

Safety Data Sheet

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision Date 2021-09-28

Revision Number 7

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier	
Product Code	SD0976
Product Name	dNTP Mixture (dGTP.dTTP.dATP)
EC No	231-791-2
CAS-No	7732-18-5
Pure substance/mixture <u>1.2. Relevant identified uses of the</u>	Substance substance or mixture and uses advised against
Identified uses	No information available
Uses advised against	No information available
1.3. Details of the supplier of the sa	fety 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	
Europe:	

Takara Bio Europe S.A.S. 34, Rue de la Croix de Fer 78100 Saint-Germain-en-Laye France Phone: +33 1 39 04 68 80 Web: www.takarabio.com

Europe: Takara Bio Europe AB Arvid Wallgrens Backe 20, SE-413 46 Goteborg, Sweden Phone: +46 31 758 09 00 Web: www.takarabio.com

India: DSS Takara Bio India Pvt. Ltd. A-5 Mohan Co-operative Industrial Estate, Mathura Road, New Delhi 110044, India Phone: +91 11 30886717

For further information, please contact:

1.4. 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).

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008 This substance is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.2. Label elements

This substance is classified as not hazardous according to regulation (EC) 1272/2008 [CLP] **Hazard statements** This substance is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical name	Weight-%	REACH registration number	EC No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Water 7732-18-5	90 - 100	No data available	231-791-2	No data available	-	-	-

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapor - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Water 7732-18-5	89838.9	No data available	No data available	No data available	No data available

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Remove to fresh air.
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. In the case of skin irritation or allergic reactions see a

	physician.			
Ingestion	Rinse mouth.			
4.2. Most important symptoms and	effects, both acute and delayed			
Symptoms	No information available.			
4.3. Indication of any immediate me	edical attention and special treatment needed			
Note to physicians	Treat symptomatically.			
	SECTION 5: Firefighting measures			
5.1. Extinguishing media				
Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.			
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.			
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.			
5.2. Special hazards arising from th	e substance or mixture			
Specific hazards arising from the chemical	No information available.			
5.3. Advice for firefighters				
Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.			
S	ECTION 6: Accidental release measures			
6.1. Personal precautions, protectiv	ve equipment and emergency procedures			
Personal precautions	Ensure adequate ventilation.			
For emergency responders	Use personal protection recommended in Section 8.			
6.2. Environmental precautions				
Environmental precautions See Section 12 for additional Ecological Information.				
6.3. Methods and material for containment and cleaning up				
Methods for containment	inment Prevent further leakage or spillage if safe to do so.			
Methods for cleaning up	Take up mechanically, placing in appropriate containers for disposal.			
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.			
6.4. Reference to other sections				
Reference to other sections	See section 8 for more information. See section 13 for more information.			

SECTION 7: Handling and storage

SD0976 - dNTP Mixture (dGTP.	dTTP.dATP)	Revision Date 2021-09-28
7.1. Precautions for safe handling		
Advice on safe handling	Ensure adequate ventilation.	
General hygiene considerations	Handle in accordance with good industrial hygiene and s	afety practice.
7.2. Conditions for safe storage, inc	luding any incompatibilities	
Storage Conditions	Keep container tightly closed in a dry and well-ventilated	place.
7.3. Specific end use(s)		
Identified uses		
SECT	ON 8: Exposure controls/personal protec	ction
8.1. Control parameters		
Exposure Limits	This product, as supplied, does not contain any hazardou exposure limits established by the region specific regulate	
Biological occupational exposure l This product, as supplied, does not co regulatory bodies.	mits Intain any hazardous materials with biological limits establis	shed by the region specific
Derived No Effect Level (DNEL) Predicted No Effect Concentration (PNEC)	No information available. No information available.	
8.2. Exposure controls		
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 cor exceeded or irritation is experienced, ventilation and evac	
General hygiene considerations	Handle in accordance with good industrial hygiene and s	afety practice.
Environmental exposure controls	No information available.	
SE	CTION 9: Physical and chemical propertie	? \$

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9.1. Information on basic	physical and chemical properties
Physical state	Liquid

Property Melting point / freezing point	Values Remarks Method No data available None known	
Color Odor Odor Threshold	Clear Odorless. No information available	
Appearance	Clear, colorless	

Boiling point/boiling range (°C)	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	
Flash point	No data available	Open cup
Autoignition temperature	No data available	None known
Decomposition temperature		None known
рН	No data available	None known
pH (as aqueous solution)	No data available	No information available
Kinematic viscosity	No data available	None known
Dynamic Viscosity	No data available	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
Vapor pressure	No data available	None known
Relative density	No data available	None known
Bulk Density	No data available	
Liquid Density	No data available	
Vapor density	No data available	None known
Particle characteristics		
Particle Size	No information available	
Particle Size Distribution	No information available	

9.2. Other information

9.2.1. Information with regard to physical hazard classes Not applicable

9.2.2. Other safety characteristics No information available

SECTION 10: Stability and reactivity

10.1. Reactivity	
Reactivity	No information available.
10.2. Chemical stability	
Stability	Stable under normal conditions.
Explosion Data Sensitivity to mechanical impac Sensitivity to static discharge	t None. None.
10.3. Possibility of hazardous reaction	ions_
Possibility of hazardous reactions	None under normal processing.
10.4. Conditions to avoid	
Conditions to avoid	None known based on information supplied.
10.5. Incompatible materials	
Incompatible materials	None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous Decomposition Products None known based on information supplied.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure

Product Information

Inhalation	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 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, or	chemical and toxicological characteristics
Symptoms	No information available.

Numerical measures of toxicity

Acute toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Water	> 90 mL/kg (Rat)	-	-

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

Skin corrosion/irritation	No information available.	
Serious eye damage/eye irritation	No information available.	
Respiratory or skin sensitization	No information available.	
Germ cell mutagenicity	No information available.	
Carcinogenicity	No information available.	
Reproductive toxicity	No information available.	
STOT - single exposure	No information available.	
STOT - repeated exposure	No information available.	
Aspiration hazard	No information available.	
11.2. Information on other hazards		
11.2.1. Endocrine disrupting properties		

Endocrine disrupting properties	No information available.
11.2.2. Other information	
Other adverse effects	No information available.
	SECTION 12: Ecological information
<u>12.1. Toxicity</u>	
Ecotoxicity	The environmental impact of this product has not been fully investigated.
Unknown aquatic toxicity	Contains 0.96908 % of components with unknown hazards to the aquatic environment.
12.2. Persistence and degradability	<u> </u>
Persistence and degradability	No information available.
12.3. Bioaccumulative potential	
Bioaccumulation	No information available.
12.4. Mobility in soil	
Mobility in soil	No information available.
12.5. Results of PBT and vPvB ass	essment
PBT and vPvB assessment	No information available.
12.6. Endocrine disrupting property	ies
Endocrine disrupting properties	No information available.
12.7. Other adverse effects No information available.	
	SECTION 13: Disposal considerations

SECTION 13: Disposal considerations

13.1. 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.

SECTION 14: Transport information

IATA

14.1UN number or ID number14.2UN proper shipping name14.3Transport hazard class(es)14.4Packing group	Not regulated No information available Not regulated Not regulated
14.5 Environmental hazards	Not applicable

14.6 Special precautions for user Special Provisions	None
IMDG 14.1 UN number or ID number 14.2 UN proper shipping name 14.3 Transport hazard class(es) 14.4 Packing group 14.5 Environmental hazards 14.6 Special precautions for user Special Provisions 14.7 Maritime transport in bulk according to IMO instruments	Not regulated No information available Not regulated Not regulated Not applicable None No information available
RID14.1 UN number or ID number14.2 UN proper shipping name14.3 Transport hazard class(es)14.4 Packing group14.5 Environmental hazards14.6 Special precautions for user Special Provisions	Not regulated No information available Not regulated Not regulated Not applicable None
ADR 14.1 UN number or ID number 14.2 UN proper shipping name 14.3 Transport hazard class(es) 14.4 Packing group 14.5 Environmental hazards 14.6 Special precautions for user Special Provisions	Not regulated No information available Not regulated Not regulated Not applicable None

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorizations and/or restrictions on use:

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009 Not applicable

International Inventories TSCA DSL/NDSL

EINECS/ELINCS	
ENCS	
IECSC	
KECL	
PICCS	
AICS	

Legend:

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

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

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

15.2. Chemical safety assessment

Chemical Safety Assessment No information available

SECTION 16: Other information

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

Legend

SVHC: Substances of Very High Concern for Authorization:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWĀ	Time weighted average	STEL	Short term exposure limit
Ceiling	Maximum limit value	*	Skin designation

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapor	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitization	Calculation method
Skin sensitization	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

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 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

SD0976 - dNTP Mixture (dGTP.dTTP.dATP)

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

Revision Date 2021-09-28

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

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End of Safety Data Sheet