



SuperPrep Cell Lysis & RT Kit for qPCR
First issue : Jul. 22, 2013

SDS No.771F

Safety Data Sheet

1 PRODUCT AND COMPANY IDENTIFICATION

Product Name	<i>SuperPrep</i>TM Cell Lysis & RT Kit for qPCR
Product Code	SCQ-101
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
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Recommended use and restrictions on use	Cell lysis and cDNA synthesis for qPCR (Reagents for research)



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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			
	Serious eye damage	Category 2B	Category 2B	Not classified
	/Eye irritation			
Environmental Hazards		Classification not possible	Classification not possible	Classification not possible
		Stop Solution	5xRT Master Mix	5xRT Master Mix no-RT control
Physical Hazards	Flammable liquid	Not classified	Not classified	Not classified
Health Hazards	Skin corrosion	Classification not possible	Category 3	Category 3
	/Irritation			
	Serious eye damage	Classification not possible	Category 2B	Category 2B
	/Eye irritation			
Environmental Hazards		Classification not possible	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	
	Poly(oxyethylene) octylphenyl ether	9036-19-5	
	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
	Stop Solution	Tris(hydroxymethyl)aminomethane	77-86-1
		Ethylenebis(oxyethylenitrilo)tetraacetic acid	67-42-5
4-(2-Aminoethyl)benzenesulfonyl fluoride hydrochloride		30827-99-7	
Dithiothreitol		3483-12-3	
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)	Poly(oxyethylene) octylphenyl ether	Glycerol	Ethylenebis(oxy ethylenenitrilo)t etraacetic acid	4-(2-Aminoethyl) benzenesulfonyl fluoride hydrochloride
Synonyms	Triton X-114	Glycerin	EGTA	AEBSF
Chemical formula	$(C_2H_4O)_n C_{14}H_{22}O$	$CH_2(OH)CH(OH)$ $)CH_2(OH)$	$C_{14}H_{24}N_2O_{10}$	$NH_2CH_2CH_2C_6H$ $_4SO_2F$
CAS No.	9036-19-5	56-81-5	67-42-5	30827-99-7
Concentration	0.1%	approximately 50%	2%	0.1%
Common Chemical Name (or Generic Name)	4-(2-hydroxyethyl)- 1-piperazineethane sulfonic acid	Poly(oxyethylene))nonylphenyl ether		
Synonyms	HEPES	Nonidet P-40		
Chemical formula	$C_8H_{18}N_2O_4S$	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.



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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

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

	Poly(oxyethylene) octylphenyl ether	Glycerol (mist)	Ethylenebis(oxy ethylenenitrilo)t etraacetic acid	4-(2-Aminoethyl) benzenesulfonyl fluoride
JSOH OEL	not established	not established	not established	not established
ACGIH TLV	not established	10mg/m ³	not established	not established
OSHA PEL	not established	total dust: 15mg/m ³ TWA respirable fr. : 5mg/m ³ TWA	not established	not established

Limit Values

	4-(2-hydroxyethyl)- 1-piperazineethane sulfonic acid	Poly(oxyethylene)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, Stop 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 explosible
Density	1.0~1.2(g/cm ³)
Solubility	Soluble in water



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10 STABILITY AND REACTIVITY

Stability	Stable at below -20°C.
Possible Hazardous Reactions	Nothing particular
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	
	Poly(oxyethylene) octylphenyl ether Glycerol
Skin corrosion/Irritation	- rabbit:500mg/24 hr:Mild
Serious eye damage/Eye irritation	rabbit: Moderate irritation (Result of Hazard Assessment Report 2001-42(2002) conducted by Chemical Evaluation and Research Institute rabbit:500mg/24 hr:Mild

12 ECOLOGICAL INFORMATION

Mobility	Soluble in water and diffusible into water environment.
Persistence/Degradability	Not available
Bioaccumulation	Not available
Ecotoxicological information on the components of this product	
	Poly(oxyethylene) octylphenyl ether
Acute aquatic toxicity (LC50)	Algae (Selenastrum)-0.21mg/l-96h (Result of Hazard Assessment Report conducted by Ministry of the Environment and Chemical Evaluation and Research Institute in Japan-2006)

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
Specific Precautions	Follow all of the laws and regulations in your respective country. To prevent packages from breaking, handle with care.



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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.