# **Material Safety Data Sheet**

Canada English

Section 1. Chemical product and company identification

Adenosine 5'-Triphosphate, Disodium, Crystalline

(ATP), 25 g

Catalogue Number 27-1006-04

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 stateSolid.ColorWhite.OdorOdorless.

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.

Potential acute health effects

**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.

Potential chronic health effects

Chronic effects
 Carcinogenicity
 Mutagenicity
 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 organsNot available.InhalationNo specific data.IngestionNo specific data.SkinNo specific data.EyesNo specific data.Medical conditions aggravated byNone known.

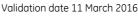
over-exposure

See toxicological information (Section 11)



Article Number Page: 1/5

27100604





## 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

**Eye contact** 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.

Skin contact

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.

**Inhalation** 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.

**Ingestion** 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.

**Protection of first-aiders**No action shall be taken involving any personal risk or without suitable training.

## Section 5. Fire-fighting measures

**Flammability of the product** No specific fire or explosion hazard.

**Extinguishing media** 

**Suitable** Use an extinguishing agent suitable for the surrounding fire.

Not suitable None known.

**Special exposure hazards** 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.

Special protective equipment for

Methods for cleaning up

fire-fighters

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

**Personal precautions**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).

**Environmental precautions**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).

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.

Small spill 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

Handling 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.

Storage Storage 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.

Recommended monitoring

procedures

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.

**Engineering measures** 

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Hygiene measures

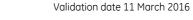
Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

<u>Personal protection</u>



Article Number Page: 2/5

27100604





Respiratory Use a properly fitted, particulate filter respirator complying with an approved standard if a ri

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.

Hands 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.

Safety eyewear complying with an approved standard should be used when a risk assessment indicates Eves

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.

Skin 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.

Emissions from ventilation or work process equipment should be checked to ensure they comply with the **Environmental exposure controls** 

> 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

Other protection Not available. Personal protective equipment

(Pictograms)

Not available.

## Section 9. Physical and chemical properties

Solid Physical state

Flash point [Product does not sustain combustion.]

Not available **Burning time Burning rate** Not available. White. Color Odor Odorless. Molecular weight 551.18 g/mole Molecular formula  $C_{10}H_{14}N_5O_{13}P_3N\alpha_2$ Volatility SADT Not available.

Solubility Easily soluble in the following materials: cold water and hot water.

## Section 10. Stability and reactivity

Chemical stability The product is stable. Incompatible materials No specific data.

Possibility of hazardous reactions Under normal conditions of storage and use, hazardous reactions will not occur.

## Section 11. Toxicological information

#### **Acute toxicity**

Result Product/ingredient name **Species** Dose Exposure Adenosine 5'-(tetrahydrogen LD50 Oral Rat 7660 mg/kg

Not available. Conclusion/Summary

**Chronic toxicity** Not available

triphosphate), disodium salt

Conclusion/Summary Not available

Irritation/Corrosion

Not available

Conclusion/Summary Not available

<u>Sensitizer</u> Not available

Conclusion/Summary Not available.

Carcinogenicity Not available

Conclusion/Summary Not available.

Classification Not available



Article Number Page: 3/5

27100604 Validation date 11 March 2016



Mutagenicity

Not available.

Conclusion/Summary Not available.

Teratogenicity

Not available.

Conclusion/Summary

Not available.

Reproductive toxicity

Not available.

Conclusion/SummaryNot available.Synergistic productsNot available.

## Section 12. Ecological information

**Environmental effects** No known significant effects or critical hazards.

Not available.

Persistence/degradability

Partition coefficient: n-octanol/ 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*	Additional information
DOT Classification	Not regulated.	-	-	-	-
TDG Classification	Not regulated.	-	-	-	-
Mexico Classification	Not regulated.	-	-	-	-
ADR/RID Class	Not regulated.	-	-	-	-
IMDG Class	Not regulated.	-	-	-	-
IATA-DGR Class	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.



Article Number

Page: 4/5

2710060



Validation date 11 March 2016



#### **International regulations**

International lists Australia inventory (AICS): This material is listed or exempted.

China inventory (IECSC): This material is listed or exempted. Japan inventory: This material is listed or exempted. Korea inventory: This material is listed or exempted. Malaysia Inventory (EHS Register): Not determined.

New Zealand Inventory of Chemicals (NZIoC): This material is listed or exempted.

Philippines inventory (PICCS): Not determined. Taiwan inventory (CSNN): Not determined.

**Chemical Weapons Convention** 

List Schedule I Chemicals

Not listed

Chemical Weapons Convention List Schedule II Chemicals Not listed

Chemical Weapons Convention List Schedule III Chemicals 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** 

Date of printing11 March 2016Date of previous issue27 March 2014

Date of issue11 March 2016Version4.01

#### 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.



Article Number

27100604

