

## Section 1 - Product and Company Information

Product Name 2'-DEOXYGUANOSINE 5'-TRIPHOSPHATE  
SODIUM SALT HYDRATE  
Product Number D4010  
Brand SIGMA  
Company Sigma-Aldrich Canada, Ltd  
Address 2149 Winston Park Drive  
Oakville ON L6H 6J8 CA  
Technical Phone: 9058299500  
Fax: 9058299292  
Emergency Phone: 800-424-9300

## Section 2 - Composition/Information on Ingredient

Substance Name CAS # SARA 313  
2'-DEOXYGUANOSINE 5'-TRIP 93919-41-6 No  
Formula C10H16N5O13P3 . x Na+ . y

## Section 3 - Hazards Identification

## EMERGENCY OVERVIEW

Irritant.  
Irritating to eyes, respiratory system and skin.  
Target organ(s): Nerves. Liver.

## HMIS RATING

HEALTH: 2\*  
FLAMMABILITY: 0  
REACTIVITY: 0

## NFPA RATING

HEALTH: 2  
FLAMMABILITY: 0  
REACTIVITY: 0

\*additional chronic hazards present.

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 immediately.

## 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

N/A

## AUTOIGNITION TEMP

N/A

## FLAMMABILITY

N/A

## EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

## FIREFIGHTING

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(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

## STORAGE

Store at -20°C

## Section 8 - Exposure Controls / PPE

## ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

## PERSONAL PROTECTIVE EQUIPMENT

Other: Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.

## GENERAL HYGIENE MEASURES

Wash contaminated clothing before reuse. Wash thoroughly after handling.

## Section 9 - Physical/Chemical Properties

Appearance Color: White

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Form: Powder

Property	Value	At Temperature or Pressure
Molecular Weight	507.18 AMU	
pH	N/A	
BP/BP Range	N/A	
MP/MP Range	N/A	
Freezing Point	N/A	
Vapor Pressure	N/A	
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
SG/Density	N/A	
Bulk Density	N/A	
Odor Threshold	N/A	
Volatiles	N/A	
VOC Content	N/A	
Water Content	N/A	
Solvent Content	N/A	
Evaporation Rate	N/A	
Viscosity	N/A	
Surface Tension	N/A	
Partition Coefficient	N/A	
Decomposition Temp.	N/A	
Flash Point	N/A	
Explosion Limits	N/A	
Flammability	N/A	
Autoignition Temp	N/A	
Refractive Index	N/A	
Optical Rotation	N/A	
Miscellaneous Data	N/A	
Solubility	Solubility in Water:clear, colorless 50 mg/ml H2O	

N/A - not available

## Section 10 - Stability and Reactivity

## STABILITY

Stable: Stable.  
Materials to Avoid: Strong oxidizing agents.

## HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, and nitrogen oxides, Phosphorous oxides.

## HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

## Section 11 - Toxicological Information

## ROUTE OF EXPOSURE

Inhalation: Material is irritating to mucous membranes and upper respiratory tract.  
Multiple Routes: Causes eye and skin irritation. May be harmful by inhalation, ingestion, or skin absorption.

## TARGET ORGAN(S) OR SYSTEM(S)

Liver. Nerves. Damage to the heart.

## SIGNS AND SYMPTOMS OF EXPOSURE

Damage to the heart. Narcotic effect. Nausea, headache, and vomiting. Exposure can cause: Can cause CNS depression.

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vomiting. Exposure can cause: Can cause CNS depression.

## Section 12 - Ecological Information

No data available.

## Section 13 - Disposal Considerations

## APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

## Section 14 - Transport Information

## 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

## EU ADDITIONAL CLASSIFICATION

Symbol of Danger: Xi  
Indication of Danger: Irritant.  
R: 36/37/38  
Risk Statements: Irritating to eyes, respiratory system and skin.  
S: 22-26-36  
Safety Statements: Do not breathe dust. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

## US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Irritant.  
Risk Statements: Irritating to eyes, respiratory system and skin.  
Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing. Do not breathe dust.  
US Statements: Target organ(s): Nerves. Liver.

## 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

## DISCLAIMER

For R&D use only. Not for drug, household or other uses.

## WARRANTY

The above information is believed to be correct but does not

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purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2009Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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