SAFETY DATA SHEETS

According to the UN GHS revision 9

Version: 1.0
Creation Date: July 15, 2019
Revision Date: July 15, 2019

1. SECTION 1: Identification

1.1. GHS Product identifier

Product name Adenosine 5'-(tetrahydrogen triphosphate), disodium salt

1.2. Other means of identification

Product number -

Other names Adenosine 5'-triphosphate disodium salt;Adenosine 5-Triphosphate Disodium Salt;

1.3. Recommended use of the chemical and restrictions on use

Identified uses Industrial and scientific research use.

Uses advised against no data available

1.4. Supplier's details

Company Shandong Sincere Chemical Co., Ltd.

Address No.21 Industrial North Road, Licheng District, Jinan City,Shandong Province, China.

Telephone (+86) 188-6575-9396.

1.5. Emergency phone number

Emergency phone number (+86) 188-6575-9396.

Service hours Monday to Friday, 9am-5pm (Standard time zone: UTC/GMT +8 hours).

2. SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Self- heating substances and mixtures, Category 2

2.2. GHS label elements, including precautionary statements

Pictogram(s)

Signal word Warning

Hazard statement(s) H252 Self-heating in large quantities; may catch fire

Precautionary statement(s)

Prevention P235 Keep cool.P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...

Response	none
Storage	P407 Maintain air gap between stacks or pallets.P410 Protect from sunlight.P413 Store bulk masses greater than … kg/…lbs at temperatures not exceeding …°C/…°F.P420 Store separately.
Disposal	none

2.3. Other hazards which do not result in classification

no data available

3. SECTION 3: Composition/information on ingredients

3.1. Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
Adenosine 5'-(tetrahydrogen triphosphate), disodium salt	Adenosine 5'-(tetrahydrogen triphosphate), disodium salt	987-65-5	213-579-1	98%

4. SECTION 4: First-aid measures

4.1. Description of necessary first-aid measures

Medical attention is required. Consult a doctor. Show this safety data sheet (SDS) to the doctor in attendance.

If inhaled

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

Following skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

Following eye contact

Rinse with pure water for at least 15 minutes. Consult a doctor.

Following ingestion

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

4.2. Most important symptoms/effects, acute and delayed

no data available

4.3. Indication of immediate medical attention and special treatment needed, if necessary

no data available

5. SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media
Use dry chemical, carbon dioxide or alcohol-resistant foam.

5.2. Specific hazards arising from the chemical
no data available

5.3. Special protective actions for fire-fighters
Wear self-contained breathing apparatus for firefighting if necessary.

6. SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Avoid dust formation. Avoid breathing mist, gas or vapours.Avoid contacting with skin and eye. Use personal protective equipment.Wear chemical impermeable gloves. Ensure adequate ventilation.Remove all sources of ignition. Evacuate personnel to safe areas.Keep people away from and upwind of spill/leak.

6.2. Environmental precautions
Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

6.3. Methods and materials for containment and cleaning up
Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

7. SECTION 7: Handling and storage

7.1. Precautions for safe handling
Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

7.2. Conditions for safe storage, including any incompatibilities
Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

8. SECTION 8: Exposure controls/personal protection

8.1. Control parameters
Occupational Exposure limit values
no data available
Biological limit values
no data available

8.2. Appropriate engineering controls
Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

Skin protection

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Respiratory protection

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

Thermal hazards

no data available

9. SECTION 9: Physical and chemical properties and safety characteristics

Physical state	Solid.
Colour	no data available
Odour	no data available
Melting point/freezing point	188-190°C
Boiling point or initial boiling point and boiling range	951.4°C at 760mmHg
Flammability	no data available
Lower and upper explosion limit/flammability limit	no data available
Flash point	no data available
Auto-ignition temperature	no data available
Decomposition temperature	no data available
pH	no data available
Kinematic viscosity	no data available
Solubility	no data available
Partition coefficient n-octanol/water	no data available
Vapour pressure	no data available
Density and/or relative density	2.63g/cm3
Relative vapour density	no data available
Particle characteristics	no data available

10. SECTION 10: Stability and reactivity

10.1. Reactivity

no data available

10.2. Chemical stability

no data available

10.3. Possibility of hazardous reactions

no data available

10.4. Conditions to avoid

no data available

10.5. Incompatible materials

no data available

10.6. Hazardous decomposition products

no data available

11. SECTION 11: Toxicological information

Acute toxicity

- Oral: no data available
- Inhalation: no data available
- Dermal: no data available

Skin corrosion/irritation

no data available

Serious eye damage/irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

STOT-single exposure

no data available

STOT-repeated exposure

no data available

Aspiration hazard

no data available

12. SECTION 12: Ecological information

12.1. Toxicity

- Toxicity to fish: no data available
- Toxicity to daphnia and other aquatic invertebrates: no data available

- Toxicity to algae: no data available
- Toxicity to microorganisms: no data available

12.2. Persistence and degradability
no data available

12.3. Bioaccumulative potential
no data available

12.4. Mobility in soil
no data available

12.5. Other adverse effects
no data available

13. SECTION 13: Disposal considerations

13.1. Disposal methods
Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

14. SECTION 14: Transport information

14.1. UN Number

ADR/RID	IMDG	IATA
Not dangerous goods. (For reference only, please check.)	Not dangerous goods. (For reference only, please check.)	Not dangerous goods. (For reference only, please check.)

14.2. UN Proper Shipping Name

ADR/RID	IMDG	IATA
Not dangerous goods. (For reference only, please check.)	Not dangerous goods. (For reference only, please check.)	Not dangerous goods. (For reference only, please check.)

14.3. Transport hazard class(es)

ADR/RID	IMDG	IATA
Not dangerous goods. (For reference only, please check.)	Not dangerous goods. (For reference only, please check.)	Not dangerous goods. (For reference only, please check.)

14.4. Packing group, if applicable

ADR/RID	IMDG	IATA
Not dangerous goods. (For reference only, please check.)	Not dangerous goods. (For reference only, please check.)	Not dangerous goods. (For reference only, please check.)

14.5. Environmental hazards

ADR/RID: No IMDG: No IATA: No

14.6. Special precautions for user

no data available

14.7. Transport in bulk according to IMO instruments

no data available

15. SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
Adenosine 5'-(tetrahydrogen triphosphate), disodium salt	Adenosine 5'-(tetrahydrogen triphosphate), disodium salt	987-65-5	213-579-1

European Inventory of Existing Commercial Chemical Substances (EINECS)	Listed.
EC Inventory	Listed.
United States Toxic Substances Control Act (TSCA) Inventory	Listed.
China Catalog of Hazardous chemicals 2015	Not Listed.
New Zealand Inventory of Chemicals (NZIoC)	Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Not Listed.
Vietnam National Chemical Inventory	Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)	Listed.
Korea Existing Chemicals List (KECL)	Listed.

16. SECTION 16: Other information

Information on revision

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Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit

- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

References

- IPCS - The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home
- HSDB - Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm
- IARC - International Agency for Research on Cancer, website: http://www.iarc.fr/
- eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en
- CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple
- ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp
- ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg
- Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp
- ECHA - European Chemicals Agency, website: https://echa.europa.eu/

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