園TaKaRa

Safety Data Sheet

This safety data sheet complies with the requirements of: JIS Z 7253:2019

> Revision Date 2021-06-16 Revision Number 6

1. Identification

Product Name TdT Buffer (5X)
Product Code SD0592

CAS-No -

Registration number No information available

Details of the supplier of the safety data sheet

Supplier Japan:

Takara Bio Inc. Nojihigashi 7-4-38

Kusatsu, Shiga 525-0058, Japan Phone: +81.77.565.6972 Web: www.takara-bio.com

China:

Takara Biomedical Technology (Beijing) Co., Ltd.

Life Science Park, 22 KeXueYuan Road, Changping District,

Beijing 102206, China Phone: +86 10 8072 0980 Web: www.takarabiomed.com.cn

Emergency telephone number

In case of emergency, call PERS (Professional Emergency Resource Services)

1-800-633-8253 (US) or 801-629-0667 (international).

Recommended use of the chemical and restrictions on use

Identified uses For research use only. Not for use in diagnostic procedures

Restrictions on use No information available

2. Hazard(s) identification

GHS Classification

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS) Not classified

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Acute toxicity - Oral	Classification not possible
Acute toxicity - Dermal	Classification not possible
Acute toxicity - Inhalation (Gases)	Classification not applicable
Acute toxicity - Inhalation (Vapors)	Classification not possible
Acute toxicity - Inhalation (Dusts/Mists)	Classification not possible
Skin corrosion/irritation	Classification not possible
Serious eye damage/eye irritation	Classification not possible
Respiratory sensitization	Classification not possible
Skin sensitization	Classification not possible
Germ cell mutagenicity	Classification not possible
Carcinogenicity	Classification not possible
Reproductive toxicity	Classification not possible
Effects on or via lactation	No effects on or via lactation
Specific target organ toxicity (single exposure)	Classification not possible
Specific target organ toxicity (repeated exposure)	Classification not possible
Aspiration hazard	Classification not possible
Acute aquatic toxicity	Classification not possible
Chronic aquatic toxicity	Classification not possible
Ozone	Classification not possible

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GHS label elements

Hazard Statements

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS) Not classified

Prevention

· Not applicable

Response

· Not applicable

Storage

Not applicable

Disposal

· Not applicable

Other hazards

No information available.

3. Composition/information on ingredients

Pure substance/mixture

Mixture

CAS-No

Chemical name	CAS No	Weight-%	ENCS Inventory	ENCS Number	ISHL Inventory	ISHL No
TRADE SECRET	=	1 - 5	Existing	Listed	Existing	Listed

Pollutant Release and Transfer Registry (PRTR)

Not applicable

Industrial Safety and Health Law

ISHL Notifiable Substances

Not applicable

Harmful Substances Whose Names Are to be Indicated on the Label

Not applicable

Poisonous and Deleterious Substances Control Law

Not applicable

4. First-aid measures

In case of inhalation Remove to fresh air.

In case of skin contact Wash skin with soap and water.

In case of eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

In case of ingestion Clean mouth with water and drink afterwards plenty of water.

Most important symptoms/effects,

acute and delayed

No information available.

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5. Fire-fighting measures

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

Do not scatter spilled material with high pressure water streams. Unsuitable extinguishing media

Specific hazards arising from the

chemical

No information available.

Special Extinguishing Media

Large Fire

Cool drums with water spray. CAUTION: Use of water spray when fighting fire may be inefficient.

Special protective equipment and

precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

Accidental release measures

Personal precautions, protective equipment and emergency

procedures

Ensure adequate ventilation.

Use personal protection recommended in Section 8. For emergency responders

Environmental precautions See Section 12 for additional Ecological Information.

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.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. Handling and storage

Handling

Advice on safe handling

Storage

Storage Conditions

Handle in accordance with good industrial hygiene and safety practice.

Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls/personal protection

Engineering controls Showers

> Eyewash stations Ventilation systems.

Exposure guidelines This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies.

Biological occupational exposure

limits

This product, as supplied, does not contain any hazardous materials with biological limits

established by the region specific regulatory bodies

Environmental exposure controls Personal Protective Equipment

No information available.

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.

Eye/face protection Skin and body protection No special protective equipment required. No special protective equipment required.

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9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance Clear, colorless

Physical state Liquid
Color Clear
Odor Odorless

Odor Threshold No information available

PropertyValuesRemarks • MethodMelting point / freezing pointNo data availableNo information availableBoiling point/boiling range (°C)No data availableNo information availableFlammability (solid, gas)No data availableNo information available

Upper/lower flammability or explosive limits

Upper flammability limit:No data availableLower flammability limit:No data available

Flash point No data available ASTM D 56

Evaporation RateNo data availableNo information availableAutoignition temperatureNo data availableNo information availableDecomposition temperatureNo data availableNo information availablepHNo data availableNo information available

Viscosity

Kinematic viscosity No data available No information available

Dynamic ViscosityNo information availableWater solubilityNo data availableNo information available

Water solubilityNo data availableNo information availableSolubility in other solventsNo data availableNo information availablePartition CoefficientNo data availableNo information available

(n-octanol/water)

Vapor pressureNo data availableNo information availableVapor densityNo data availableNo information availableRelative densityNo data availableNo information available

Particle characteristics

Particle SizeNo data availableNot applicableParticle Size DistributionNo data availableNot applicable

Other information

Explosive properties No information available Oxidizing properties No information available

10. Stability and reactivity

Reactivity

Chemical stability

Possibility of hazardous reactions

No information available.

Stable under normal conditions.

None under normal processing.

Incompatible materials None known based on information supplied. Hazardous Decomposition Products None known based on information supplied.

Explosion Data

Sensitivity to static discharge None. Sensitivity to mechanical impact None.

11. Toxicological information

Acute toxicity

Numerical measures of toxicity - Product Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
TRADE SECRET	= 2600 mg/kg (Rat)	-	-

Abbreviations and acronyms

Rat: Rat

Symptoms No information available.

Product Information

Ingestion Specific test data for the substance or mixture is not available.

Inhalation Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available.

Eye contact Specific test data for the substance or mixture is not available.

Skin corrosion/irritationBased on available data, the classification criteria are not met. Classification not possible.

Serious eye damage/eye irritation Based on available data, the classification criteria are not met. Classification not possible.

Respiratory or skin sensitization Classification not possible.

Germ cell mutagenicityBased on available data, the classification criteria are not met. Classification not possible.

Carcinogenicity Based on available data, the classification criteria are not met. Classification not possible.

Reproductive toxicityBased on available data, the classification criteria are not met. Classification not possible.

STOT - single exposureBased on available data, the classification criteria are not met. Classification not possible.

STOT - repeated exposureBased on available data, the classification criteria are not met. Classification not possible.

Aspiration hazard Based on available data, the classification criteria are not met. Classification not possible.

12. Ecological information

Ecotoxicity Classification not possible.

Percentage for unknown 0.37807 % of the mixture consists of component(s) of unknown hazards to the aquatic

hazards environment.

Chemical name	Algae/aquatic plants	Fish	Crustacea
TRADE SECRET	2500: 72 h Desmodesmus	750 - 1020: 96 h Pimephales	825: 48 h Daphnia magna mg/L
	subspicatus mg/L EC50	promelas mg/L LC50 static	EC50
	-	1060: 96 h Lepomis	83: 48 h Daphnia magna mg/L
		macrochirus mg/L LC50 static	EC50 Static

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Persistence and degradability No information available.

Bioaccumulation No information available.

Hazardous to the ozone layer Other adverse effects Classification not possible. Based on available data, the classification criteria are not met.

No information available.

13. Disposal considerations

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

IMDGNot regulatedADRNot regulatedIATANot regulated

Not regulated

15. Regulatory information

National regulations

Pollutant Release and Transfer Registry (PRTR)

Not applicable

<u>Japan</u>

Industrial Safety and Health Law

Not applicable

ISHL Notifiable Substances

Not applicable

Poisonous and Deleterious Substances Control Law

Not applicable

International Regulations

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

IECSC .

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

16. Other information

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Revision NoteNo information available.

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA Time weighted average Ceiling Maximum limit value

Skin designation + Sensitizers

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Chemicals Agency

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

World Health Organization

Disclaimer

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End of Safety Data Sheet