This safety data sheet complies with the requirements of:

Issuing Date 2016-07-21  Revision Date 2016-07-21  Version 4

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

1.1. Product identifier

Product Code ST0795
Product Name Control 3’-RACE TFR Primer

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.clontech.com

Europe:
Takara Bio Europe S.A.S.
2, avenue du president Kennedy
78100 Saint-Germain-en-Laye France
Phone: +33.(1).39.04.68.80
Web: www.takara-bio.eu

Europe:
Takara Bio Europe AB
Arvid Wallgrens backe 20
41346 Goteborg, Sweden
Phone: +46 (0) 31 758 0972
Web: www.takara-bio.eu

India:
DSS Takara Bio India Pvt. Ltd.
A-5 Mohan Co-op Industrial Estate
New Delhi 110044 India
Phone: +91.11.30886717

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 [GHS]

2.2. Label elements

**Product Identifier**

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

**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 [GHS]

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

Section 4: FIRST AID MEASURES

4.1. Description of 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 soap and plenty of water while removing all contaminated clothes and shoes.

**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

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

**Main Symptoms**

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

**Notes to physician**

Treat symptomatically.
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

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

- Inhalation  There is no data available for this product.
- Eye contact  There is no data available for this product.
- Skin contact  There is no data available for this product.
- Ingestion  There is no data available for this product.

Unknown acute toxicity

0.86314 % of the mixture consists of ingredient(s) of unknown toxicity.
0.86314 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
0.86314 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
0.86314 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).
0.86314 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).
0.86314 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Skin corrosion/irritation  No information available.

Serious Eye Damage/Eye Irritation  No information available.
Sensitization  No information available.
mutagenic effects  No information available.
Carcinogenic effects  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.

### Section 12: ECOLOGICAL INFORMATION

**12.1. Toxicity**

1 % 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

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

## RID

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

## ADR/RID

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

## ICAO/IATA

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

For research use only

**TSCA**

-
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  2016-07-21
Revision Date  2016-07-21
Reason for revision:  Not Applicable.

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

Disclaimer
The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

Notice to Purchaser:
Our products are to be used for research purposes only. They may not be used for any other purpose, including, but not limited to, use in drugs, in vitro diagnostic purposes, therapeutics, or in humans. Our products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products or to provide a service to third parties without our prior written approval. Your use of this product is also subject to compliance with the licensing requirements described on the product's web page. It is your responsibility to review, understand and adhere to any restrictions imposed by these statements. All other marks are the property of their respective owners. Certain trademarks may not be registered in all jurisdictions.

End of Safety Data Sheet