Safety Data Sheet

Revision Date 2021-02-06

Revision Number 8

	1. Identification	
Product identifier		
Product Name	TaKaRa LA Taq®	
Other means of identification		
Product Code	SD1998	
Synonyms	No information available	
Recommended use of the chemical and restrictions on use		
Identified uses	No information available	
Restrictions on use	No information available	
Details of the supplier of the safety data sheet		

Supplier USA: Takara Bio USA, Inc. 1290 Terra Bella Avenue Mountain View, CA 94043 Phone: 800.662.2566/888.251.6618 Web: www.takarabio.com

Emergency telephone number

Emergency telephone

In case of emergency, call PERS (Professional Emergency Resource Services) 1-800-633-8253 (US) or 801-629-0667 (international).

2. Hazard(s) identification

Classification

Acute toxicity - Inhalation (Dusts/Mists)

Category 4

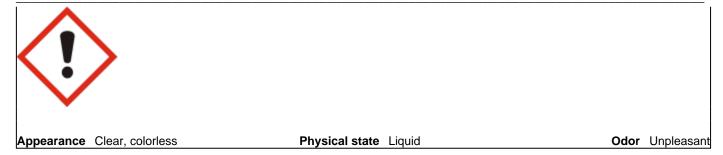
Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Warning

Hazard statements Harmful if inhaled



Precautionary Statements - Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

IF INHALED: Remove person to fresh air and keep comfortable for breathing Call a POISON CENTER or doctor if you feel unwell

Unknown acute toxicity

1 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Other information

No information available.

3. Composition/information on ingredients

Substance

Not applicable.

<u>Mixture</u>

Chemical name	CAS No	Weight-%	Trade secret
Glycerol	56-81-5	60 - 100	*

4. First-aid measures

Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.
Inhalation	Remove to fresh air. If symptoms persist, call a physician. If breathing has stopped, give artificial respiration. Get medical attention immediately.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	Wash skin with soap and water.
Ingestion	Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid breathing vapors or mists. Use personal protective equipment as required. See section 8 for more information.

Most important symptoms and effects, both acute and delayed

Symptoms	Coughing and/ or wheezing. Difficulty in breathing.		
Indication of any immediate medical	attention and special treatment needed		
Note to physicians	Treat symptomatically.		
5. Fire-fighting measures			
Suitable Extinguishing Media Large Fire	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. CAUTION: Use of water spray when fighting fire may be inefficient.		
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.		
Specific hazards arising from the chemical	No information available.		
Explosion Data Sensitivity to mechanical impact None.			
Sensitivity to static discharge	None.		
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.		

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation. Avoid breathing vapors or mists. Use personal protective equipment as required.
Other information	Refer to protective measures listed in Sections 7 and 8.
Methods and material for containm	ent and cleaning up
Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Conditions for safe storage, including any incompatibilities Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Odor Threshold

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Glycerol	-	TWA: 15 mg/m ³	-
56-81-5		TWA: 5 mg/m ³	
		(vacated) TWA: 10 mg/m ³	
		(vacated) TWA: 5 mg/m ³	

Appropriate engineering controls

Engineering controls	Showers Eyewash stations Ventilation systems.		
Individual protection measures, such as personal protective equipment			
Eye/face protection	No special protective equipment required.		
Skin and body protection	No special protective equipment required.		
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.		
General hygiene considerations	Do not eat, drink or smoke when using this product.		

9. Physical and chemical properties

Information on basic physical and chemical propertiesPhysical stateLiquidAppearanceClear, colorlessColorClearOdorUnpleasant

Property	Values	Remarks • Method
pH	<u>values</u>	None known
Melting point / freezing point	No data available	None known
Boiling point/boiling range (°C)	No data available	None known
Flash point	No data available	Open cup
Evaporation Rate	no data available	None known
Flammability (solid, gas)	no data available	None known
Flammability Limit in Air		None known
Upper flammability limit:	No data available	
Lower flammability limit:	No data available	
Vapor pressure	no data available	None known
Vapor density	No data available	None known
Relative density		None known
Water solubility	No data available	None known
Solubility in other solvents	no data available	None known
Partition coefficient	no data available	None known
Autoignition temperature	392.8 °C / 739 °F	None known
Decomposition temperature		None known
Kinematic viscosity	No data available	None known
Dynamic Viscosity	no data available	None known
Other information		

No information available

Explosive properties	No information available
Oxidizing properties	No information available
Softening point	No information available
Molecular Weight	No information available
VOC Content (%)	No information available
Liquid Density	No information available
Bulk Density	No information available

10. Stability and reactivity

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to Avoid	Excessive heat.
Incompatible materials	None known based on information supplied.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available. Harmful by inhalation. (based on components).	
Eye contact	Specific test data for the substance or mixture is not available.	
Skin contact	Specific test data for the substance or mixture is not available.	
Ingestion	Specific test data for the substance or mixture is not available.	
Symptoms related to the physical, chemical and toxicological characteristics		

Symptoms Coughing and/ or wheezing.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	19,936.70 mg/kg
ATEmix (dermal)	15,838.60 mg/kg
ATEmix (inhalation-dust/mist)	4.3555 mg/l

Unknown acute toxicity

1 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Glycerol = 12600 mg/kg (Rat) 56-81-5		> 10 g/kg (Rabbit)	> 2.75 mg/L (Rat)4 h
30-61-5			

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

No information available.	
No information available.	
Kidney, Respiratory system, Eyes, Skin.	
No information available.	
No information available.	
No information available.	

12. Ecological information

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Glycerol	-	51 - 57: 96 h	-	-
56-81-5		Oncorhynchus mykiss		
		mL/L LC50 static		

Persistence and degradability

No information available.

Bioaccumulation

There is no data for this product.

Component Information

Chemical name	Partition coefficient
Glycerol	-1.76
56-81-5	

Other adverse effects

No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.

14. Transport information

DOT	Not regulated	
TDG	Not regulated	
<u>MEX</u>	Not regulated	
ICAO (air)	Not regulated	
IATA	Not regulated	
IMDG	Not regulated	
RID	Not regulated	
ADR	Not regulated	
ADN	Not regulated	

15. Regulatory information

International Inventories

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TSCA -.
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*Contact supplier for details. One or more substances in this product are either not listed on the US TSCA inventory, listed on the confidential US TSCA inventory or are otherwise exempted from inventory listing requirements

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

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DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

<u>SARA 313</u>

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

SD1998 - TaKaRa LA Taq®

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information					
NFPA HMIS	Health hazards 2 Health hazards 2	Flammability 1 Flammability 1	Instability 0 Physical hazards 0	Special hazards - Personal protection X	
	Key or legend to abbreviations and acronyms used in the safety data sheet Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION				
•	ne weighted average	STEL	Short term expos	ure limit	
Ceiling Ma	aximum limit value	*	Skin designation		

Revision Date Revision Note

2021-02-06 No information available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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End of Safety Data Sheet