

Safety Data Sheet

Section 1: Chemical Identification

Chemical Name: Disodium; [[[(2R,3S,4R,5R)-5-(6-aminopurin-9-yl)-

3,4-dihydroxyoxolan-2-yl]methoxy-

hydroxyphosphoryl]oxy-oxidophosphoryl]hydrogen

phosphate

Alternative Name: Adenosine-5'-triphosphate disodium trihydrate,

ATP, Adetide, Triadesin A, Triphosadenine,

Adetphos, ATP disodium, Disodium ATP, Fosfobion

disodium salt, Adenosine-triphosphate

Catalog Number: A-081-1; A-081-5; A-081-25; A-081-100 Recommended This product is not for use in humans. It is

intended for research purposes only.

Distributed by: Gold Biotechnology, Inc.

1328 Ashby Rd.

St. Louis, MO 63132

Phone: (314) 890-8778 Fax: (314) 890-0503

Email: contactgoldbio86@goldbio.com

Emergency Phone: (800)248-7609 Mon.-Fri., 9am-5pm CST

Section 2: Hazardous Information

GHS Classification

use:

Skin irritation (Category 3)

Specific target organ toxicity – single exposure (Category 1)

GHS Label Elements, including Precautionary statements







DANGER!

Hazard Statements:

H316: Causes mild skin irritation H370: Causes damage to organs

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Precautionary Statements:

P260: Do not breathe dust/ fume/ gas/ mist/ vapours/ spray P307+P311: IF exposed: Call a POISON CENTER or doctor/ physician

OSHA Hazards

Target Organ Effect, Toxic by inhalation, Toxic by ingestion, Toxic by skin absorption, Irritant, Carcinogen

Potential Health Effects

Eye: Causes eye irritation.

Skin: Toxic if absorbed through skin. Causes skin

irritation.

Ingestion: Toxic if swallowed.

Inhalation: Toxic if inhaled. Causes respiratory tract irritation.

HMIS Classification

Health hazard: 2
Chronic health hazard *
Flammability: 0
Physical hazards: 0

NFPA Rating

Health Hazard: 2
Fire: 0
Reactivity Hazard: 0

Section 3: Composition/Information on Ingredients

Identity: Disodium; [[[(2R,3S,4R,5R)-5-(6-aminopurin-9-yl)-3,4-

dihydroxyoxolan-2-yl]methoxy-hydroxyphosphoryl]oxy-

oxidophosphoryl]hydrogen phosphate

Synonyms: Adenosine-5'-triphosphate disodium trihydrate, ATP, Adetide,

Triadesin A, Triphosadenine, Adetphos, ATP disodium,

Disodium ATP, Fosfobion disodium salt, Adenosine-triphosphate

CAS number: 987-65-5

Molecular Formula: $C_{10}H_{14}N_5O_{13}P_3Na_2 \cdot H_2O$

Molecular Weight: 605.24 g/mol

Section 4: First Aid Measures

Inhalation: If breathed in, move person into fresh air. If not

breathing, give artificial respiration. Consult a physician.

Skin: Wash off with soap and plenty of water. Take victim

immediately to hospital Consult a physician.

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Eye: Flush eyes with water as a precaution.

Ingestion: Wash out mouth with water. Drink plenty of water.

Consult a physician.

Section 5: Fire Fighting Measures

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Specific hazards arising from the chemical: During a fire, highly toxic gases may be generated by thermal decomposition or combustion – Carbon oxides, Nitrogen oxides, Oxides of phosphorus, Sodium oxides.

Special protective actions for fire-fighters: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions: Do not let product enter drains. Prevent further leakage or spillage if safe to do so.

Methods and materials for containment and cleaning up: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7: Handling and Storage

Precautions for safe handling: Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

Conditions for safe storage, including any incompatibilities: Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: -20 °C. Keep in a dry place.

Section 8: Exposure Controls / Personal Protection

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Control parameters: Contains no substances with occupational exposure limit values.

Appropriate engineering controls: Use only in a chemical fume hood. Safety shower and eye bath.

Personal Protective Equipment (PPE)

Eye/Face Protection: Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin Protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory Protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Other Protective Clothing or Equipment: Wear appropriate protective clothing to prevent exposure.

Section 9: Physical and Chemical Properties

White powder Appearance: Odour: Not available Odour Threshold: Not available pH: Not available Melting Point: Not available Freezing Point: Not available Boiling Point/Range: Not available Flash Point: Not available Evaporation Rate: Not available Flammability: Not available Lower Explosion Limit: Not available Upper Explosion Limit: Not available Vapour Pressure: Not available

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Vapour Density: Not available Relative Density: Not available Solubility: Not available Partition Coefficient: Not available

n-octanol/water

Auto-I gnition

Temperature: Not available

Decomposition

Temperature: Not available Viscosity: Not available

Section 10: Stability and Reactivity Data

Reactivity: Not available.

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: Not available.

Conditions to avoid: Incompatible materials.

Incompatible materials: Strong oxidizing agents.

Hazardous decomposition products: Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides, Oxides of phosphorus, Sodium oxides.

Section 11: Toxicological Information

Acute toxicity:

Not available.

Skin corrosion/irritation:

Not available.

Respiratory or skin sensitization:

Not available.

Chronic effects:

Not available.

Germ cell mutagenicity:

Not available.

Carcinogenicity:

IARC: No component of this product present at levels greater

than or equal to 0.1% is identified as probable, possible

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or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater

than or equal to 0.1% is identified as a carcinogen or

potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater

than or equal to 0.1% is identified as a known or

anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater

than or equal to 0.1% is identified as a carcinogen or

potential carcinogen by OSHA.

Reproductive toxicity:

Not available.

STOT-single exposure:

Not available.

STOT-repeated exposure:

Not available.

Aspiration hazard:

Not available.

Likely routes of exposure:

Respiratory organs, mouth, skin, and eyes.

Symptoms of exposure:

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12: Ecological Information

Toxicity:

Not available.

Persistence and degradability:

Not available.

Bioaccumulative potential:

Not available.

Mobility in soil:

Not available.

Other adverse effects:

Not available.

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Section 13: Disposal Considerations

Only professional staff trained in such techniques must undertake waste disposal. Observe all appropriate federal, provincial or state and local regulations. The material for disposal should be mixed with, or dissolved in, a combustible solvent and burnt in a chemical incinerator equipped with an afterburner and scrubber.

Section 14: Transport Information

US Department of Transportation (DOT)
Not dangerous goods.

International Maritime Dangerous Goods (IMDG) Not dangerous goods.

International Air Transport Association (IATA) Not dangerous goods.

Section 15: Regulatory Information

OSHA Hazards

Target Organ Effect, Toxic by inhalation. Toxic by ingestion, Toxic by skin absorption, Irritant, Carcinogen

SARA 302 Components:

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components:

The following components are subject to reporting levels established by SARA Title III, Section 313:

CAS-No. Methanol 67-56-1

SARA 311/312 Hazards:

Methanol

Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components:	CAS-No.
Ethanol	64-17-5
U RY	
Pen <mark>nsy</mark> lva <mark>n</mark> ia Right To Know Compon <mark>en</mark> ts:	CAS-No.
Adenosine-5'-triphosphate disodium trihydrate	987-65-5
Acetone	67-64-1
Ethanol	64-17-5

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New Jersey Right To Know Components:	CAS-No.
Adenosine-5'-triphosphate disodium trihydrate	987-65-5
Acetone	67-64-1
Ethanol	64-17-5
Methanol	67-56-1

California Prop. 65 Components:

California Proposition 65: This product does not contains chemical(s) known to the state of California to cause developmental toxicity.

Section 16: Other Information

While Gold Biotechnology, Inc. believes the information contained herein to be true and accurate, it has relied on information provided by others. Gold Biotechnology, INC. makes no warranties, express or implied, as to the accuracy or adequacy of the information contained herein or with respect to the results to be obtained from the use of the product. Gold Biotechnology, Inc. disclaims all liability with respect to the use of this product, including without limitation, liability for injury to the user or third-party persons.

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