



## Safety Data Sheet

### 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Identification of the product **anti-Taq high**  
 Product Code TCP-101  
 SUPPLIER  
 Name TOYOBO Co., Ltd.  
 Address 2-2-8 Dojima Hama Kita-ku Osaka, 530-8230 Japan  
 Department Biotech support Department  
 Telephone No. +81-6-6348-3786  
 Fax No. +81-6-6348-3833  
 Recommended use and restrictions on use PCR for DNA amplification  
 (Reagent for research)

### 2 HAZARDS IDENTIFICATION

Parts Name anti-Taq high  
 Most Important Hazards anti-Taq high contain glycerol and may cause eye and skin irritation.  
 Few adverse human health effects are anticipated.  
 Specific Hazards Not available  
 GHS Classification  
 Hazard class and category  
 Physical Hazards Flammable liquids Not classified  
 Health Hazards Skin corrosion /Irritation Category 3  
 Serious eye damage /Eye irritation Category 2B  
 Environmental Hazards Classification not possible  
 Label elements  
 Pictogram or symbol -  
 Signal word Warning  
 Hazard statement Causes mild skin irritation  
 Causes eye irritation  
 Precautionary statement 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.  
 Parts Name anti-Taq high 10X PCR buffer  
 Most Important Hazards Few adverse human health effects are anticipated.  
 Specific Hazards Not available  
 GHS Classification Classification not possible



## Safety Data Sheet

### 3 COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Product (Substance/Mixture)	Mixture	
Chemical Nature		
Parts Name	Main components	CAS No.
anti-Taq high	monoclonal antibody	-
	Tris(Hydroxymethyl)aminomethane	77-86-1
	Glycerol	56-81-5
anti-Taq high 10X PCR buffer	Tris(Hydroxymethyl)aminomethane	77-86-1
	Magnesium sulfate	7487-88-9
Components Contributing to the Hazard		
Common Chemical Name (or Generic Name)	Glycerol	
Synonyms	Glycerin	
Contained	anti-Taq high : 52.4%	
Chemical formula	CH <sub>2</sub> OHCHOHCH <sub>2</sub> OH	
CAS No.	56-81-5	

### 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 several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists, 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

### 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

Technical Measures	Store in the laboratory bottle
Storage Conditions	Store at about -20°C
Packaging Materials	Store in the original package



## Safety Data Sheet

### 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	10mg/m <sup>3</sup>
OSHA	PEL	total dust:15mg/m <sup>3</sup> TWA respirable fr.: 5mg/m <sup>3</sup> TWA

#### 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.

### 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid. anti-Taq high 10X PCR buffer freezes at -20°C
Colour	None
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 anti-Taq high.
Boiling Point	Not available
Melting Point	Not available
Decomposition Temperature	Not available
Density	1.0-1.2(g/cm <sup>3</sup> )
Solubility	Soluble in water

### 10 STABILITY AND REACTIVITY

Stability	Stable at less than -20°C
Possible Hazardous Reactions	None
Conditions to Avoid	Strong heat
Material to Avoid	Direct sunlight, strong oxidizers and strong reducers
Hazardous Decomposition Product	Not available

### 11 TOXICOLOGICAL INFORMATION

Acute Toxicity	Not available
Local Effects	May cause eye and skin irritation. May cause respiratory and digestive tract irritation.
Toxicological information on the component of this product	
	Glycerol
Acute toxicity (LD50)	Oral-mouse: 4090mg/kg Oral-rat: 12.6g/kg
Skin corrosion/Irritation	rabbit:500mg/24hr:Mild
Serious eye damage/Eye irritation	rabbit:126mg/24hr:Mild



## Safety Data Sheet

### 12 ECOLOGICAL INFORMATION

Ecotoxicity	Rainboultrout:LC50(96hr) 54g/L Gold fish:LC50(24hr) > 5g/L Daphnia magna:EC50(24hr) > 10g/L Red algae:EC50(28hr) 4.6g/L
Mobility	Soluble in water and diffusible into water environment.
Persistence/Degradability	Rapidly degradable BOD
Bioaccumulation	Not bioaccumulative (LogPow=-2.3)
Mobility in Soil	Not available
Hazard to the ozone layer	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.

### 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 and is not required to appear on the TSCA inventory. 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 available.
--------	--