SAFETY DATA SHEET

Version: v1 Revision Date: 2024-01-21 Print Date: 2024-01-26

SECTION 1:Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name	: Spermine
Product Number	: S113079
Brand	: aladdin
CAS-No.	: 71-44-3

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses	: Laboratory chemicals,Manufacture of substances.
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1.3 Company

Company	: ALADDIN SCIENTIFIC CORPORATION
Address	: 14078 Meridian Parkway,
Riverside, CA. 92518	
Telephone	: +1 (833) 552-7181
Fax	: no data available

1.4 Emergency telephone number

CHEMTREC®, Inside the USA	: 1-800-424-9300
CHEMTREC®, Outside the USA	:

SECTION 2: Hazards identification

2.1	Classification of the substance or mixture	
2.2	GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) GHS Label elements, including precautionary statements	
	Pictogram	
	Signal word	Danger
	Hazard statement(s)	

Hazard statement(s)	
H314	Causes severe skin burns and eye damage
Precautionary statement(s)	
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P310	Immediately call a POISON CENTER or doctor/physician.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact
	lenses if present and easy to do - continue rinsing.

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2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms	: N,N'-Bis(3-aminopropyl)-1,4-diaminobutane; Gerontine; Musculamine;
Neuridine	
Formula	: C10H26N4
Molecular weight	: 202.34
CAS No.	: 71-44-3
EC-NO.	: 200-754-2

Component Spermine

no data available

Classification

for cell culture,≥98.0% (GC)

Concentration

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Consult a physician.Show this safety data sheet to the doctor in attendance.Move out of dangerous area. If inhaled

Transfer to fresh air If breathing stops, perform artificial respiration If symptoms appear, seek medical treatment. In case of skin contact

Immediately remove contaminated clothing and shoes. Rinse with soap and plenty of water. Immediately transport the patient to the hospital. Consult a doctor.

In case of eye contact

Thoroughly rinse with plenty of water for at least 15 minutes and consult a doctor.

If swallowed

Rinse your mouth with water and then drink a large amount of water If symptoms appear, seek medical treatment

4.2 Most important symptoms and effects, both acute and delayed

This substance causes significant damage to mucosal tissue, upper respiratory tract, eyes, and skin.

4.3 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

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> Suitable extinguishing media Water,Foam,Carbon dioxide (CO2),Dry powder Unsuitable extinguishing media no data available

5.2 Special hazards arising from the substance or mixture

no data available

5.3 Advice for firefighters

no data available

5.4 Further information

no data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Collect and handle leaks without generating dust. Sweep and shovel away. Store in a suitable closed container for disposal.

6.2 Environmental precautions

Do not allow the product to enter the sewer.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

No data available

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool place. Keep the container tightly closed and store in a dry and ventilated place.Suggested storage temperature:2-8°C

7.3 Specific end use(s)

no data available

SECTION 8: Exposure controls/personal protection

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8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

no data available

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 selected protective gloves have to satisfy the specifications of Regulation (EU)2016/425 and the standard EN 374 derived from it.

Body Protection

no data available

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).

Control of environmental exposure

no data available

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

 a) Appearance b) Odour c) Odour Threshold d) pH e) Melting point/freezing point f) Initial boiling point and boiling range g) Flash point h) Evaporation rate i) Flammability (solid, gas) 	no data available no data available no data available 26-30 °C 150 °C 110 °C no data available no data available
j) Upper/lower flammability or explosive limits k) Vapour pressure l) Vapour density m) Relative density n) Water solubility	no data available no data available no data available no data available no data available

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o) Partition coefficient: n-octanol/water no data available

no data available

no data available

- p) Auto-ignition temperature no data available
- q) Decomposition temperature no data available
- r) Viscosity
- s) Explosive properties N no data available
- t) Oxidizing properties N

9.2 Other safety information

no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

no data available

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

acid,acid chloride,Anhydride,oxidant

10.6 Hazardous decomposition products

no data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity
no data available
Skin corrosion/irritation
no data available
Serious eye damage/eye irritation
Causes eye burns.
Respiratory or skin sensitisation
no data available
Germ cell mutagenicity
Germ cell mutagenicity - in vitro experiments - mouse lymphocyte cell genetic analysis - cell mutagenicity - in vitro

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experiments - hamster kidney DNA inhibition Carcinogenicity There are no components in this product at levels greater than or equal to 0.1% that have been identified by IARC as possible or definite human carcinogens. Reproductive toxicity no data available Specific target organ toxicity - single exposure no data available Specific target organ toxicity - repeated exposure no data available Aspiration hazard no data available Additional Information no data available

SECTION 12: Ecological information

12.1 Toxicity

no data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

No data available

SECTION 13:

13.1 Disposal considerations

Product no data available Contaminated packaging Dispose of as unused product.

SECTION 14: Transport information

DOT (US)		
UN number: 3259	Packing group: II	Class: 8
Proper shipping name: POLYAMINES,	Reportable Quantity(RQ): no data	Poison Inhalation Hazard: No
SOLID, CORROSIVE, N.O.S. (4,9-	available	
Diazadodecamethylenediamine)		
Environmental Hazards: No		
IMDG		
UN number: 3259	Packing group: II	EMS-No: No
Proper shipping name: POLYAMINES, S	OLID, CORROSIVE, N.O.S. (4,9-Diazadod	lecamethylenediamine)
ΙΑΤΑ		
UN number: 3259	Packing group: II	Class: 8
Proper shipping name: POLYAMINES, S	OLID, CORROSIVE, N.O.S. (4,9-Diazadod	lecamethylenediamine)

SECTION 15: Regulatory information

no data available

SECTION 16: Other information

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