

**MATERIAL SAFETY DATA SHEET**  
*Prepared in accordance with ISO 11014-1 Standard*

Printed: 12/07/2006

Revised: 12/07/2006

### 1 Product and company identification

- **Product details**
- **Trade name:** *pTZ19R DNA*
- **Application of the substance / the preparation:** *Laboratory chemicals*
- **Manufacturer/Supplier:**  
*Fermentas UAB*  
*V.Graiciuno 8*  
*LT-02241 Vilnius*  
*Lithuania*  
*Tel.: +370 5 2602131*  
*Fax.: +370 5 2602142*
- **Further information obtainable from:**  
*Please visit our site: <http://www.fermentas.com/>*  
*Contact us: [info@fermentas.com](mailto:info@fermentas.com)*  
*Or contact Fermentas distributor in your country.*
- **Emergency information:**  
*For Chemical Emergency (Spill, Leak, Fire, Exposure or Accident),*  
*Call CHEMTREC Day or Night*  
*Domestic North America: 1-800-424-9300*  
*International: 1-703-527-3887 (collect calls accepted)*

### 2 Composition/Information on ingredients

- **Chemical characterization**
- **Description:** *Solution, consisting of the following components.*

· **Components:**

7732-18-5	water	>50%
-----------	-------	------

- **Other components:**  
*Components not listed here are not hazardous or their concentrations do not exceed the limits specified in the OSHA Hazard Communication Standard 29 CFR 1910.1200.*

### 3 Hazards identification

- **Hazard description:** *Not applicable.*
- **Information pertaining to particular dangers for man and environment:**  
*The product does not have to be labelled due to the calculation procedure of international guidelines.*
- **Classification system:**  
*The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.*

(Contd. on page 2)

# MATERIAL SAFETY DATA SHEET

Prepared in accordance with ISO 11014-1 Standard

Printed: 12/07/2006

Revised: 12/07/2006

Trade name: pTZ19R DNA

(Contd. of page 1)

· **NFPA ratings (scale 0 - 4)**

Health = 0  
 Fire = 0  
 Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

HEALTH 0 Health = 0  
 FIRE 0 Fire = 0  
 REACTIVITY 0 Reactivity = 0

## 4 First aid measures

- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.

## 5 Fire fighting measures

- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** No special measures required.

## 6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:** Dilute with plenty of water.
- **Measures for cleaning/collecting:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Additional information:** No dangerous substances are released.

## 7 Handling and storage

- **Handling:**
- **Information for safe handling:** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.

## 8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

(Contd. on page 3)

# MATERIAL SAFETY DATA SHEET

Prepared in accordance with ISO 11014-1 Standard

Printed: 12/07/2006

Revised: 12/07/2006

Trade name: pTZ19R DNA

(Contd. of page 2)

- **Components with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not required.
- **Protection of hands:**  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**  
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Goggles recommended during refilling.

## 9 Physical and chemical properties

### · General Information

<b>Form:</b>	Solution
<b>Color:</b>	Colorless
<b>Odor:</b>	Odorless

### · Change in condition

**Melting point/Melting range:** Undetermined.  
**Boiling point/Boiling range:** Undetermined.

<b>Flash point:</b>	Not applicable.
<b>Auto igniting:</b>	Product is not selfigniting.
<b>Danger of explosion:</b>	Product does not present an explosion hazard.
<b>Density at 20°C (68°F):</b>	1 g/cm <sup>3</sup>
<b>Solubility in / Miscibility with Water:</b>	Fully miscible.
<b>pH-value at 20°C (68°F):</b>	7.6

## 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **Dangerous reactions:** No dangerous reactions known.

(Contd. on page 4)

# MATERIAL SAFETY DATA SHEET

Prepared in accordance with ISO 11014-1 Standard

Printed: 12/07/2006

Revised: 12/07/2006

Trade name: pTZ19R DNA

(Contd. of page 3)

· **Dangerous products of decomposition:** No dangerous decomposition products known.

## 11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
 The product is not subject to classification according to internally approved calculation methods for preparations:  
 When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

## 12 Ecological information

- **General notes:** Generally not hazardous for water.

## 13 Disposal considerations

- **Product:**
- **Recommendation:** Smaller quantities can be disposed of with household waste.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

## 14 Transport information

- **DOT regulations:**
- **Hazard class:** -
- **Land transport ADR/RID (cross-border):**
- **ADR/RID class:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -

## 15 Regulations

- **Sara**
- **Section 355 (extremely hazardous substances):**  
 None of the ingredients is listed.

(Contd. on page 5)

**MATERIAL SAFETY DATA SHEET**  
Prepared in accordance with ISO 11014-1 Standard

Printed: 12/07/2006

Revised: 12/07/2006

Trade name: pTZ19R DNA

(Contd. of page 4)

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65**· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenicity categories**· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Product related hazard information:**

Observe the general safety regulations when handling chemicals.

The product is not subject to identification regulations according to directives on hazardous materials.

**16 Other information**

*This information is based on our present knowledge and shall be used only as a guide. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. Fermentas is not held liable for any damage resulting from handling or from contact with the above mentioned products.*

*MSDS has been prepared in accordance with ISO 11014-1 Standard and OSHA Hazard Communication Standard 29 CFR 1910.1200.*