

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

Catalogue Number	CS-O-01385
Product Name	Diaminomaleonitrile
CAS No.	1187-42-4
Category	API
Synonyms	(2Z)-2,3-Diamino-2-butenedinitrile (ACI); 2-Butenedinitrile, 2,3-diamino-, (Z)- (ZCI); Maleonitrile, diamino- (6CI, 7CI, 8CI); 2,3-Diaminomaleonitrile; Diaminomaleonitrile; Hydrogen cyanide tetramer; DAMN
Brand	Clearsynth Labs Ltd.
Identified uses	Laboratory Chemicals
Uses advised against	Not available
Company	Clearsynth Labs Ltd. Mumbai, India
Emergency Phone #	+91-22-245045900
REACH No.	Not available

SECTION 2: Hazards identification

Disclaimer: This is sample MSDS. Please email sales@clearsynth.com for more details.

2.1 Classification of the substance or mixture-Regulation (EC) No 1272/2008:

Acute toxicity (Category 4)

2.2 Label Elements

Signal Word: Warning



Hazard Statement(s)

Code	Statement
H301	Not available
H302	Harmful if swallowed.

H312	Harmful in contact with skin.
H332	Harmful if inhaled.

Precautionary Statement(s)

Code	Statement
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P270	Not available
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P316	Not available
P301+P317	Not available
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P317	Not available
P321	Specific treatment (see ... on this label).
P330	Not available
P362+P364	Take off contaminated clothing and wash it before reuse.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulation

SECTION 3: Composition / information on ingredients

3.1 Substance

Component : Diaminomaleonitrile

CAS Number : 1187-42-4

Molecular Formula : C4H4N4

Molecular Weight : 108.10

Parent Chemical : Amine

Synonyms : (2Z)-2,3-Diamino-2-butenedinitrile (ACI); 2-Butenedinitrile, 2,3-diamino-, (Z)- (ZCI); Maleonitrile, diamino- (6CI, 7CI, 8CI); 2,3-Diaminomaleonitrile; Diaminomaleonitrile; Hydrogen cyanide tetramer; DAMN

Concentration : Not available

SECTION 4: First aid measures

SECTION 4: First-aid measures

4.1 Description of first aid measures

- General advice: Remove contaminated clothing and shoes. Seek medical attention if symptoms persist or are severe.
- Inhalation: Move person to fresh air. Keep at rest. If breathing is difficult, seek medical attention.
- Skin contact: Wash with plenty of soap and water. Get medical attention if irritation develops or persists.
- Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention.
- Ingestion: Rinse mouth. Do NOT induce vomiting unless directed by medical personnel. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

- Not available.

4.3 Indication of any immediate medical attention and special treatment needed

- Treat symptomatically.
- No data available.

SECTION 5: Firefighting measures

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

- Suitable extinguishing media: Use extinguishing measures appropriate to surrounding fire.
- Unsuitable extinguishing media: Not available.

5.2 Special hazards arising from the substance or mixture

- Hazardous combustion products: Not available. Thermal decomposition may produce irritating and/or toxic fumes.

5.3 Advice for firefighters

- Wear self-contained breathing apparatus (SCBA) and full protective gear.
- Cool containers with water spray if exposed to fire.
- Prevent fire-fighting water from entering drains or waterways.

SECTION 6: Accidental release measures

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Avoid breathing dust/vapors. Avoid contact with skin and eyes.
- Use appropriate personal protective equipment (see Section 8).
- Ensure adequate ventilation.

6.2 Environmental precautions

- Avoid release to the environment. Prevent entry into drains, sewers, or waterways.

6.3 Methods and material for containment and cleaning up

- Avoid generating dust.
- Collect spilled material using suitable means (e.g., sweep carefully or use HEPA-filtered vacuum).
- Place in a suitable, labeled container for disposal.
- Clean contaminated area with water and detergent as appropriate.

6.4 Reference to other sections

- See Section 8 for personal protective equipment and Section 13 for disposal considerations.

SECTION-7: Handling and storage

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Handle in accordance with good industrial hygiene and safety practice.
- Avoid breathing dust. Avoid contact with skin, eyes, and clothing.
- Use with adequate ventilation.
- Wash hands thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

- Store in a cool, dry, well-ventilated place.
- Keep container tightly closed.
- Protect from moisture.
- Incompatible materials: Not available.

7.3 Specific end use(s)

- API / laboratory and industrial use. No further information available.

SECTION 8: Exposure controls / personal protection

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

- Occupational exposure limits: Not available.
- Biological limit values: Not available.

8.2 Exposure controls

- Engineering controls: Use local exhaust ventilation or general ventilation to minimize exposure.
- Personal protective equipment (PPE):
- Eye/face protection: Safety glasses with side shields or chemical splash goggles.
- Skin protection: Protective gloves (material not available). Wear protective clothing as appropriate.
- Respiratory protection: If ventilation is inadequate or dust is generated, use a suitable particulate respirator in accordance with applicable standards.
- Hygiene measures: Do not eat, drink, or smoke when using this product. Wash hands after handling. Remove contaminated clothing and wash before reuse.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Test	Result
Appearance	No data available
IR spectrum	No data available

Test	Result
pH	No data available
Solubility	No data available

Property	Value
a) Physical State	No data available
b) Color	No data available
c) Odor	No data available
d) pH	No data available
e) Vapour Pressure	No data available
f) Viscosity	No data available
g) Initial Boiling Point and boiling range	No data available
h) Melting Point / Freezing Point	No data available
i) Auto Ignition Temperature	No data available
j) Flash Point	No data available
k) Explosion Limit, Lower	No data available
l) Explosion Limit, Upper	No data available
m) Decomposition Temperature	No data available
n) Loss on Drying	No data available
o) Relative Density	No data available
p) Solubility (in DMSO)	No data available
q) Oxidizing Properties	No data available

SECTION 10: Stability and reactivity

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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

- Heat, moisture, and incompatible materials (specifics not available).

10.5 Incompatible materials

- Not available.

10.6 Hazardous decomposition products

- Not available. Thermal decomposition may produce irritating and/or toxic fumes.

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: No data available.

- Respiratory or skin sensitization: No data available.

- Germ cell mutagenicity: No data available.

- Carcinogenicity: No data available.

- Reproductive toxicity: No data available.

- STOT-single exposure: No data available.

- STOT-repeated exposure: No data available.

- Aspiration hazard: No data available.

Likely routes of exposure

- No data available.

Symptoms related to the physical, chemical and toxicological characteristics

- Not available.

SECTION 12: Ecological information

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12.1 Toxicity

- Not available.

12.2 Persistence and degradability

- Not available.

12.3 Bioaccumulative potential

- Not available.

12.4 Mobility in soil

- Not available.

12.5 Results of PBT and vPvB assessment

- Not available.

12.6 Endocrine disrupting properties

- Not available.

12.7 Other adverse effects

- Not available.

SECTION 13: Disposal considerations

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Dispose of contents/container in accordance with local/regional/national/international regulations.
- Do not discharge to drains.
- Contaminated packaging: Dispose of as unused product.
- Waste code: Not available.

SECTION 14: Transport information

SECTION 14: Transport information

- UN number: Not available.

- UN proper shipping name: Not available.

- Transport hazard class(es): Not available.

- Packing group: Not available.

- Environmental hazards: Not available.

- Special precautions for user: Not available.

- Transport in bulk according to IMO instruments: Not available.

SECTION 15: Regulatory information

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15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- Not available.

15.2 Chemical safety assessment

- No data available.

SECTION 16: Other information

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- Synonyms: (2Z)-2,3-Diamino-2-butenedinitrile; Maleonitrile, diamino-; Hydrogen cyanide tetramer; DAMN

- Supplier: Clearsynth Labs Ltd., Mumbai, India

- Emergency phone: +91-22-245045900

Disclaimer: The information provided is based on available product information and is intended for guidance in safe handling, use, processing, storage, transportation, disposal, and release. It does not constitute a warranty of any kind. Data not available indicates that no relevant information was found or provided.

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