

Safety Data Sheet

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

> Revision Date 2021-02-08 Revision Number 8

1. Identification

Product Name Product Code CAS-No TCR Primer 2 Forward HT Index 5 ST1029 7732-18-5 No information available

Registration number No information a 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 usesFor research use only. Not for use in diagnostic proceduresRestrictions on useNo information available

2. Hazard(s) identification

GHS Classification

Not classified	
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

GHS label elements

Hazard Statements 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 CAS-No

Mixture 7732-18-5

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.	
Note to physicians	Treat symptomatically.	

5. Fire-fighting measures

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
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.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Ensure adequate ventilation.
For emergency responders	Use personal protection recommended in Section 8.
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

<u>Handling</u> Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice.
Storage	
Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls/personal protection			
Engineering controls	Showers Evewash stations		
Exposure guidelines	Ventilation systems. 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	No information available.		
Personal Protective Equipment 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.		

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance Physical state Color Odor Odor Threshold	Clear, colorless Liquid Clear Odorless No information available	
<u>Property</u> Melting point / freezing point Boiling point/boiling range (°C) Flammability (solid, gas) Upper/lower flammability or explosi Upper flammability limit: Lower flammability limit:	<u>Values</u> ve limits	Remarks • Method No information available No information available No information available
Flash point		ASTM D 56
Evaporation Rate		No information available
Autoignition temperature		No information available
Decomposition temperature		No information available
рН		No information available
Viscosity		
Kinematic viscosity		No information available
Dynamic Viscosity		No information available
Water solubility		No information available
Solubility in other solvents		No information available
Partition Coefficient		No information available
(n-octanol/water)		
Vapor pressure		No information available
Vapor density		No information available
Relative density		No information available
Particle characteristics		
Particle Size		Not applicable
Particle Size Distribution		Not applicable
Other information		

Explosive properties Oxidizing properties

No information available 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.		
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	t None.		

11. Toxicological information

Acute toxicity

Numerical measures of toxicity - Product Information

0.84961 % of the mixture consists of ingredient(s) of unknown acute oral toxicity 0.84961 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

0.84961 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas) 0.84961 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor) 0.84961 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

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/irritation	Based 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 mutagenicity	Based 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 toxicity	Based on available data, the classification criteria are not met. Classification not possible.		
STOT - single exposure	Based on available data, the classification criteria are not met. Classification not possible.		
STOT - repeated exposure	Based 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 hazards	0.84961 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.		
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			
IMDG	Not regulated		
ADR	Not regulated		
IATA	Not regulated		
Japan_	Not regulated		
15. Regulatory information			
National regulations			
Pollutant Release and Transfer Registry (PRTR)			

Not applicable

Industrial Safety and Health Law Not applicable ISHL Notifiable Substances

Not applicable

Poisonous and Deleterious Substances Control Law Not applicable

Fire Service Law: Not applicable

Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (CSCL) Not applicable

Act on Prevention of Marine Pollution and Maritime Disaster 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

 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

Revision Date 2021-02-08 Revision Note No 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 ChemID Plus (NLM CIP) National Library of Medicine's ChemiD Plus (NLM CIP) National Toxicology Program (NTP)	16. Other information			
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 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 Environment, Health, and Safety Publications Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization			available.	
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 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 Environment, Health, and Safety Publications Organization for Economic Co-operation and Development Environment, Health, Sefter Publications Organization for Economic Co-operation and Development Environment, Health, Sefter Publications Organization for Economic Co-operation and Development Environment, Health, Sefter Publications	Legend Section 8: EXPC TWA Time	SURE CONTROLS/PERSON weighted average	AL PROTECTION Ceiling	Maximum limit value
	Agency for Toxic Substar U.S. Environmental Prote European Chemicals Age European Food Safety A EPA (Environmental Prote Acute Exposure Guidelin U.S. Environmental Prote U.S. Environmental Prote Food Research Journal Hazardous Substance Da International Uniform Che Japan GHS Classification Australia National Industr NIOSH (National Industr NIOSH (National Institute National Library of Medic National Library of Medic National Toxicology Prog New Zealand's Chemical Organization for Econom Organization for Econom	aces and Disease Registry (A action Agency ChemView Data ancy uthority (EFSA) ection Agency) e Level(s) (AEGL(s)) action Agency Federal Insection action Agency High Production atabase amical Information Database (a ial Chemicals Notification and for Occupational Safety and ine's ChemID Plus (NLM CIP) ine's PubMed database (NLM ram (NTP) Classification and Information ic Co-operation and Developm ic Co-operation and Developm	TSDR) abase dide, Fungicide, and Ro Volume Chemicals IUCLID) Assessment Scheme Health) PUBMED) Database (CCID) ment Environment, Hea hent High Production V	odenticide Act e (NICNAS) alth, and Safety Publications Volume Chemicals Program

Disclaimer

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End of Safety Data Sheet