

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 2023-12-30

Revision Number 6

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

1.1. Product identifierProduct CodeST0981Product NamePCR2 PrimersPure substance/mixtureMixture1.2. Relevant identified uses of the substance or mixture and uses advised againstIdentified usesFor research use only. Not for use in diagnostic proceduresUses advised againstNo information available

1.3. Details of the supplier of the safety data sheet

Supplier USA: Takara Bio USA, Inc. 2560 Orchard Parkway San Jose, CA 95131, USA 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 Göteborg, 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: +91.1800.212.4922 (Toll free) Web: www.takarabio.com

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).
Italy	Marco Marano

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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

2.2. Label elements

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

Not applicable

3.2 Mixtures

The product contains no substances which at their given concentration, are considered to be hazardous to health

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

Acute Toxicity Estimate No information 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 medical 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 the substance or mixture	

Specific hazards arising from the No information available. chemical

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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective 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	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

7.1. Precautions for safe handling

Advice on safe handling	Ensure adequate ventilation.
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General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

SECTION 8: Exposure controls/personal protection		
8.1. Control parameters		
Exposure Limits	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.	
Biological occupational exposure li This product, as supplied, does not co regulatory bodies.	i mits Intain any hazardous materials with biological limits established 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 conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.	
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.	
Environmental exposure controls	No information available.	

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Clear, colorless
Color	Clear
Odor	Odorless.
Odor Threshold	No information available
Property	Values
Melting point / freezing point	No data available
Boiling point/boiling range (°C)	No data available

Remarks • Method None known None known

Flammability (solid, gas) Flammability Limit in Air	No data available	None known 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 impact Sensitivity to static discharge	t None. None.
10.3. Possibility of hazardous reacti	ons
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 pro	ducts

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, o	chemical and toxicological characteristics	
Symptoms	No information available.	
Numerical measures of toxicity		
Acute toxicity The following values are calculated based on chapter 3.1 of the GHS document ATEmix (dermal) 99,999.00 mg/kg		
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	
12.1. Toxicity		
Ecotoxicity	The environmental impact of this product has not been fully investigated.	
Unknown aquatic toxicity	Contains 0.85979 % of components with unknown hazards to the aquatic environment.	
12.2. Persistence and degradability	_	
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 asse	ssment_	
PBT and vPvB assessment	No information available.	
12.6. Endocrine disrupting properties		
Endocrine disrupting properties	No information available.	
12.7. Other adverse effects No information available.		
	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	

SECTION 14: Transport Information

<u>IATA</u>

 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 applicable None
IMDG14.1UN number or ID number14.2UN proper shipping name14.3Transport hazard class(es)14.4Packing group14.5Environmental hazards14.6Special precautions for userSpecial Provisions14.7Maritime transport in bulkaccording to IMO instruments	Not regulated No information available Not regulated Not applicable None No information available
RID14.1UN number or ID number14.2UN proper shipping name14.3Transport hazard class(es)14.4Packing group14.5Environmental hazards14.6Special precautions for userSpecial Provisions	Not regulated No information available 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 **KECL** - Korean Existing and Evaluated Chemical Substances

RECL - 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 c	ompile 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, F	Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volu	
Food Research Journal	
Hazardous Substance Database	
International Uniform Chemical Information Database (IUCL	ID)
Japan GHS Classification	
Australia National Industrial Chemicals Notification and Asse	essment 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 PUB	MED)
U.S. National Toxicology Program (NTP)	
New Zealand's Chemical Classification and Information Data	abase (CCID)
Organization for Economic Co-operation and Development E	Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development H	High Production Volume Chemicals Program
Organization for Economic Co-operation and Development S	Screening Information Data Set
World Health Organization	
Devision Data	

Revision Date 2023-12-30

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

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.

End of Safety Data Sheet