


## Material Safety Data Sheet

Canada  
English

## Section 1. Chemical product and company identification

Product name	Adenosine 5'-Triphosphate, Disodium, Crystalline (ATP), 25 g		
Catalogue Number	27-1006-04	 9 0 2 7 1 0 0 6 0 4	
Synonym	Adenosine 5'-(tetrahydrogen triphosphate), sodium salt (1:2); Adenosine 5'-triphosphate, disodium salt		
Material uses	Industrial applications: Analytical chemistry. Research.		
Product type	Solid.		
Validation date	11 March 2016		
Print date	11 March 2016		
Supplier	GE Healthcare UK Ltd Amersham Place Little Chalfont Buckinghamshire HP7 9NA England +44 0870 606 1921		
<u>In case of emergency</u>	US	ChemTrec (US)	1-800-424-9300
	Canada	ChemTrec (US)	1-703-527-3887

## 2. Hazards identification

Physical state	Solid.
Color	White.
Odor	Odorless.
Signal word	
Hazard statements	NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.
Precautionary measures	
Routes of entry	Dermal contact. Eye contact. Inhalation. Ingestion.
<u>Potential acute health effects</u>	
Eyes	No known significant effects or critical hazards.
Skin	No known significant effects or critical hazards.
Inhalation	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Ingestion	No known significant effects or critical hazards.
<u>Potential chronic health effects</u>	
Chronic effects	No known significant effects or critical hazards.
Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.
Teratogenicity	No known significant effects or critical hazards.
Developmental effects	No known significant effects or critical hazards.
Fertility effects	No known significant effects or critical hazards.
Target organs	Not available.
Inhalation	No specific data.
Ingestion	No specific data.
Skin	No specific data.
Eyes	No specific data.
Medical conditions aggravated by over-exposure	None known.

See toxicological information (Section 11)



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### 3. Composition/information on ingredients

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

### Section 4. First aid measures

<b>Eye contact</b>	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if symptoms occur.
<b>Skin contact</b>	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.
<b>Inhalation</b>	Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms occur.
<b>Ingestion</b>	Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.
<b>Protection of first-aiders</b>	No action shall be taken involving any personal risk or without suitable training.

### Section 5. Fire-fighting measures

<b>Flammability of the product</b>	No specific fire or explosion hazard.
<b><u>Extinguishing media</u></b>	
<b>Suitable</b>	Use an extinguishing agent suitable for the surrounding fire.
<b>Not suitable</b>	None known.
<b>Special exposure hazards</b>	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
<b>Special protective equipment for fire-fighters</b>	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

### Section 6. Accidental release measures

<b>Personal precautions</b>	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment (see Section 8).
<b>Environmental precautions</b>	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
<b>Methods for cleaning up</b>	Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
<b>Small spill</b>	Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

### Section 7. Handling and storage

<b>Handling</b>	Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas.
<b>Storage</b>	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

### Section 8. Exposure controls/personal protection

#### Occupational exposure limits

No exposure limit value known.

#### **Consult local authorities for acceptable exposure limits.**

<b>Recommended monitoring procedures</b>	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
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<b>Engineering measures</b>	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
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<b>Hygiene measures</b>	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
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#### Personal protection



<b>Respiratory</b>	Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
<b>Hands</b>	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
<b>Eyes</b>	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
<b>Skin</b>	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
<b>Environmental exposure controls</b>	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
<b>Other protection</b>	Not available.
<b>Personal protective equipment (Pictograms)</b>	Not available.

## Section 9. Physical and chemical properties

<b>Physical state</b>	Solid.
<b>Flash point</b>	[Product does not sustain combustion.]
<b>Burning time</b>	Not available.
<b>Burning rate</b>	Not available.
<b>Color</b>	White.
<b>Odor</b>	Odorless.
<b>Molecular weight</b>	551.18 g/mole
<b>Molecular formula</b>	C <sub>10</sub> H <sub>14</sub> N <sub>5</sub> O <sub>13</sub> P <sub>3</sub> Na <sub>2</sub>
<b>Volatility</b>	0% (w/w)
<b>SADT</b>	Not available.
<b>Solubility</b>	Easily soluble in the following materials: cold water and hot water.

## Section 10. Stability and reactivity

<b>Chemical stability</b>	The product is stable.
<b>Incompatible materials</b>	No specific data.
<b>Possibility of hazardous reactions</b>	Under normal conditions of storage and use, hazardous reactions will not occur.

## Section 11. Toxicological information

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Adenosine 5'-(tetrahydrogen triphosphate), disodium salt	LD50 Oral	Rat	7660 mg/kg	-
<b>Conclusion/Summary</b>	Not available.			

### Chronic toxicity

Not available.

<b>Conclusion/Summary</b>	Not available.
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### Irritation/Corrosion

Not available.

<b>Conclusion/Summary</b>	Not available.
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### Sensitizer

Not available.

<b>Conclusion/Summary</b>	Not available.
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### Carcinogenicity

Not available.

<b>Conclusion/Summary</b>	Not available.
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### Classification

Not available.



**Mutagenicity**

Not available.

**Conclusion/Summary** Not available.**Teratogenicity**

Not available.

**Conclusion/Summary** Not available.**Reproductive toxicity**

Not available.

**Conclusion/Summary** Not available.**Synergistic products** Not available.**Section 12. Ecological information****Environmental effects** No known significant effects or critical hazards.

Not available.

**Persistence/degradability****Partition coefficient: n-octanol/  
water** Not available.**Bioconcentration factor** Not available.**Other adverse effects** No known significant effects or critical hazards.**Section 13. Disposal considerations**

**Waste disposal** The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**RCRA classification** Not classified**Disposal should be in accordance with applicable regional, national and local laws and regulations.****Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.****Section 14. Transport information**

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
<b>DOT Classification</b>	Not regulated.	-	-	-	-	-
<b>TDG Classification</b>	Not regulated.	-	-	-	-	-
<b>Mexico Classification</b>	Not regulated.	-	-	-	-	-
<b>ADR/RID Class</b>	Not regulated.	-	-	-	-	-
<b>IMDG Class</b>	Not regulated.	-	-	-	-	-
<b>IATA-DGR Class</b>	Not regulated.	-	-	-	-	-

PG\* : Packing group

**Section 15. Regulatory information**

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

**WHMIS (Canada)** Not controlled under WHMIS (Canada).**Canadian lists****Canadian NPRI** This material is not listed.**CEPA Toxic substances** This material is not listed.**Canada inventory** This material is listed or exempted.

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**International regulations**

<b>International lists</b>	<b>Australia inventory (AICS):</b> This material is listed or exempted. <b>China inventory (IECSC):</b> This material is listed or exempted. <b>Japan inventory:</b> This material is listed or exempted. <b>Korea inventory:</b> This material is listed or exempted. <b>Malaysia Inventory (EHS Register):</b> Not determined. <b>New Zealand Inventory of Chemicals (NZIoC):</b> This material is listed or exempted. <b>Philippines inventory (PICCS):</b> Not determined. <b>Taiwan inventory (CSNN):</b> Not determined.
<b>Chemical Weapons Convention List Schedule I Chemicals</b>	Not listed
<b>Chemical Weapons Convention List Schedule II Chemicals</b>	Not listed
<b>Chemical Weapons Convention List Schedule III Chemicals</b>	Not listed

**Section 16. Other information**

**The customer is responsible for determining the PPE code for this material.**



Indicates information that has changed from previously issued version.

**History**

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<b>Date of issue</b>	11 March 2016	<b>Version</b>	4.01

**Notice to reader**

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

