



This safety data sheet complies with the requirements of:  
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Issuing Date 2020-04-09

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Version 8

## Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

Product Code	ST0287
Product Name	2X Terra™ PCR Direct Buffer (with Mg <sup>2+</sup> , dNTP)

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses	For research use only. Not for use in diagnostic procedures
Uses advised against	No information available

### 1.3. Details of the supplier of the safety 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
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### **For further information, please contact:**

Technical Support: +33.(1).39.04.68.80

### 1.4. Emergency telephone number

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

### 2.2. Label elements

#### **Product Identifier**

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

#### **Signal Word**

None

### 2.3. Other hazards

No information available

## Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances / 3.2 Mixtures

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

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

## Section 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

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

### 4.2. Most important symptoms and effects, both acute and delayed

<b>Main Symptoms</b>	No information available.
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### 4.3. Indication of any immediate medical attention and special treatment needed

<b>Notes to physician</b>	Treat symptomatically.
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## Section 5: FIRE FIGHTING MEASURES

### 5.1. Extinguishing media

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** No information available

### 5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors

### 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit. Use personal protective 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

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

### 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.

### 6.4. 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** Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice.

**Hygiene measures** Handle in accordance with good industrial hygiene and safety practice.

### 7.2. Conditions for safe storage, including any incompatibilities

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

**Incompatible products** None known based on information supplied.

### 7.3. Specific end use(s)

**Risk Management Methods (RMM)** The information required is contained in this Material Safety Data Sheet.

**Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1. Control parameters**

**Exposure limits** Contains no substances with occupational exposure limit values.

**Derived No Effect Level (DNEL)** No information available.

**Predicted No Effect Concentration (PNEC)** No information available.

**8.2. Exposure controls**

**Engineering Measures** Apply technical measures to comply with the occupational exposure limits. For rescue and maintenance work in storage tanks use self-contained breathing apparatus.

**Personal Protective Equipment**

**Eye/Face Protection** If splashes are likely to occur, wear: Safety glasses with side-shields  
**Hand Protection** Protective gloves.  
**Skin and body protection** Wear suitable protective equipment, Boots  
**Respiratory protection** None under normal use conditions.

**Environmental Exposure Controls** The product should not be allowed to enter drains, water courses or the soil.

**Section 9: PHYSICAL AND CHEMICAL PROPERTIES**

**9.1. Information on basic physical and chemical properties**

<b>Physical State</b>	Liquid	<b>Odor</b>	Unpleasant
<b>Appearance</b>	Clear, colorless	<b>Odor Threshold</b>	No information available
<b>Color</b>	Clear		
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
<b>pH VALUE</b>	No information available		
<b>Melting point / freezing point</b>	No information available /		
<b>Boiling point/boiling range (°C)</b>	No information available		
<b>Flash point</b>	No information available		
<b>Evaporation Rate</b>	No information available		
<b>Flammability (solid, gas)</b>	No information available		
<b>Flammability Limit in Air</b>			
<b>Upper flammability limit:</b>	No information available		
<b>Lower flammability limit:</b>	No information available		
<b>Vapor pressure</b>	No information available		
<b>Vapor density</b>	No information available		
<b>Relative density</b>	No information available		
<b>Water Solubility</b>	Not applicable		
<b>Solubility in other solvents</b>	No information available		
<b>Partition coefficient</b>	No information available		
<b>Autoignition temperature</b>	No information available		
<b>Decomposition temperature</b>	No information available		
<b>Viscosity, kinematic</b>	No information available		
<b>Viscosity, dynamic</b>	No information available		
<b>Explosive properties</b>	No information available		
<b>Oxidizing Properties</b>	No information available		

**9.2. Other information**

Softening point	No information available
Molecular Weight	No information available
VOC Content (%)	No information available
Density VALUE	No information available
Bulk Density	No information available

**Section 10: STABILITY AND REACTIVITY**

**10.1. Reactivity**

No data available.

**10.2. Chemical stability**

Stable under normal conditions.

**Explosion Data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**10.3. Possibility of hazardous reactions**

None under normal processing.

**10.4. Conditions to avoid**

None known based on information supplied.

**10.5. Incompatible materials**

No information available.

**10.6. Hazardous decomposition products**

None under normal use conditions.

**Section 11: TOXICOLOGICAL INFORMATION**

**11.1. Information on toxicological effects**

**Acute toxicity**

**Product Information**

Product does not present an acute toxicity hazard based on known or supplied information

<b>Inhalation</b>	There is no data available for this product.
<b>Eye contact</b>	There is no data available for this product.
<b>Skin contact</b>	There is no data available for this product.
<b>Ingestion</b>	There is no data available for this product.

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

**ATEmix (oral)** 28,133.00 mg/kg

**Unknown acute toxicity**

- 40.42805 % of the mixture consists of ingredient(s) of unknown 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).

<b>Skin corrosion/irritation</b>	No information available.
<b>Serious Eye Damage/Eye Irritation</b>	No information available.
<b>Sensitization</b>	No information available.
<b>mutagenic effects</b>	No information available.
<b>Carcinogenic effects</b>	No information available.
<b>Reproductive toxicity</b>	No information available.
<b>STOT - Single Exposure</b>	No information available.
<b>STOT - Repeated Exposure</b>	No information available.
<b>Aspiration Hazard</b>	No information available.

## Section 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

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

### 12.2. Persistence and degradability

No information available.

### 12.3. Bioaccumulative potential

No information available.

### 12.4. Mobility in soil

#### **Mobility in soil**

No information available.

#### **Mobility**

No information available.

### 12.5. Results of PBT and vPvB assessment

No information available.

### 12.6. 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 the European Directives on waste and hazardous waste.

**Contaminated packaging** Dispose of in accordance with local regulations.

**Section 14: TRANSPORT INFORMATION**

**IMDG/IMO**

<b>14.1 UN/ID no</b>	Not regulated
<b>14.2 Proper Shipping Name</b>	Not regulated
<b>14.3 Hazard Class</b>	Not regulated
<b>14.4 Packing group</b>	Not regulated
<b>14.5 Environmental Hazard</b>	Not Applicable
<b>Marine pollutant</b>	Not regulated
<b>14.6 Special Provisions</b>	None
<b>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	No information available

**RID**

<b>14.1 UN/ID no</b>	Not regulated
<b>14.2 Proper Shipping Name</b>	Not regulated
<b>14.3 Hazard Class</b>	Not regulated
<b>14.4 Packing group</b>	Not regulated
<b>14.5 Environmental Hazard</b>	Not Applicable
<b>14.6 Special Provisions</b>	None

**ADR/RID**

<b>14.1 UN/ID no</b>	Not regulated
<b>14.2 Proper Shipping Name</b>	Not regulated
<b>14.3 Hazard Class</b>	Not regulated
<b>14.4 Packing group</b>	Not regulated
<b>14.5 Environmental Hazard</b>	Not Applicable
<b>14.6 Special Provisions</b>	None

**ICAO/IATA**

<b>14.1 UN/ID no</b>	Not regulated
<b>14.2 Proper Shipping Name</b>	Not regulated
<b>14.3 Hazard Class</b>	Not regulated
<b>14.4 Packing group</b>	Not regulated
<b>14.5 Environmental Hazard</b>	Not Applicable
<b>14.6 Special Provisions</b>	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

<u>International Inventories</u>	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

**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**

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

**Issuing Date** 2020-04-09

**Revision Date** 2020-04-09

**Reason for revision:** Not Applicable.

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

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**End of Safety Data Sheet**