

SAFETY DATA SHEET

Version: v1

Revision Date: 2025-09-12

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

1.1 Product identifiers

Product name : 1,5-Dicyanopentane
Product Number : D121816
Brand : aladdin
CAS-No. : 646-20-8

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

Identified uses : Laboratory chemicals, Manufacture of substances.

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

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Acute toxicity, Oral (Category 3), H301

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H301 Toxic if swallowed
H312 Harmful in contact with skin
H332 Harmful if inhaled

Precautionary statement(s)

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P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash hands [and ...] thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P321	Specific treatment (see ... on this label).
P330	Rinse mouth.
P302+P352	IF ON SKIN: wash with plenty of water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P362+P364	Take off contaminated clothing and wash it before reuse.
P405	Store locked up.
P501	Dispose of contents/container to an approved waste disposal plant.
P301+P316	IF SWALLOWED: Get emergency medical help immediately.
P317	Get emergency medical help.

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

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms	: Heptanedinitrile;Pentamethylene Dicyanide;Pimelonitrile
Formula	: C7H10N2
Molecular weight	: 122.17
CAS No.	: 646-20-8
EC-NO.	: 211-469-8

Component	Classification	Concentration
1,5-Dicyanopentane	no data available	≥98%

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

If breathed in, move person into fresh air.If not breathing, give artificial respiration.Consult a physician

In case of skin contact

Wash off with soap and plenty of water.Take victim immediately to hospital.Consult a physician

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician

4.2 Most important symptoms and effects, both acute and delayed

no data available

4.3 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Hazardous decomposition products formed under fire conditions.- Carbon oxides, nitrogen oxides (NO_x)

Unsuitable extinguishing media

no data available

5.2 Special hazards arising from the substance or mixture

Wear self contained breathing apparatus for fire fighting if necessary

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

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

6.2 Environmental precautions

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

no data available

SECTION 7: Handling and storage

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7.1 Precautions for safe handling

Avoid contact with skin and eyes.Avoid inhalation of vapour or mist.Normal measures for preventive fire protection

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes and clothing.Wash hands before breaks and immediately after handling the product

Personal protective equipment

Eye/face protection

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)

Skin protection

Handle with gloves.Gloves must be inspected prior to use.Use proper glove removal technique (without touching gloves 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.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) 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	form: Transparent liquid color: Pale yellow
b) Odour	no data available
c) Odour Threshold	no data available

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d) pH	no data available
e) Melting point/freezing point	175 - 176 °C (347 - 349 °F) at 19 hPa (14 mmHg) - lit
f) Initial boiling point and boiling range	175°C/14mmHg
g) Flash point	112 °C (234 °F) - closed cup
h) Evaporation rate	no data available
i) Flammability (solid, gas)	no data available
j) Upper/lower flammability or explosive limits	no data available
k) Vapour pressure	no data available
l) Vapour density	no data available
m) Relative density	0.951 g/cm ³ at 25 °C (77 °F)
n) Water solubility	Insoluble in water; miscible with ether, chloroform, and ethanol
o) Partition coefficient: n-octanol/water	no data available
p) Auto-ignition temperature	no data available
q) Decomposition temperature	no data available
r) Viscosity	no data available
s) Explosive properties N	no data available
t) Oxidizing properties N	no data available

9.2 Other safety information

no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage conditions.

10.2 Chemical stability

no data available

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

Strong acids, Strong bases, Strong oxidizing agents, Strong reducing agents

10.5 Incompatible materials

Hazardous decomposition products formed under fire conditions.- Carbon oxides, nitrogen oxides (NO_x) Other decomposition products - no data available

10.6 Hazardous decomposition products

no data available

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

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.

Carcinogenicity

no data available

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

May be harmful if inhaled. May cause respiratory tract irritation

Aspiration hazard

no data available

Additional Information

SECTION 12: Ecological information

12.1 Toxicity

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

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12.6 Other adverse effects

no data available

SECTION 13:

13.1 Disposal considerations

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber

Contaminated packaging

Dispose of as unused product

SECTION 14: Transport information

DOT (US)

UN number: 3276

Packing group: III

Class: 6.1

Proper shipping name: NITRILES,
LIQUID, TOXIC, N.O.S. (pimelic acid
dinitrile)

Reportable Quantity(RQ): no data
available

Poison Inhalation Hazard: no data
available

Environmental Hazards: no

IMDG

UN number: 3276

Packing group: III

EMS-No: no data available

Proper shipping name: NITRILES, LIQUID, TOXIC, N.O.S. (pimelic acid dinitrile)

IATA

UN number: 3276

Packing group: III

Class: 6.1

Proper shipping name: NITRILES, LIQUID, TOXIC, N.O.S. (pimelic acid dinitrile)

SECTION 15: Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

SECTION 16: Other information

Prepared By

Regulatory Affairs

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SDS sections updated v1

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