

SuperPrep™ II Cell Lysis &amp; RT Kit for qPCR

First issue : Dec. 13, 2016



SDS No.1346F

## Safety Data Sheet

### 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Identification of the product	<b>SuperPrep™ II Cell Lysis &amp; RT Kit for qPCR</b>
Product Code	SCQ-401
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	Cell lysis and cDNA synthesis for qPCR (Reagents for research)

### 2 HAZARDS IDENTIFICATION

Most Important Hazards gDNA Remover, RNase Inhibitor, 5xRT Master Mix, and 5x RT Master Mix no-RT control contain glycerol and may cause eye and skin irritation. Lysis Solution contains detergent and may cause eye

Specific Hazard Not available

GHS Classification

Hazard class and category

		gDNA Remover	RNase Inhibitor	Lysis Solution
Physical Hazards	Flammable liquid	Not classified	Not classified	Not classified
Health Hazards	Skin corrosion	Category 3	Category 3	Not classified
	/Irritation			
Health Hazards	Serious eye damage /Eye	Category 2B	Category 2B	Not classified
	Environmental Hazards	Classification not possible	Classification not possible	Classification not possible
Physical Hazards		5xRT Master Mix	5xRT Master Mix no-RT control	
	Flammable liquid	Not classified	Not classified	
Health Hazards	Skin corrosion	Category 3	Category 3	
	/Irritation			
Health Hazards	Serious eye damage /Eye	Category 2B	Category 2B	
	Environmental Hazards	Classification not possible	Classification not possible	

Label elements gDNA Remover  
RNase Inhibitor  
5xRT Master Mix  
5xRT Master Mix no-RT control

Pictogram or symbol

Signal word Warning

Hazard statement Causes mild skin irritation  
Causes eye irritation

Precautionary statement

Prevention Wash hands thoroughly after handling

Response If skin irritation occurs: Get medical advice/attention.  
IF IN EYES: 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.



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### 3 COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Product (Substance/Mixture)	Mixture	
Chemical Nature	Aqueous solution	
Parts Name	Main Component	CAS No.
Lysis Solution	Tris(hydroxymethyl)aminomethane	77-86-1
	Surfactant A	-
	Magnesium chloride	7786-30-3
	Calcium Chloride	10043-52-4
	Dithiothreitol	3483-12-3
	Proteinase K	39450-01-6
gDNA Remover	Glycerol	56-81-5
	Deoxyribonuclease	9003-98-9
RNase Inhibitor	Glycerol	56-81-5
	4-(2-hydroxyethyl)-1-piperazineethanesulfonic acid	7365-45-9
	RNase Inhibitor	-
5xRT Master Mix	Tris(hydroxymethyl)aminomethane	77-86-1
	Potassium chloride	7447-40-7
	Magnesium chloride	7786-30-3
	2'-deoxyadenosine 5'-(tetrahydrogen triphosphate)	1927-31-7
	2'-deoxycytidine 5'-(tetrahydrogen triphosphate)	102783-51-7
	2'-deoxyguanosine 5'-(tetrahydrogen triphosphate)	93919-41-6
	2'-deoxythymidine 5'-(tetrahydrogen triphosphate)	18423-43-3
	Poly(oxyethylene)nonylphenyl ether	9016-45-9
	Glycerol	56-81-5
	Reverse Transcriptase	-
	RNase Inhibitor	-
	DNA	-
5xRT Master Mix no-RT control	Tris(hydroxymethyl)aminomethane	77-86-1
	Potassium chloride	7447-40-7
	Magnesium chloride	7786-30-3
	2'-deoxyadenosine 5'-(tetrahydrogen triphosphate)	1927-31-7
	2'-deoxycytidine 5'-(tetrahydrogen triphosphate)	102783-51-7
	2'-deoxyguanosine 5'-(tetrahydrogen triphosphate)	93919-41-6
	2'-deoxythymidine 5'-(tetrahydrogen triphosphate)	18423-43-3
	Poly(oxyethylene)nonylphenyl ether	9016-45-9
	Glycerol	56-81-5
	RNase Inhibitor	-
	DNA	-
Nuclease-free Water	Water	7732-18-5



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### 3 COMPOSITION / INFORMATION ON INGREDIENTS(CONTINUED)

Components Contributing to the Hazard

Common Chemical Name (or Generic Name)	Surfactant A	Glycerol
Synonyms	-	Glycerin
Chemical formula	-	CH <sub>2</sub> (OH)CH(OH) )CH <sub>2</sub> (OH)
CAS No.	-	56-81-5
Concentration	< 0.1%	approximately 50%
Common Chemical Name (or Generic Name)	4-(2-hydroxyethyl)- 1-piperazineethane sulfonic acid	Poly(oxyethylen e)nonylphenyl ether
Synonyms	HEPES	Nonidet P-40
Chemical formula	C <sub>8</sub> H <sub>18</sub> N <sub>2</sub> O <sub>4</sub> S	Not specified
CAS No.	7365-45-9	9016-45-9
Concentration	0.5%	< 0.005%

### 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 below -20°C
Packaging Materials	Store in the original package



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### 8 EXPOSURE CONTROLS/ PERSONAL PROTECTION

ENGINEERING Set up good ventilation and exhaust system in the work area.  
 MEASURES Provide washing facilities nearby.

Control Parameter

Limit Values	Surfactant A	Glycerol (mist)
JSOH OEL	not established	not established
ACGIH TLV	not established	10mg/m <sup>3</sup>
OSHA PEL	not established	total dust: 15mg/m <sup>3</sup> TWA respirable fr.: 5mg/m <sup>3</sup> TWA
Limit Values	4-(2-hydroxyethyl)- 1-piperazineethane sulfonic acid	Poly(oxyethylen e)nonylphenyl ether
JSOH OEL	not established	not established
ACGIH TLV	not established	not established
OSHA PEL	not established	not established

### 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.

### 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State Liquid. Lysis Solution, and Nuclease-free Water freeze at -20°C.  
 Colour Colourless  
 Odour None  
 pH 6.0-9.0  
 Flash Point No flammability due to aqueous solution  
 Explosion limit Not explosive  
 Density 1.0~1.2(g/cm<sup>3</sup>)  
 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 Not available  
 Product



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### 11 TOXICOLOGICAL INFORMATION

Acute Toxicity	Not Available	
Local Effects	May cause eye and skin irritation.	
Toxicological information on the component of this product		
	Surfactant A	Glycerol
Skin corrosion/Irritation	-	rabbit:500mg/24 hr:Mild
Serious eye damage/Eye irritation	Rabbit, undiluted, OECD405: Category 1	rabbit:500mg/24 hr:Mild

### 12 ECOLOGICAL INFORMATION

Ecotoxicity	Glycerol	Surfactant A
	Rainb trout:	Rainb trout:
	LC50(96hr) 54g/L	LC50(96hr)
	Gold fish:	> 0.5 mg/L
	LC50(24hr) > 5g/L	
	Daphnia magna	
	: EC50(24hr) > 10g/L	
	Red algae:	
Persistence and degradability	Not available	
Bioaccumulative potential	Not available	
Mobility in soil	Soluble in water and diffusible into water environment.	

### 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.

### 15 REGULATORY INFORMATION

Follow all of the laws and regulations in your country.

### 16 OTHER INFORMATION

Notice	This product is sold for research purposes only . It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. 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 information shall not be taken as being all inclusive and is to be used only a guide. All materials and mixtures may be present unknown hazards and should be used with caution. The SDS is subject to revision as new information becomes
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