

## Section 1 Identification

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**Innovating Science**<sup>®</sup> by Aldon Corporation  
 "cutting edge science for the classroom"

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**CHEMTREC 24 Hour Emergency  
 Phone Number (800) 424-9300**  
 For laboratory and industrial use only.  
 Not for drug, food or household use.

<b>Product</b>	ADENOSINE 5'-TRIPHOSPHATE
<b>Synonyms</b>	Adenosine 5'-(tetrahydrogen triphosphate), disodium salt / ATP / Adenosine triphosphate

## Section 2 Hazards identification

**Signal word:** WARNING  
**Pictograms:** None assigned  
**Target organs:** None known.

**GHS Classification:**  
 Acute tox. - oral (Category 5)

**GHS Label information: Hazard statement(s):**  
 H303: May be harmful if swallowed.

**STORE BELOW 0°C (32°F)**

**Precautionary statement(s):**  
 P312: Call a POISON CENTER or doctor/physician if you feel unwell.

**Hazards not otherwise classified:**

Health hazards not otherwise classified (HHNOC) - Not Known  
 Physical hazards not otherwise classified (PHNOC) - Not Known

## Section 3 Composition / information on ingredients

Chemical Name	CAS #	%	EINECS
Adenosine 5'-triphosphate, disodium salt	987-65-5	100%	213-579-1

## Section 4 First aid measures

**INGESTION:** Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** MAY CAUSE TRANSIENT IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION:** Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

## Section 5 Fire fighting measures

**Extinguishing Media:** Use any media suitable for extinguishing supporting fire.

**General information:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

## Section 6 Accidental release measures

Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation. Recover for use if not contaminated. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water. Avoid runoff into storm sewers and ditches which lead to waterways.

**Section 7 Handling and storage**

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Read label on container before using. Do not wear contact lenses when working with chemicals. Keep container tightly closed. Keep out of reach of children. Use with adequate ventilation. Wash thoroughly after handling.

**Handling:** Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid ingestion. Do not inhale dusts. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances.

**Section 8 Exposure controls / personal protection**

Exposure Limits:	Chemical Name CAS # 987-65-5	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
		None established.	None established.	None established.

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

**Section 9 Physical and chemical properties**

<b>Appearance:</b> White, crystalline powder. <b>Odor:</b> No odor. <b>Odor threshold:</b> Data not available. <b>pH:</b> Data not available. <b>Melting / Freezing point:</b> 188-190°C (370-374°F) <b>Boiling point:</b> Decomposes <b>Flash point:</b> Not applicable	<b>Evaporation rate ( = 1):</b> Not applicable <b>Flammability (solid/gas):</b> Data not available. <b>Explosion limits: Lower / Upper:</b> Not applicable <b>Vapor pressure (mm Hg):</b> Negligible <b>Vapor density (Air = 1):</b> 21 <b>Relative density (Specific gravity):</b> >1.0 <b>Solubility(ies):</b> Soluble in water.	<b>Partition coefficient: (n-octanol / water):</b> Data not available <b>Auto-ignition temperature:</b> Data not available <b>Decomposition temperature:</b> Data not available <b>Viscosity:</b> Data not available. <b>Molecular formula:</b> C <sub>10</sub> H <sub>14</sub> N <sub>5</sub> Na <sub>2</sub> O <sub>13</sub> P <sub>3</sub> •3H <sub>2</sub> O <b>Molecular weight:</b> 605.19
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**Section 10 Stability and reactivity**

**Chemical stability:** Stable **Hazardous polymerization:** Will not occur.

**Conditions to avoid:** Excessive temperatures and heat. Stable under recommended storage conditions.

**Incompatibilities with other materials:** Strong oxidizers.

**Hazardous decomposition products:** Carbon oxides, nitrogen, potassium and sodium.

**Section 11 Toxicological information**

**Acute toxicity:** Oral-rat LD50: >2,000 mg/kg - Oral-mouse LD50: >2,000 mg/kg

**Skin corrosion/irritation:** Data not available

**Serious eye damage/irritation:** Data not available

**Respiratory or skin sensitization:** Data not available

**Germ cell mutagenicity:** Data not available

**Carcinogenicity:** Data not available

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.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

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.

Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

**Reproductive toxicity:** Data not available

**STOT-single exposure:** Data not available

**STOT-repeated exposure:** Data not available

**Aspiration hazard:** Data not available

**Potential health effects:**

Inhalation: May be harmful if inhaled.

Ingestion: May be harmful if swallowed.

Skin: May cause irritation.

Eyes: May cause irritation.

**Signs and symptoms of exposure:** To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated. Specific data is not available. Exercise appropriate procedures to minimize potential hazards.

**Additional information:** RTECS #: AU7417000

**Section 12 Ecological information**

**Toxicity to fish:** No data available

**Toxicity to daphnia and other aquatic invertebrates:** No data available

**Toxicity to algae:** No data available

**Persistence and degradability:** No data available

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**PBT and vPvB assessment:** No data available

**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**Section 13 Disposal considerations**

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

**Section 14 Transport information**

**UN/NA number:** Not applicable

**Shipping name:** Not Regulated

**Hazard class:** Not applicable

**Packing group:** Not applicable

**Reportable Quantity:** No

**Marine pollutant:** No

**Exceptions:** Not applicable

**2020 ERG Guide #** Not applicable

**Section 15 Regulatory information**

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERCLA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Adenosine 5-triphosphate	Listed	Not listed	Not listed	Listed	Not listed	This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

**Section 16 Other information**

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

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 Not for drug, food or household use.

<b>Product</b>	<b>FIREFLY LANTERN EXTRACT</b>
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<b>Synonyms</b>	None
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## Section 2 Hazards identification

**Signal word:** WARNING

**Pictograms:** GHS07

**Target organs:** Gastrointestinal system, central nervous system.



**GHS Classification:**

Acute tox. - oral (Category 4)

**GHS Label information: Hazard statement(s):**

H302: Harmful if swallowed.

**STORE BELOW 0°C.**

**Precautionary statement(s):**

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P301/312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P330: Rinse mouth.

P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with all local, state and federal regulations.

**Hazards not otherwise classified:**

Health hazards not otherwise classified (HHNOC) - Not Known

Physical hazards not otherwise classified (PHNOC) - Not Known

## Section 3 Composition / information on ingredients

Chemical Name	CAS #	%	EINECS
Potassium phosphate, monobasic	7778-77-0	47%	231-913-4
Fireflies desiccated tails	None assigned	43%	None assigned
Magnesium sulfate, anhydrous	7487-88-9	10%	231-298-2

## Section 4 First aid measures

**INGESTION:** HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** MAY BE HARMFUL IF INHALED. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** MAY CAUSE TRANSIENT IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION:** MAY CAUSE IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

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Read label on container before using. Do not wear contact lenses when working with chemicals. Keep container tightly closed. Keep out of reach of children. Use with adequate ventilation. Wash thoroughly after handling.

**Handling:** Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid ingestion. Do not inhale dusts. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances.

## Section 8 Exposure controls / personal protection

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Firefly extract	None established.	None established.	None established.

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

## Section 9 Physical and chemical properties

**Appearance:** Yellow powder.

**Odor:** No odor.

**Odor threshold:** Data not available

**pH:** Data not available

**Melting / Freezing point:** Data not available

**Boiling point:** Data not available

**Flash point:** Data not available

**Evaporation rate ( = 1):** Data not available

**Flammability (solid/gas):** Data not available.

**Explosion limits: Lower / Upper:** Data not available

**Vapor pressure (mm Hg):** Data not available

**Vapor density (Air = 1):** Data not available

**Relative density (Specific gravity):** Data not available

**Solubility(ies):** Soluble in water.

**Partition coefficient: (n-octanol / water):** Data not available

**Auto-ignition temperature:** Data not available

**Decomposition temperature:** Data not available

**Viscosity:** Data not available.

**Molecular formula:** Mixture

**Molecular weight:** Mixture

## Section 10 Stability and reactivity

**Chemical stability:** Stable

**Hazardous polymerization:** Will not occur.

**Conditions to avoid:** Excessive temperatures and heat. Stable under recommended storage conditions.

**Incompatibilities with other materials:** Strong oxidizers and acids.

**Hazardous decomposition products:** Unknown.

## Section 11 Toxicological information

**Acute toxicity:** Oral-mouse LD50: ca. 1,700 mg/kg [Potassium phosphate]

**Skin corrosion/irritation:** Data not available

**Serious eye damage/irritation:** Data not available

**Respiratory or skin sensitization:** Data not available

**Germ cell mutagenicity:** Data not available

**Carcinogenicity:** Data not available

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.

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Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

**Reproductive toxicity:** Data not available

**STOT-single exposure:** Data not available

**STOT-repeated exposure:** Data not available

**Aspiration hazard:** Data not available

**Potential health effects:**

Inhalation: May be harmful if inhaled.

Ingestion: Harmful if swallowed.

Skin: May cause irritation.

Eyes: May cause irritation.

**Signs and symptoms of exposure:** To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated. Specific data is not available. Exercise appropriate procedures to minimize potential hazards.

**Additional information: RTECS #:** None assigned.

## Section 12 Ecological information

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**Persistence and degradability:** No data available

**Bioaccumulative potential:** No data available

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**UN/NA number:** Not applicable

**Shipping name:** Not Regulated

**Hazard class:** Not applicable

**Packing group:** Not applicable

**Reportable Quantity:** No

**Marine pollutant:** No

**Exceptions:** Not applicable

**2020 ERG Guide #** Not applicable

## Section 15 Regulatory information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Potassium phosphate	Listed	Not listed	Not listed	Listed	Not listed	This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.
Magnesium sulfate	Listed	Not listed	Not listed	Listed	Not listed	

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