


 Safety Data Sheet: **7aminoActinomycin D** from **FERMENTEK**
1. Identification of the substance/mixture and of the Company
1.1. Product identifiers

Product name	7aminoActinomycin D	Formula	$C_{62}H_{86}N_{12}O_{16}$
Product Code	AM	RTECS	AU1579000
CAS #	7240-37-1	Molecular weight	1270
EC Number #	635-285-6	Substance? Mixture?	Substance
Synonyms	<ul style="list-style-type: none"> • 2,7-Diamino-N1,N9-bis(6,13-diisopropyl-2,5,9-trimethyl-1,4,7,11,14-pentaoxohexadecahydro-1H-pyrrolo[2,1-i][1]oxa[4,7,10,13]tetraazacyclohexadecin-10-yl)-4,6-dimethyl-3-oxo-3H-phenoxazine-1,9-dicarboxamide • 7-AAD, • 7-Amino-AMD • 7-Aminoactinomycin C₁ • 7-Aminodactinomycin 		
Source	Synthetic	Date of version	16 March, 2021

1.2. Intended uses of the substance or mixture and uses advised against

1.2.1. Intended use:	1.2.2. Uses advised against:
<ul style="list-style-type: none"> • Research and development. • Laboratory reagent. • To be used by professionals only 	<ul style="list-style-type: none"> • Not for drug, • Not to be used in humans or animals. • Not food additive

1.3. Details of the supplier of the SDS
1.4. Emergency Telephone number

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	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		

1.5. Reach:

See section 15

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)

Acute toxicity, Oral	(Category 2)	H300 Fatal if swallowed
----------------------	--------------	-------------------------



2.2.GHS Label elements, including precautionary statements

2.2.1. **Pictogram:** {  }

2.2.2. **Signal word** {*Danger*}

2.2.3. **GHS Hazard Statements**

H300	Fatal if swallowed
-------------	--------------------

2.2.4. **GHS Precautionary Statements**

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P264	Wash {hands} thoroughly after handling.
P270	Do not eat, drink or smoke when using this product
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

2.2.5. **GHS Response Phrases**

P301+P310	If swallowed: Immediately call a poison center/doctor
------------------	--

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>7aminoActinomycin D</i>
Concentration	<i>100%</i>
CAS Registry#:	<i>7240-37-1</i>
EC#:	<i>635-285-6</i>
Molecular Formula:	<i>C62H86N12O16</i>
Molecular Weight:	<i>1270</i>
Classification	<i>Acute toxicity, Oral (Category 2), H300 Acute Aquatic, (Category 1), H400</i>
Mixture?	<i>Substance.</i>



4. First Aid Measures

4.1. Description of First Aid Measures

4.1.1. General advice:	Consult a physician. Show this safety data sheet to the doctor in attendance.
4.1.2. Inhalation:	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
4.1.3. Ingestion:	If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible.
4.1.4. Skin Contact:	If on skin: Take off immediately all contaminated clothing. Rinse skin with water/ shower.
4.1.5. Eye contact:	Rinse eyes with plenty of water. Remove contact lenses if any.

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

	No information available
--	--------------------------

4.3. Indication of any immediate medical attention and special treatment needed

	No information available
--	--------------------------

5. Fire-fighting measures

5.1. Extinguishing media

5.1.1. Suitable extinguishing media	Use water foam Carbon dioxide (CO ₂) Dry powder
5.1.2. Unsuitable extinguishing media	None known

5.2. Other information

5.2.1. Hazardous combustion products	Carbon oxides; Nitrogen oxides
5.2.2. More information	Combustible.
5.2.3. Advice for firefighters	Wear self-contained breathing apparatus for fire fighting if necessary. Wear protective suit.

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	Purple powder
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

The toxicological effects of this product have not been thoroughly studied.

11.1.1. Acute Toxicity	
Oral	LD50 Oral – – 5.1 mg/kg;
Skin corrosion/irritation:	No data available
Serious eye damage/eye irritation:	No data available
Respiratory or skin sensitization/corrosion:	No data available
11.1.2. CMR hazards  (Carcinogenic, mutagenic, reprotoxic)	
In vitro data	Causes mutations in mouse lymphocytes in vitro
Germ cell mutagenicity:	Causes DNA damage in vitro
Carcinogenicity:	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.
Reproductive toxicity / Teratogenicity:	No data available
STOT-SE – single exposure (GHS):	No data available
STOT-SE – repeated exposure (GHS):	No data available
Aspiration hazard:	No data available
11.1.3. Potential Health Effects and Routes of Exposure	
If Inhaled	No data available
If swallowed	No data available
If on skin	No data available
If in Eyes	No data available

11.2. Additional information

	Nausea, Headache, Vomiting
RTECS number	AU1579000 

12. Ecological Information

Persistence and degradability	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.
Other adverse effects	No further relevant information available.

13. Disposal Considerations

13.1. Waste treatment methods

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

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	UN 2811 TOXIC SOLID, ORGANIC, N.O.S. (7aminoActinomycin D), 6.1 – toxic substances	UN 2811 TOXIC SOLID, ORGANIC, N.O.S. (7aminoActinomycin D), 6.1 – toxic substances	UN 2811 TOXIC SOLID, ORGANIC, N.O.S. (7aminoActinomycin D), 6.1 – toxic substances	UN 2811 TOXIC SOLID, ORGANIC, N.O.S. (7aminoActinomycin D), 6.1 – toxic substances
Transport Hazard Class & Packing Group	Pack.Grp II (7aminoActinomycin D)	Pack.Grp II (7aminoActinomycin D)	Pack.Grp II (7aminoActinomycin D)	Pack.Grp II (7aminoActinomycin D)
			Not marine pollutant	

14.2. Additional information

Excepted quantities (EQ)	
De Minimis exemption	When sold in quantities of less than or equal to 1 mL, or 1 g, with an Excepted Quantity Code of E1, E2, E4, or E5, this item meets the De Minimis Quantities exemption, per IATA 2.6.10. Therefore, packaging does not have to be labeled as Dangerous Goods/Excepted Quantity

15. Regulatory information

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

USA EPA / TSCA	This product is not listed on the USA EPA TSCA (it is for research)
California proposit. 65	This product is not listed on California proposit. 65 as on Jan 3, 2020
EU ECHA Status	This product is registered with the EU ECHA, Number 635-285-6 REACH: Not registered ANNEX III: Not Listed
Canada	This product is not listed on the Canadian DSL/NDSL

16. Other information

16.1. Date of revision:

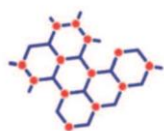
- Tuesday, 16 March, 2021 15:03

16.2. Department issuing this SDS

- Quality systems and regulatory affairs

16.3. 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.

16.4. *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.

16.5. *Comments:*

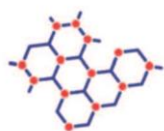
- Depreciated CAS Registry numbers: **none known**

16.6. *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
- REL:* Recommended Exposure Limit
- Repr.:* Reproductive toxicity
- Skin Irrit:* Skin corrosion/irritation
- STOT RE:* Specific target organ toxicity (repeated exposure)
- TLV:* Threshold Limit Value
- vPvB:* very Persistent and very Bioaccumulative

16.7. *End of SDS*





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

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