

## Section 1 - Product and Company Information

Product Name ADENOSINE 3',5'-CYCLIC MONOPHOSPHATE  
Product Number 851205  
Brand ALDRICH

Company Sigma-Aldrich Canada, Ltd  
Address 2149 Winston Park Drive  
Oakville ON L6H 6J8 CA

Technical Phone: 9058299500  
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## Section 2 - Composition/Information on Ingredient

Substance Name (-)-ADENOSINE 3',5'-CYCLIC MONOPHOSPHATE CAS # 60-92-4 SARA 313 No

Formula C10H12N5O6P  
Synonyms Adenosine cyclic monophosphate \* Adenosine 3',5'-cyclic monophosphate \* Adenosine cyclic 3',5'-phosphate \* Adenosine 3',5'-cyclophosphate \* Adenosine 3',5'-monophosphate \* Adenosine 3',5'-phosphate \* 3',5'-amp \* cAMP \* Cyclic adenosine 3',5'-phosphate \* Cyclic 3',5'-adenylic acid \* Cyclic AMP \* Cyclic 3',5'-amp \* NSC 143670 \* ADENOSINE 3',5'-CYCLIC MONOPHOSPHATE

RTCS Number: AU7357600

## Section 3 - Hazards Identification

HMS 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

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 protective equipment.

## 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

Mechanical exhaust.

## PERSONAL PROTECTIVE EQUIPMENT

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

## Section 9 - Physical/Chemical Properties

Appearance Color: White  
Form: Powder

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Property	Value	At Temperature or Pressure
Molecular Weight	329.22 AMU	
pH	N/A	
BP/BP Range	N/A	
MP/MP Range	> 300 °C	
Freezing Point	N/A	
Vapor Pressure	N/A	
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
Bulk Density	N/A	
Odor Threshold	N/A	
Volatile%	N/A	
VOC Content	N/A	
Water Content	2.0 - 4.0 %	
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	Degree of Rotation: 7 g/l Solvent: H2O -64 - -54 (+/-2)	
Miscellaneous Data	N/A	
Solubility	N/A	

N/A - not available

## Section 10 - Stability and Reactivity

## STABILITY

Stable: Stable.

## HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides.

## HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

## Section 11 - Toxicological Information

## ROUTE OF EXPOSURE

Multiple Routes: May be harmful by inhalation, ingestion, or skin absorption. May cause irritation.

## CONDITIONS AGGRAVATED BY EXPOSURE

The toxicological properties have not been thoroughly investigated.

## TOXICITY DATA

Oral  
Mouse  
14,300 mg/kg  
LD50

## CHRONIC EXPOSURE - MUTAGEN

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Species: Human Human  
Dose: 100 UMOL/L 100 UMOL/L  
Cell Type: Other cell types Other cell types  
Mutation test: Other mutation test systems Other mutation test systems

Species: Rat Rat  
Dose: 10 MMOL/L 10 MMOL/L  
Cell Type: liver liver  
Mutation test: Other mutation test systems Other mutation test systems

Species: Rat Rat  
Dose: 10 MMOL/L 10 MMOL/L  
Cell Type: Other cell types Other cell types  
Mutation test: DNA inhibition DNA inhibition

Species: Mouse Mouse  
Dose: 500 UMOL/L 500 UMOL/L  
Cell Type: fibroblast fibroblast  
Mutation test: Other mutation test systems Other mutation test systems

## 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

S: 22-24/25  
Safety Statements: Do not breathe dust. Avoid contact with skin and eyes.

## UNITED STATES REGULATORY INFORMATION

SARA LISTED: No

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TSCA INVENTORY ITEM: Yes Yes

## 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: Yes

## 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 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 2009 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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