation	rabbit:500mg/24hr:Mild
Serious eye damage/Eye irritation	rabbit:500mg/24hr:Mild

12 ECOLOGICAL INFORMATION

Mobility	Soluble in water and diffusible into water environment.
Persistence/Degradability	Glycerol, deoxynucleotide, and enzymes are biodegradable.
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.

14 TRANSPORT INFORMATION

International Regulations	
UN Classification Number	Not classified
	Follow all of the laws and regulations in your respective country.
Specific Precautions	To prevent packages from breaking, handle with care.



ReverTra Ace[®] qPCR RT Kit
First issue : Jun. 11, 2014

SDS No.880F

Safety Data Sheet

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.