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Version 9

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name 2X Terra™ PCR Direct Buffer (with Mg²⁺, dNTP)

Other means of identification

Product Code ST0287
Registration number No information available

Recommended use of the chemical and restrictions on use

Identified uses For research use only. Not for use in diagnostic procedures.
Uses advised against 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.takara.com.cn

Korea:
Takara Korea Biomedical Inc.
601, New T Castle, 108, Gasan Digital 2-ro, Geumcheon-gu
Seoul 08506, Korea
Phone: +82 2 2081 2525
Web: www.takara.co.kr

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

Classification of the substance or mixture

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

Label elements

Signal Word
None

Hazard Statements

Precautionary Statements - Prevention

Not applicable.

Precautionary Statements - Response

• Not applicable

Precautionary Statements - Storage

Not applicable.

Precautionary Statements - Disposal

Not applicable

Other information

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

Hazards not otherwise classified (HNOC) Not applicable

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture

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

Section 4: FIRST AID MEASURES

| | |
|---------------------------|--|
| General advice | In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). |
| Inhalation | Move to fresh air. |
| Skin contact | Wash off immediately with plenty of water for at least 15 minutes. |
| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Ingestion | Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Not an expected route of exposure. |
| Notes to physician | Treat symptomatically. |

Section 5: FIRE FIGHTING MEASURES

| | |
|---|---|
| Flammable Properties | May cause fire. |
| Suitable Extinguishing Media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Unsuitable Extinguishing Media | No information available. |
| Specific hazards arising from the chemical | Keep product and empty container away from heat and sources of ignition. |

Special Extinguishing Media Cool drums with water spray.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions For personal protection see section 8.

Environmental precautions Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Soak up with inert absorbent material.

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

Section 7: HANDLING AND STORAGE

Handling

Advice on safe handling Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice.

Storage

Technical measures/Storage conditions Keep container tightly closed in a dry and well-ventilated place.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Other information These recommendations apply to the product as supplied.

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Respiratory protection None under normal use conditions.

Hand Protection Latex gloves.

Eye/Face Protection Tightly fitting safety goggles.

Skin and body protection Wear suitable protective equipment. Boots.

Hygiene measures When using, do not eat, drink or smoke. Handle in accordance with good industrial hygiene and safety practice.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| | | | |
|-----------------------|------------------|-----------------------|--------------------------|
| Physical State | Liquid | Odor | Unpleasant |
| Appearance | Clear, colorless | Odor Threshold | No information available |
| Color | Clear | | |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|----------------------------------|----------------------------|-------------------------|
| pH VALUE | No information available | |
| Melting point / freezing point | No information available / | |
| Boiling point/boiling range (°C) | No information available | |
| Flash point | No information available | |
| Evaporation Rate | No information available | |
| Flammability (solid, gas) | No information available | |
| Flammability Limit in Air | | |
| Upper flammability limit: | No information available | |
| Lower flammability limit: | No information available | |
| Vapor pressure | No information available | |
| Vapor density | No information available | |
| Relative density | No information available | |
| Water Solubility | Not applicable | |
| Solubility in other solvents | No information available | |
| Partition coefficient | No information available | |
| Autoignition temperature | | |
| Decomposition temperature | No information available | |
| Viscosity, kinematic | No information available | |
| Viscosity, dynamic | | |
| Explosive properties | No information available | |
| Oxidizing Properties | No information available | |
| <u>Other information</u> | | |
| VOC Content (%) | No information available | |
| Bulk Density | No information available | |

Section 10: STABILITY AND REACTIVITY

| | |
|---|---|
| Reactivity | No dangerous reaction known under conditions of normal use. |
| Stability | Stable under normal conditions. |
| Explosion Data | |
| Sensitivity to Mechanical Impact | None. |
| Sensitivity to Static Discharge | None. |
| Hazardous Reactions | None under normal processing. |
| Conditions to Avoid | None known based on information supplied. |
| Hazardous Decomposition Products | None under normal use conditions. |

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

Numerical measures of toxicity - Product Information

Unknown acute toxicity

- 2.86025 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 40.42805 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 40.42805 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
- 40.42805 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
- 40.42805 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

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

| | |
|-------------------------------|--------------------------|
| ATEmix (oral) | 28,133.00 mg/kg |
| ATEmix (dermal) | No information available |
| ATEmix (inhalation-gas) | No information available |
| ATEmix (inhalation-dust/mist) | No information available |
| ATEmix (inhalation-vapor) | No information available |

Numerical measures of toxicity - Component Information

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. |
| Sensitization | No information available. |
| mutagenic effects | No information available. |
| Reproductive toxicity | No information available. |
| STOT - Single Exposure | No information available. |
| STOT - Repeated Exposure | No information available. |
| Neurological effects | No information available. |
| Target Organ Effects | No information available. |
| Aspiration Hazard | No information available. |

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

40.80372 % of the mixture consists of components(s) of unknown hazards to the aquatic environment.

| | |
|--------------------------------------|---------------------------|
| Persistence and degradability | No information available. |
| Bioaccumulation | No information available. |
| Mobility | No information available. |

Section 13: DISPOSAL CONSIDERATIONS

| | |
|--|--|
| Waste from Residues / Unused Products | Dispose of as hazardous waste in compliance with local and national regulations. |
| Contaminated packaging | Dispose of in accordance with local regulations. |

Section 14: TRANSPORT INFORMATION

IMDG/IMO Not regulatedICAO Not regulatedADR/RID Not regulatedICAO/IATA Not regulatedJapan**Section 15: REGULATORY INFORMATION**International Inventories For research use only

| | |
|---------------|---|
| 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

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

Section 16: OTHER INFORMATION

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Revision Note No information available.

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

- No information available

Disclaimer

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End of Safety Data Sheet