

## Material Safe Data Sheet

Date Created 02/02/2009  
Date Updated 10/14/2010  
Version 1.1

### Section 1- Product Information

Product Name dTTP(100mM) ≥99%HPLC  
Product Cat. No. C01580

### Section 2- Composition / Information on Ingredients

Substance / Preparation: Substance  
Ingredient Name dTTP(100mM)  
CAS No. 18423-43-3  
SARA 313 No  
Formula  $C_{10}H_{14}N_2Na_3O_{14}P_3$

### Section 3- Hazards Identification

HMIS Rating  
Health 0  
Flammability 0  
Reactivity 0  
NFPA Rating  
Health 0  
Flammability 0  
Reactivity 0

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

### Section 4- First Aid Measures

Oral Exposure If swallowed, wash out mouth with water provided person is conscious. Call a physician.  
Inhalation Exposure If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.  
Dermal Exposure In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.  
Eye Exposure In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

### Section 5- Fire Fighting Measures

Flash Point Not available  
Autoignition Temp Not available  
Flammability Not available  
Extinguishing Media Suitable  
Fire Fighting Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.  
Protective Equipment Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.  
Specific Hazard(s) Emits toxic fumes under fire conditions

### Section 6- Accidental Release Measures

Procedure to Be Followed in Case of Leak or Spill Evacuate area  
Procedure(s) of Personal Precaution(s) Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves  
Methods for Cleaning Up Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

### Section 7- Handling and Storage

Handling  
User Exposure Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.  
Storage Storage at -20°C

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**Section 8- Exposure Controls/Personal Protection Equipment**

|                               |   |
|-------------------------------|---|
| Engineering Controls          | Mechanical exhaust required   |
| Personal Protective Equipment |   |
| Respiratory                   | Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) respirator. |
| Other                         | Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.  |
| General Hygiene Measures      | Wash thoroughly after handling  |

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**Section 9- Physical and Chemical Properties**

|                       |                            |
|-----------------------|----------------------------|
| Appearance            |                            |
| Physical State        | Clear and colorless liquid |
| Property              |                            |
| Molecular Weight      | 548.1 AMU                  |
| pH                    | Not available              |
| BP/BP Range           | Not available              |
| MP/MP Range           | Not available              |
| Freezing Point        | Not available              |
| Vapor Pressure        | Not available              |
| Vapor Density         | Not available              |
| Saturated Vapor Conc. | Not available              |
| SG/Density            | Not available              |
| Bulk Density          | Not available              |
| Odor Threshold        | Not available              |
| Volatile%             | Not available              |
| VOC Content           | Not available              |
| Water Content         | Not available              |
| Solvent Content       | Not available              |
| Evaporation Rate      | Not available              |
| Viscosity             | Not available              |
| Surface Tension       | Not available              |
| Partition Coefficient | Not available              |
| Decomposition Temp.   | Not available              |
| Flash Point           | Not available              |
| Explosion Limits      | Not available              |
| Flammability          | Not available              |
| Autoignition Temp     | Not available              |
| Refractive Index      | Not available              |
| Optical Rotation      | Not available              |
| Miscellaneous Data    | Not available              |
| Solubility            | Soluble in water           |

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**Section 10- Stability and Reactivity**

|                                  |   |
|----------------------------------|---|
| Stability                        |   |
| Stable                           | Stable  |
| Hazardous Decomposition Products |   |
| Hazardous Decomposition Products | Carbon monoxide, carbon dioxide, nitrogen oxides. |

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**Section 11- Toxicological Information**

|                                   |  |
|-----------------------------------|--|
| Route of Exposure                 |  |
| Skin Contact                      | May cause skin irritation  |
| Skin Absorption                   | May be harmful if absorbed through the skin  |
| Inhalation                        | Material may be irritating to mucous membranes and upper respiratory tract, May be harmful if inhaled. |
| Ingestion                         | May be harmful if swallowed  |
| Conditions Aggravated by Exposure | The toxicological properties have not been thoroughly investigated.                                    |

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**Section 12- Ecological Information**

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Eco-toxicity  
Toxicity of The Products of  
Biodegradation

The product itself and its products of degradation are not toxic.

**Section 13- Disposal Considerations**

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Appropriate Method of Disposal of  
Substance or Preparation

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

**Section 14- Transport Information**

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DOT  
Proper Shipping Name

None

Non-Hazardous for Transport

This substance is considered to be non-hazardous for transport.

IATA  
Non-Hazardous for Air Transport

Non-hazardous for air transport

**Section 15- Regulatory Information**

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United States Regulatory information  
SARA Listed

No

Canada Regulatory Information  
WHMIS Classification

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL

No

NDSL

No

**Section 16- Other Information**

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Disclaimer

For *in vitro* research use only.

GenScript corporation MSDS is believed to be correct but only used as a guide for experienced personnel, GenScript shall not be held liable for any damage resulting from the handling or from contact with the above product.