



Safety Data Sheet: Puromycin-Aminonucleoside

1. Identification of the Substance and of the Company

1.1. Product identifiers

Product name	<i>Puromycin-Aminonucleoside</i>	Formula	$C_{12}H_{18}N_6O_3$
Product Code	PAN	RTECS	AU337000
CAS #	58-60-6		
EC Number #	200-388-3		
Source	<i>Synthetic</i>	Molecular weight	294.36
Synonyms	<ul style="list-style-type: none"> • <i>3'-amino-3'-deoxy-N,N-dimethyladenosine</i> • <i>Aminonucleoside puromycin</i> • <i>Stylomycin aminonucleoside</i> 		
Substance? Mixture?	<i>Substance</i>	Date of version	26 November, 2022

1.2. Intended uses of the Substance and uses advised against

1.2.1. Intended use:	1.2.2. Uses advised against:
Research and development. Laboratory reagent. To be used by professionals only	Not for drug, Not to be used in humans or animals. Not food additive

1.3. Details of the Manufacturer

FERMENTEK Ltd
4 Yatziv street, POB 47120
Jerusalem 97800,
Israel

Tel: +972 2 5853953
Fax: +972 2 5853943
eMail: fermentek@fermentek.com
Website: www.fermentek.com

1.4. Emergency Telephone number

For chemical emergency spill, leak, fire, exposure, or accident calls
CHEMTREC day or night:
Within USA and Canada: 1-800-424-9300. Outside USA and Canada:
+1 703-527-3887

This company is the manufacturer of the product, and the supplier of the safety data sheet

2. Hazards identification

2.1. Classification of the substance

2.1.1. GHS Classification According to EU Reg. 1272/2008 and US OSHA 1910.1200)

<i>STOT RE 2 (specific organ, Repeated exposure)</i>	<i>(Category 2)</i>	<i>May cause damage to organs through prolonged or repeated exposure (Kidney)</i>
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2.2. GHS Label elements, including precautionary statements

2.2.1. Pictogram: {  } Signal word {**Warning**}

2.2.2. GHS Hazard Statements

H373	<i>May cause damage to organs through prolonged or repeated exposure (Kidney)</i>
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2.2.3. GHS Precautionary Statements

P201	<i>Obtain special instructions before use.</i>
P202	<i>Do not handle until all safety precautions have been read and understood.</i>
P264	<i>Wash {hands} thoroughly after handling.</i>
P270	<i>Do not eat, drink or smoke when using this product</i>

2.2.4. GHS Response Phrases

P301+P312	<i>If swallowed: consult a poison center/doctor</i>
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2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

3. Composition/information on ingredients

Substance	
Substance name:	<i>Puromycin-Aminonucleoside</i>
Concentration	<i>100%</i>
CAS Registry#:	<i>58-60-6</i>
EC#:	<i>200-388-3</i>
Molecular Formula:	<i>C₁₂H₁₈N₆O₃</i>
Molecular Weight:	<i>294.36</i>
Classification	<i>STOT RE 2;H373</i>

4. First Aid Measures

4.1. Description of First Aid Measures

General advice:	Consult a physician if necessary. Show this safety data sheet to the doctor in attendance.
Inhalation:	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
Ingestion:	Never give anything by mouth to an unconscious person. Clean mouth with water
Skin Contact:	If on skin: Wash skin with soap and water
Eye contact:	Rinse eyes with water as a precaution.

4.2. Most important symptoms and effects, both acute and delayed

Observations in mammals	<i>OTHER EFFECTS</i> <i>Damage to fetus reported in rodents</i>
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4.3. Indication of any immediate medical attention and special treatment needed

	<i>None</i>
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5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media	<i>Use water foam Carbon dioxide (CO₂)</i> <i>Dry powder</i>
Unsuitable extinguishing media	<i>None known</i>

5.2. Other information

Hazardous combustion products	<i>Carbon oxides; Nitrogen oxides</i>
More information	<i>Combustible.</i>
Advice for firefighters	<i>Wear self-contained breathing apparatus for fire fighting if necessary. Wear protective suit.</i>



6. **Accidental release measures**

6.1. **Personal precautions, protective equipment, and emergency procedures**

Personal precautions

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. Keep people away from and upwind of spill/leak.

6.2. **Environmental precautions**

Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

6.3. **Methods and material for containment and cleaning up**

Methods for containment:

Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up:

Clean-up should be dealt with only by qualified personnel familiar with the specific substance. Cover liquid spill with sand, earth or other non-combustible absorbent material (e.g., sand, earth, diatomaceous earth, and vermiculite). Cover powder spill with plastic sheet or tarp to minimize spreading. Sweep up and shovel into suitable containers for disposal.

7. **Handling and storage**

7.1. **Precautions for safe handling**

Advice on safe handling:

Avoid contact with skin, eyes, or clothing. Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink, or smoke when using this product.

7.2. **Conditions for safe storage, including any incompatibilities**

Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Store at -20 °C. Some other manufacturers may advice storing temperature 2-8°C.

Suitable packaging

Incompatible materials:

None known based on information available.

8. **Exposure Controls/Personal Protection**

8.1. **Control parameters**

Control parameters

Components with workplace control parameters

8.2. **Exposure controls**

Appropriate engineering controls

*Showers, Eyewash stations, Ventilation systems
Avoid contact with skin, eyes, and clothing.
Wash hands before breaks and immediately after handling the product.
Use fumehood for routine work.*



8.3. Personal protective equipment

[PPE=Personal Protection Equipment]

PPE: Respiratory protection	Where risk assessment shows air-purifying respirators are appropriate use a fullface particle respirator type N100 (US) or type P3 (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).
PPE: Hand Protection:	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal techniques to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices, and wash and dry hands
PPE: Eye Protection:	Use a face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU)
PPE: Skin and Body 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 selected protective gloves must satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

9. Physical and chemical properties

9.1. Physical / chemical properties

Physical State at room temperature	Solid / powder
Color	Off White powder
Melting/freezing point	180-195°C

No further safety relevant data are available

10. Stability and reactivity

Reactivity:	No information available.
Chemical stability:	Stable under normal conditions.
Conditions to avoid	Heat, flames, and sparks. Sunlight.
Incompatible materials	Strong reducers and oxidizers
Possibility of Hazardous Reactions	None under normal processing
Hazardous decomposition products	Nitrogen oxides. Carbon oxides.

11. Toxicological information

11.1. Information on toxicological effects

11.1.1. Acute Toxicity	
Oral	No data available



11.1.2. Information on likely routes of exposure	
Inhalation	<i>No data available</i>
Skin corrosion/irritation:	<i>No data available</i>
Serious eye damage/eye irritation:	<i>No data available</i>
Respiratory or skin sensitization/corrosion:	<i>No data available</i>
11.1.3. CMR hazards (Carcinogenic, mutagenic, reprotoxic)	
Mutagenicity	<i>DNA inhibition reported in mice in-vivo at 83 mg/kg intraperitoneal</i>
Germ cell mutagenicity:	<i>DNA inhibition reported in human lung cell culture in-vitro at 6 mg/L</i>
Carcinogenicity:	<i>No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.</i>
Reproductive toxicity / Teratogenicity:	<i>Teratogenicity reported in rats, subcutaneous, at 45 mg/kg 8-10 day(s) after conception Effects. Abnormalities in urogenital system</i>
STOT-SE – single exposure (GHS):	<i>No data available</i>
STOT-SE – repeated exposure (GHS):	<i>No data available</i>
Aspiration hazard:	<i>No data available</i>
11.1.4. Potential Health Effects and Routes of Exposure	
If inhaled	<i>No data available</i>
If swallowed	<i>No data available</i>
If on skin	<i>No data available</i>
If in Eyes	<i>No data available</i>

11.2. Additional information

	See section 4
RTECS number	AU337000

12. Ecological Information

Toxicity	<i>No data available</i>
Persistence and degradability	<i>This Substance contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB)</i>
Bioaccumulative potential	<i>No data available</i>
Mobility in soil	<i>No data available</i>
Results of PBT and vPvB assessment	<i>PBT/vPvB assessment not available as chemical safety assessment not required/not conducted</i>
Endocrine disrupting properties	<i>No data available</i>
Other adverse effects	<i>No further relevant information available.</i>



13. **Disposal Considerations**

13.1. **Waste treatment methods**

Waste from residues / unused products	<i>Dispose of in accordance with local regulations</i>
Contaminated packaging	<i>Dispose of as unused product</i>

14. **Transport information**

14.1. **UN number, Proper Shipping Name, Transport Hazard Class, packing group**

	US DOT	IATA	IMDG	ADR/RID
UN Number UN proper shipping name	<i>Not dangerous for transport and/or not regulated.</i>	<i>Not dangerous for transport and/or not regulated.</i>	<i>Not dangerous for transport and/or not regulated.</i>	<i>Not dangerous for transport and/or not regulated.</i>
Transport Hazard Class & Packing Group	<i>Not dangerous for transport and/or not regulated.</i>	<i>Not dangerous for transport and/or not regulated.</i>	<i>Not dangerous for transport and/or not regulated.</i>	<i>Not dangerous for transport and/or not regulated.</i>
			<i>Not marine pollutant</i>	

14.2. **Additional information**

Excepted quantities (EQ)	<i>Not applicable</i>
De Minimis exemption	<i>Not applicable</i>

15. **Regulatory information**

15.1. **Product-specific safety, health, and environmental regulations/legislation**

USA EPA / TSCA	<i>This product is not listed on the USA EPA TSCA (it is for research)</i>
California proposit. 65	<i>This product is not listed on California proposit. 65 as on Jan 3, 2020</i>
EU ECHA Status	<i>This product is registered with the EU ECHA Number: 200-388-3 REACH: pre registered ; ANNEX III: Listed</i>
Canada	<i>This product is not listed on the Canadian DSL/NDSL</i>

16. **Other information**

16.1. **Department issuing this SDS**

- *Quality systems and regulatory affairs*

16.2. **General Disclaimer**

- *The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication.*
- *The information given here is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification.*
- *The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.*



16.3. *The users'/employers' responsibility:*

- *A risk assessment should be performed by the employer/user prior to use of this product.*
- *All recommendations included in this document, are advisory in nature.*
- *The type of protective equipment must be selected based on the amount and concentration of all dangerous materials being used in the workplace.*

16.4. *Abbreviations and acronyms:*

Acute Tox. *Acute toxicity*

CAS: *Chemical Abstracts Service (division of the American Chemical Society)*

DOT: *US Department of Transportation*

EINECS: *European Inventory of Existing Commercial Chemical Substances*

Eye Dam.: *Serious eye damage/eye irritation*

HMIS: *Hazardous Materials Identification System (USA)*

IATA: *International Air Transport Association*

IMDG: *International Maritime Code for Dangerous Goods*

LC50: *Lethal concentration, Median*

LD50: *Lethal dose, Median*

NFPA: *National Fire Protection Association (USA)*

NIOSH: *National Institute for Occupational Safety*

OSHA: *Occupational Safety & Health*

PBT: *Persistent, Bioaccumulative and Toxic*

PEL: *Permissible Exposure Limit*

PPE *Personal Protective Equipment*

REL: *Recommended Exposure Limit*

Repr.: *Reproductive toxicity*

Skin Irrit: *Skin corrosion/irritation*

STOT RE: *Specific Target Organ Toxicity (Repeated Exposure)*

STOT SE: *Specific Target Organ Toxicity (Single Exposure)*





TLV: *Threshold Limit Value*

vPvB: *very Persistent and very Bioaccumulative*

16.5. *End of SDS*



APPENDIX Source: <https://www.babelplex.com/a-guide-to-ghs-pictograms/>

<p><i>Toxic</i> <i>Acute toxicity (oral, dermal, inhalation) (cat. 1, 2, 3)</i></p> 	<p><i>Health Hazard</i> <i>Respiratory sensitization (cat. 1)</i> <i>Germ cell mutagenicity (cat. 1A, 1B, 2)</i> <i>Carcinogenicity (cat. 1A, 1B, 2)</i> <i>Reproductive toxicity (cat. 1A, 1B, 2)</i> <i>Specific target organ toxicity following single exposure (cat. 1, 2)</i> <i>Specific target organ toxicity following repeated exposure (cat. 1A, 1B, 2)</i> <i>Aspiration hazard (cat. 1, 2)</i></p> 	<p><i>Irritant</i></p> <p><i>Acute toxicity (oral, dermal, inhalation) (cat. 4)</i> <i>Skin irritation (cat. 2, 3)</i> <i>Eye irritation (cat. 2A)</i> <i>Skin sensitization (cat. 1)</i> <i>Specific target organ toxicity following single exposure (cat. 3)</i> <i>Respiratory tract irritation</i> <i>Narcotic effects</i></p> 
<p><i>Corrosive</i> <i>Corrosive to metals (cat. 1)</i> <i>Skin corrosion (cat. 1A, 1B, 1C)</i> <i>Serious eye damage (cat. 1)</i></p> 	<p><i>Environmentally Damaging</i> <i>Acute hazards to the aquatic environment (cat.1)</i> <i>Chronic hazards to the aquatic environment (cat. 1, 2)</i></p> 