

Uracil-DNA Glycosylase, Heat-labile
 First issue : Oct. 2, 2018
 Revised : Apr. 1, 2021
 SDS No.1600F



Safety Data Sheet

1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Identification of the product	Uracil-DNA Glycosylase, Heat-labile
Product Code	UNG-101, 109
SUPPLIER	
Name	TOYOBO Co., Ltd.
Address	2-8 Dojima Hama 2-chome, Kita-ku OSAKA 530-8230 JAPAN
Department	Biotechnology Overseas Sales and Marketing Department
Emergency Telephone No.	+81-6-6348-3843
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Recommended use and restrictions on use	decomposition of DNA template containing uracil (Reagent for research)

2 HAZARDS IDENTIFICATION

Important Hazards	
Adverse effects on human health	Few adverse human health effects are anticipated.
GHS Classification	Not classified

3 COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Product (Substance/Mixture)	Mixture	
Chemical Nature	Aqueous solution of enzyme	
	Main components	CAS No.
	Uracil DNA glycosylase	-
	Glycerol	56-81-5
Components Contributing to the Hazard		
Common Chemical Name	Glycerol	
Synonyms	Glycerin	
Chemical formula	CH ₂ OHCHOHCH ₂ OH	
CAS No.	56-81-5	
Concentration	50%	

4 FIRST-AID MEASURES

Inhalation	In case of irritation by inhaling this product, remove person to fresh air and keep comfortable. Seek medical attention.
Skin Contact	Wash with clean water, immediately.
Eye Contact	Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice / attention.
Ingestion	Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell. Do not induce to vomiting.

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 fire.

6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedure	Wear protective equipment to avoid eye/skin contact and inhalation.
Environmental Precautions	Avoid disposition to the environment.
Methods and materials for containment and methods and materials 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.



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7 HANDLING AND STORAGE

Handling (precautions for safe handling)

Technical Measures

Wear protective equipments and avoid contact with eyes and skin.

Precautions (local/total ventilation)

Good laboratory technique should be used.

Prevention of contact

Avoid contact with oxidizers.

Hygiene measures

After handling, wash with clean

Storage (conditions for safe storage)

Technical Measures

Keep tightly closed and store between -20°C and -30°C

Incompatible substances and mixtures

Oxidizers

Packaging Materials

Store in the original package

8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

ENGINEERING MEASURES

Set up good ventilation and exhaust system in the work area.

Control Parameter

Limit Values

JSOH OEL

Glycerol (mist)

Not established

ACGIH TLV

10mg/m³

OSHA PEL

total dust:15mg/m³TWA

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, Form, Colour

liquid over -20°C, Colourless

Odour

None

pH

7.0-9.0

Flash Point

No flammability for aqueous solution, but glycerol with the flash point of 160°C may remain after volatilization of water.

Boiling Point

Not available

Melting Point

Not available

Decomposition Temperature

Not available

Specific gravity

1.0-1.2

Solubility

Soluble in water

10 STABILITY AND REACTIVITY

Chemical stability and hazardous reactions Stable at -20°C or below. Decomposes gradually at normal temperature, but not dangerous reaction.

Conditions to Avoid

Strong heat, Direct sunlight

Incompatible materials

Strong oxidizers, Strong reducers

Hazardous decomposition products

Not available

11 TOXICOLOGICAL INFORMATION

Acute Toxicity

Not available

Skin irritation/corrosion

May cause skin irritation.

Eye damage/irritation

May cause eye irritation.

Specific target organ toxicity-single exposure

May cause respiratory irritation.

Acute Toxicity

Not available

Local Effects

May cause eye and skin irritation. May cause respiratory and digestive

12 ECOLOGICAL INFORMATION

Ecotoxicity

Glycerol

Rainboultrout:LC50(96hr) 54g/L

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Gold fish:LC50(24hr)>5g/L
Daphnia magna:EC50(24hr)>10g/L
Red algae:EC50(28hr) 4.6g/L

Persistence and degradability
Bioaccumulative potential
Mobility in soil
Other adverse effects

Rapidly biodegradable.
Not available
Soluble in water and diffusible into water environment.
Not available

13 DISPOSAL CONSIDERATIONS

Waste from Residues
Contaminated container and
Contaminated packaging

Dispose of in accordance with all applicable local and national laws and
Dispose of in accordance with all applicable local and national laws and
regulations.

14 TRANSPORT INFORMATION

International Regulations
UN Classification Number

Specific Precautions

Not classified
Follow all of the laws and regulations in your respective country.
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

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.