園TaKaRa

Safety Data Sheet

This safety data sheet complies with the requirements of:

JIS Z 7253:2019

Revision Date 2021-02-08 Revision Number 3

1. Identification

Product Name Template Preparation P Enzyme

Product Code ST1937

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

| <u>One diagonication</u> | |
|----------------------------------------------------|--------------------------------|
| 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) | Category 4 |
| 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



Signal word Warning

Hazard Statements Harmful if inhaled

Prevention

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

Response

- Not applicable
- IF INHALED: Remove person to fresh air and keep comfortable for breathing
- Call a POISON CENTER or doctor if you feel unwell

Storage

Not applicable

Disposal

· Not applicable

Other hazards

No information available.

3. Composition/information on ingredients

Pure substance/mixture Mixture

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

surrounding environment.

Unsuitable extinguishing mediaDo 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

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.

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

Physical and chemical properties

Information on basic physical and chemical properties

Appearance Clear, colorless

Physical state Liquid

No information available Color

Odor Unpleasant

Odor Threshold No information available

Property Values Remarks • Method

Melting point / freezing point No information available Boiling point/boiling range (°C) No information available Flammability (solid, gas) No information available

Upper/lower flammability or explosive limits

Upper flammability limit: Lower flammability limit:

ASTM D 56 Flash point

Evaporation Rate No information available

392.8 °C / 739 °F **Autoignition temperature** No information available **Decomposition temperature** No information available рΗ 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 No information available

Partition Coefficient (n-octanol/water)

No information available Vapor pressure Vapor density No information available Relative density No information available

Particle characteristics

Particle Size Not applicable Particle Size Distribution Not applicable

Other information

No information available **Explosive properties Oxidizing properties** No information available

10. Stability and reactivity

No information available. Reactivity Chemical stability Stable under normal conditions. Possibility of hazardous reactions None under normal processing.

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

Explosion Data

Sensitivity to static discharge Sensitivity to mechanical impact None.

11. Toxicological information

Acute toxicity

Numerical measures of toxicity - Product Information

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

 ATEmix (oral)
 19,984.10 mg/kg

 ATEmix (dermal)
 15,876.30 mg/kg

 ATEmix (inhalation-dust/mist)
 4.3659 mg/l

3.22001 % of the mixture consists of ingredient(s) of unknown acute oral toxicity 3.22001 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

66.27001 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas) 66.27001 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor) 3.22001 % 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/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.

CarcinogenicityBased 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.

Target organ effects Kidney. Respiratory system. Eyes. Skin.

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

12. Ecological information

Ecotoxicity Classification not possible.

Percentage for unknown

hazards

0.22001 % of the mixture consists of component(s) of unknown hazards to the aquatic

environment.

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

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

<u>IATA</u> Not regulated

<u>Japan</u> 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

Air Pollution Control Law

Volatile organic compound per Air Pollution Control Law article 2, paragraph 4

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

AICS - Australian Inventory of Chemical Substances

16. Other information

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

Time weighted average Ceiling **TWA** Maximum limit value

Skin designation Sensitizers

Hazard Designation

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