



# DNA Polymerase Technology

## Material Safety Data Sheet

Version 2.0  
Revision Date: 08/28/2010

### 1. PRODUCT AND COMPANY IDENTIFICATION

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Product Name: **10x Klentaq Reaction Buffer** (supplied with Klentaq DNA Polymerases and also sold separately)

Manufacturer: DNA Polymerase Technology, Inc.  
1508 South Grand Blvd.  
St. Louis, Missouri 63104  
USA

Telephone: 314.771.5566  
Fax: 314.771.5581  
Website: www.klentaq.com

Emergency Phone: 1-800-222-1222 (U.S. Poison Help Hotline)

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

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Substance name: **10x Klentaq Reaction Buffer** CAS #: None

Ingredient:	% by weight	CAS #
1. Tris HCl	6.1%	1185-53-1
2. Ammonium sulfate	1.4%	7783-20-2
3. Brij® 58	0.25%	9004-95-9
4. Magnesium Chloride	<1%	7791-18-6

### 3. HAZARDS IDENTIFICATION

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**Hazard information for the substance as whole:** No information available. However it is recommended to avoid ingestion and contact with eyes, skin, and respiratory tract.

**Emergency Overview:** Irritating to eyes, respiratory system, and skin

**OSHA Hazards**  
No known OSHA hazards

**HMIS Classification**  
Health Hazard: 0  
Flammability: 0  
Physical hazards: 0

**NFPA Rating**  
Health Hazard: 0  
Fire: 0  
Reactivity Hazard: 0

**Potential Health Effects:**

**Inhalation:** May be harmful if inhaled. May cause respiratory tract irritation.

**Skin:** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes:** May cause eye irritation.

**Ingestion:** May be harmful if swallowed.

For additional information on toxicity, please refer to Section 11.

#### 4. FIRST AID MEASURES

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**If inhaled:** move person into fresh air. If not breathing, give artificial respiration.

**In case of skin contact:** wash with soap and water.

**In case of eye contact:** flush eyes with water.

**If swallowed:** rinse mouth with water. Never give anything by mouth to an unconscious person.

#### 5. FIRE-FIGHTING MEASURES

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**Flammable properties:**

**Flash point:** no data available

**Ignition temperature:** no data available

**Flammability:** no data available.

**Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special protective equipment for fire fighters:** Wear self-contained breathing apparatus for fire fighting if necessary.

#### 6. ACCIDENTAL RELEASE MEASURES

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**Personal precautions:** none required

**Environmental precautions:** N/A

**Methods for cleaning up:** Absorb with a paper towel and dispose with dry waste or rinse down the drain.

#### 7. HANDLING AND STORAGE

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**Handling:** Avoid inhaling any vapors. Avoid contact with eyes, skin, and clothing. Use normal measures for fire prevention.

**Storage:** Recommended storage temperature: 4°. Keep container tightly closed when not in use.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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**Exposure limit values:** contains no substances with occupational exposure limit values.

**Technical measures for exposure control:** Provide adequate ventilation and access to eye-wash and safety shower

**Personal protective equipment (PPE) recommendations:** The use of a lab coat is recommended.

**Respiratory protection:** not required.

**Hand protection:** Laboratory gloves are recommended.

**Eye protection:** Safety glasses are recommended.

**Hygiene measures:** General industrial hygiene practice

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

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**Appearance:** Clear to cloudy liquid

**Safety data:**

pH: 9.2

Melting point: no data available

Boiling point: no data available

Flash point: no data available

Ignition temperature: no data available

Lower explosion limit: no data available

Upper explosion limit: no data available

Water solubility: soluble

## 10. STABILITY AND REACTIVITY

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**Storage stability:** Stable under recommended storage conditions.

**Materials to avoid:** Strong oxidizing agents, strong acids and bases.

**Hazardous decomposition products:** Hazardous decomposition products formed under fire conditions. Tris-HCl can produce toxic gases or vapors. Nature of other decomposition products is not known.

## 11. TOXICOLOGICAL INFORMATION

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**Acute toxicity:** no data available

**Irritation and corrosion:** no data available

**Sensitization:** Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

**Chronic exposure:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, ACGIH, NTP, or OSHA.

**Signs and Symptoms of Exposure:** The chemical, physical, and toxicological properties have not been thoroughly investigated.

### **Potential Health Effects:**

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Skin** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation.

**Ingestion** May be harmful if swallowed.

## 12. ECOLOGICAL INFORMATION

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**Elimination information (persistence and degradability):** no data available

**Ecotoxicity effects:** no data available

**Further information on ecology:** no data available

## 13. DISPOSAL CONSIDERATIONS

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**Product:** Observe all federal, state, and local environmental regulations.

**Contaminated packaging:** Dispose of as unused product.

## 14. TRANSPORT INFORMATION

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**DOT (US):** Not dangerous goods

**IMDG:** Not dangerous goods

**IATA:** Not dangerous goods

## 15. REGULATORY INFORMATION

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**OSHA Hazards:** No known OSHA hazards

**DSL Status:** This product is not on the Canadian DSL or NDSL lists.

**SARA 302 Components:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components:** This material does not contain any chemical components with known CAS numbers that exceed the threshold reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards:** No SARA Hazards

**Massachusetts Right to Know Components:** No components subject to the Right to Know Act.

**Pennsylvania and New Jersey Right to Know Components:** 10x Klentaq Reaction Buffer, Cas #: none.

**California Prop. 65 Components:** This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

## **16. OTHER INFORMATION**

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### **Disclaimer:**

For R&D use only. Not for drug, household or other uses. The above information is believed to be correct, based on the present state of our knowledge, but does not purport to be all all-inclusive and should be used only as a guide. The information does not represent any guarantee of the properties of the product. DNA Polymerase Technology, Inc. cannot control the actual methods, volumes, or conditions of use and, therefore, specifically disclaims liability and responsibility arising from the use, misuse or alteration of its products. License granted to make copies for internal use only.