

Safety Data Sheet

 according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
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SECTION 1: Identification of the sub	stance/mixture and of the company/undertaking	
1.1. Product identifier		
Product form	: Substance	
Substance name	: ADENOSINE 5'-MONOPHOSPHATE, LITHIUM SALT (U-15N5, 96-98%)	
CAS-No.	: NA	
Product code	: NLM-3792-SL	
Formula	: C10H12Li2*N5O7P	
Synonyms	: 5'-AMP, 5'Adenlic acid, A-5'-P, AMP	
1.2. Relevant identified uses of the subs	tance or mixture and uses advised against	
1.2.1. Relevant identified uses		
Main use category	: Professional use	
Industrial/Professional use spec	: For professional use only	
1.2.2. Uses advised against		
No additional information available		
1.3. Details of the supplier of the safety of	lata sheet	
Cambridge Isotope Laboratories, Inc. 50 Frontage Road		
Andover, MA 01810 USA		
USA: 1-800-322-1174 Int: 1-978-749-8000 <u>cilsales@isotope.com</u> www.isotope.com		
Emergency telephone number		
Emergency numbers:		
Chemtrec: 1-800-424-9300 (24 hours) International: 1-703-741-5970 (24 hours)		
SECTION 2: Hazards identification		
2.1. Classification of the substance or m	ixture	
Classification according to Regulation (EC) N	o. 1272/2008 [CLP]	
Not classified		
Classification according to Directive 67/548/E	EC [DSD] or 1999/45/EC [DPD]	
Not classified		
GHS-US classification		
Not classified		
Adverse physicochemical, human health and	environmental effects	
No additional information available		
2.2. Label elements		
Labeling according to Regulation (EC) No. 1272/2008 [CLP]		
No labeling applicable		
GHS-US labeling		

No labeling applicable

	2.3.	Other	hazards
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No additional information available

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SECTION 3: Composition/Information on ingredients			
3.1. Substances			
Name	Product identifier	%	Classification according to Directive 67/548/EEC
ADENOSINE 5'-MONOPHOSPHATE, LITHIUM SALT (U- 15N5, 96-98%)	(CAS-No.) NA	100	Not classified
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
ADENOSINE 5'-MONOPHOSPHATE, LITHIUM SALT (U- 15N5, 96-98%)	(CAS-No.) NA	100	Not classified

Full text of R- and H- phrases: see section 16

Name	Product identifier	%	GHS-US classification
ADENOSINE 5'-MONOPHOSPHATE, LITHIUM SALT (U- 15N5, 96-98%) (Main constituent)	(CAS-No.) NA	100	Not classified

Full text of H-phrases: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: If you feel unwell, seek medical advice (show the label where possible). Evacuate danger area.
First-aid measures after inhalation	: When symptoms occur: go into open air and ventilate suspected area. If not breathing give artificial respiration. Get medical advice/attention.
First-aid measures after skin contact	: Wash with plenty of soap and water. and soap. Get immediate medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes.
First-aid measures after ingestion	: Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get medical advice/attention.
4.2. Most important symptoms and effect	cts, both acute and delayed
Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory irritation.
Symptoms/effects after skin contact	: May be harmful in contact with skin. May cause moderate irritation.
Symptoms/effects after eye contact	: May cause eye irritation.
Symptoms/effects after ingestion	: May be harmful if swallowed.
4.3. Indication of any immediate medica	I attention and special treatment needed
No additional information available	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Water spray. dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).
5.2. Special hazards arising from the su	bstance or mixture
Reactivity	: Not available.
5.3. Advice for firefighters	
Firefighting instructions	: Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection. Wear recommended personal protective equipment.
SECTION 6: Accidental release mea	sures
6.1. Personal precautions, protective eq	uipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Avoid breathing vapors, mist, gas. Avoid dust formation.
6.1.2. For emergency responders	
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

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6.2. Environmental precautions	
Prevent entry to sewers and public waters. Do	not allow to enter drains or water courses. Avoid release to the environment.
6.3. Methods and material for contain	ment and cleaning up
For containment	: Take up mechanically (sweeping, shoveling) and collect in suitable container for disposal.
Methods for cleaning up	: This material and its container must be disposed of in a safe way, and as per local legislation.
6.4. Reference to other sections	
For further information refer to section 13.	
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Provide adequate ventilation to minimize dust and/or vapor concentrations.
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Handle in accordance with good industrial hygiene and safet practice.
7.2. Conditions for safe storage, inclu	ding any incompatibilities
Technical measures	: Store in a well-ventilated place. Keep container tightly closed.
Storage conditions	: Store in freezer (-20°C). Protect from light.
7.3. Specific end use(s)	
No additional information available	
SECTION 8: Exposure controls/pe	rsonal protection
8.1. Control parameters	
No additional information available	
8.2. Exposure controls	. Week hands and other averaged areas with mild seen and water before acting drinking ar
Appropriate engineering controls	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
Personal protective equipment	: Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.
Materials for protective clothing	: Wear suitable protective clothing and gloves.
Hand protection	: Wear suitable protective clothing and gloves.
Eye protection	: Wear eye protection. Chemical goggles or face shield with safety glasses.
Skin and body protection	: Wear suitable protective clothing, gloves and eye/face protection.
Respiratory protection	: In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator
Environmental exposure controls	: Avoid release to the environment.
SECTION 9: Physical and chemica	l properties
9.1. Information on basic physical and	
Physical state	: Solid
Appearance	: Solid
Molecular mass	: 364.05 g/mol (Labeled)
Color	: White
Odor	: Not available
Odor threshold	: No data available
рН	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available

Vapor pressure

Freezing point

Auto-ignition temperature

Flammability (solid, gas)

Decomposition temperature

Boiling point Flash point No data availableNo data available

: No data available

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Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosion limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity		
10.1. Reactivity		
Not available.		
10.2. Chemical stability		
Two years after receipt if stored as stated in "Sto	rage" section. Re-QC after 2 years.	
10.3. Possibility of hazardous reactions		
No additional information available		
10.4. Conditions to avoid		
Not available.		
10.5. Incompatible materials		
Not available. Oxides of phosphorus.		
10.6. Hazardous decomposition products		
Formed under fire conditions: Carbon oxides, nitrogen oxides (NOx).		
SECTION 11: Toxicological informat	ion	
11.1. Information on toxicological effects		
Acute toxicity	: Not classified	
Skin corrosion/irritation	: Not classified	
Serious eye damage/irritation	: Not classified	
Respiratory or skin sensitization	: Not available	
Germ cell mutagenicity	: Not available	
Carcinogenicity	: Not classified	
Reproductive toxicity	: Not available	
Specific target organ toxicity - single exposure	: Not classified	
Specific target organ toxicity – repeated exposure	: Not classified	
Aspiration hazard	: Not classified	
Potential Adverse human health effects and symptoms	: This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.	
Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory irritation.	
Symptoms/effects after skin contact	: May be harmful in contact with skin. May cause moderate irritation.	
Symptoms/effects after eye contact	: May cause eye irritation.	
Symptoms/effects after ingestion	: May be harmful if swallowed.	

SECTIC	ON 12: Ecological information	
12.1.	Toxicity	
Ecology -	general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

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12.2. Persistence and degradability	
ADENOSINE 5'-MONOPHOSPHATE, LITHIUN	I SALT (U-15N5, 96-98%) (NA)
Persistence and degradability	Not available.
12.3. Bioaccumulative potential	
ADENOSINE 5'-MONOPHOSPHATE, LITHIUM	I SALT (11-15N5 96-98%) (NA)
Bioaccumulative potential	Not available.
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12.4. Mobility in soil	
ADENOSINE 5'-MONOPHOSPHATE, LITHIUN Ecology - soil	I SALT (U-15N5, 96-98%) (NA) Not available.
12.5. Results of PBT and vPvB assessmer	nt
No additional information available	
12.6. Other adverse effects	
Other adverse effects	: Not available.
SECTION 13: Disposal consideration	S
13.1. Waste treatment methods	
Regional legislation (waste)	: Waste materials should be disposed of under conditions which meet Federal, State, and local
·	environmental control regulations.
Product/Packaging disposal recommendations	: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
Ecology - waste materials	: Dispose of as unused product.
SECTION 14: Transport information	
In accordance with ADR / RID / IMDG / IATA / AD	DN
14.1. UN number	
Not applicable	
14.2. UN proper shipping name	
Not applicable	
14.3. Additional information	
Other information	: No supplementary information available.
Special transport precautions	: DOT/IMDG/IATA: Not dangerous goods.
Overland transport	
Overland transport No additional information available	
Transport by sea	
Transport by sea No additional information available	
Air transport No additional information available	
14.4. Environmental hazards	
Other information	: No supplementary information available.
14.5. Special precautions for user Special transport precautions Image: Special transport precautions	: DOT/IMDG/IATA: Not dangerous goods.
44.0 Transport in bull conording to Appe	will of MARROL 72/70 and the IRC Code
14.6. Transport in bulk according to Anne Not applicable	x II of MARPOL 73/78 and the IBC Code
nor applicance	
SECTION 15: Regulatory information	
15.1. US Federal regulations	
ADENOSINE 5'-MONOPHOSPHATE, LITHIUN	I SALT (U-15N5, 96-98%) (NA)

ADENOSINE 5'-MONOPHOSPHATE, LITHIUM SALT (U-15N5, 96-98%) (NA)		
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.	
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ADENOSINE 5'-MONOPHOSPHATE, LITHIUM SALT (U-15N5, 96-98%) (NA)	
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.

15.2. International regulations

CANADA

ADENOSINE 5'-MONOPHOSPHATE, LITHIUM SALT (U-15N5, 96-98%) (NA)

Listed on the Canadian DSL (Domestic Substances List)

15.2.1. National regulations

No additional information available

15.3. US State regulations

ADENOSINE 5'-MONOPHOSPHATE, LITHIUM SALT (U-15N5, 96-98%)(NA)	
U.S California - Proposition 65 - Carcinogens List	No
U.S California - Proposition 65 - Developmental Toxicity	No
U.S California - Proposition 65 - Reproductive Toxicity - Female	No
U.S California - Proposition 65 - Reproductive Toxicity - Male	No
State or local regulations	U.S Pennsylvania - RTK (Right to Know) List U.S New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information	
Other information	: This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.
NFPA health hazard	: 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.
NFPA fire hazard	: 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
NFPA reactivity	: 0 - Material that in themselves are normally stable, even under fire conditions.
Hazard Rating	
Health	: 0 Minimal Hazard - No significant risk to health
Flammability	: 0 Minimal Hazard
Physical	: 0 Minimal Hazard

CIL Substance SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product