



Safety Data Sheet

1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Identification of the product	KOD Long PCR Master Mix
Product Code	KML-101, KML-101S
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 restrictions on use	PCR kit for DNA amplification(Reagents for research)

2 HAZARDS IDENTIFICATION

GHS Classification	
Acute toxicity (oral)	No Classification
Acute toxicity (dermal)	No Classification
Skin corrosion/irritation	No Classification
Serious eye damage/eye irritation	No Classification
Acute hazards to the aquatic environment	No Classification
Chronic hazards to the aquatic environment	No Classification

Label elements

Pictogram or symbol	-
Signal word	-
Hazard statements:	-

3 COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Product	Mixture
Chemical Nature	Aqueous solution

Main Component	wt%	CAS No. (EC No.)
Tris(Hydroxymethyl)aminomethane	<5%	77-86-1
Magnesium sulfate	<0.1%	7487-88-9
Deoxyadenosine triphosphate	<0.1%	1927-31-7
Deoxycytidine triphosphate	<0.1%	102783-51-7
Deoxyguanosine triphosphate	<0.1%	93919-41-6
Deoxythymidine triphosphate	<0.1%	18423-43-3
DNA polymerase	-	(EC 2.7.7.7)
monoclonal antibody	-	9016-45-9
Glycerol	<5%	56-81-5
Poly(oxyethylene) Nonylphenylether	<0.01%	9016-45-9

4 FIRST-AID MEASURES

Inhalation	Remove person to fresh air and keep at rest in a position comfortable for breathing. Consult a physician if you feel unwell.
Skin Contact	Wash with plenty of clean water, immediately. If skin irritation occurs: Get medical advice/attention.
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	Rinse mouth. Vomit if possible. Seek medical attention, immediately.



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5 FIRE-FIGHTING MEASURES

Extinguishing Media	Water, Carbon Dioxide, Foam, Dry Chemical Powder
Specific extinguishing methods	Fire-fighting should be done from the windward side of fire area.
Protection of fire-fighters	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	Aspirate under reduced pressure, or soak up with cloth, paper or the like, and collect it in a disposal container.

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. Wash hands thoroughly after handling.
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 controls	Set up good ventilation and exhaust system in the work area. Provide washing facilities nearby.
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.
Colour	Colourless
Odour	None
pH	7.0-9.0
Flash Point	No flammability due to aqueous solution, but glycerol whose flash point 160°C may stay behind after volatilization.
Boiling Point	Classification not possible
Melting Point	Classification not possible
Decomposition Temperature	Classification not possible
Specific Gravity	1.0-1.2
Solubility	Soluble in water

10 STABILITY AND REACTIVITY

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



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11 TOXICOLOGICAL INFORMATION

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Acute toxicity (oral):	No Classification
Acute toxicity (dermal):	No Classification
Acute toxicity (inhalation):	No Classification
Skin corrosion/irritation:	No Classification
Serious eye damage/irritation:	No Classification
Respiratory sensitization:	Classification not possible
Skin sensitization:	Classification not possible
Mutagenicity:	Classification not possible
Carcinogenicity:	Classification not possible
Reproductive toxicity:	Classification not possible
Target organ effect/Single exposure:	Classification not possible
Target organ effect/Multi exposure:	Classification not possible
Respiratory toxic:	Classification not possible

12 ECOLOGICAL INFORMATION

Ecotoxicity	Not available
Persistence and degradability	Enzyme, protein and glycerol are biodegradable.
Bioaccumulative potential	Not available
Mobility in soil	Classification not possible

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 as dangerous goods.

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

Specific Precautions

To prevent packages from breaking, handle with care. Store at about -20°C when it is transported.

15 REGULATORY INFORMATION

Follow all of the laws and regulations in your country.

16 OTHER INFORMATION

Notice

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 available.