

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

Catalogue Number	CS-C-01519
Product Name	Acetylene-d2 gas
CAS No.	1070-74-2
Category	Stable Isotope Reagent
Synonyms	Not available
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:

Not available

2.2 Label Elements

Signal Word: Warning



Hazard Statement(s)

Code	Statement
H220	Not available
H280	Not available

Precautionary Statement(s)

Code	Statement
P203	Not available
P210	Not available
P222	Not available
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P377	Not available
P381	Not available
P403	Not available
P410+P403	Not available

SECTION 3: Composition / information on ingredients

3.1 Substance

Component : Acetylene-d2 gas
 CAS Number : 1070-74-2
 Molecular Formula : C2D2
 Molecular Weight : 28.03
 Parent Chemical : Acetylene
 Synonyms : Not available
 Concentration : Not available

SECTION 4: First aid measures

SECTION 4: First-aid measures

4.1 Description of first aid measures

- General advice: Remove victim from exposure. Ensure own safety. Show this SDS to medical personnel.
- Inhalation: Move to fresh air. Keep at rest in a position comfortable for breathing. If breathing is difficult, trained personnel should provide oxygen. If not breathing, provide artificial respiration by trained personnel. Get medical attention.
- Skin contact: Not expected to cause skin effects from the gas itself. If contact with cold gas/liquid causes frostbite: gently warm affected area with lukewarm water; do not rub. Get medical attention.
- Eye contact: If exposure to cold gas/liquid causes eye injury/frostbite: rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Get immediate medical attention.
- Ingestion: Not a likely route of exposure for a gas. If swallowed (unlikely): rinse mouth. Get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

- Asphyxiation hazard in confined spaces due to oxygen displacement.
- Dizziness, headache, nausea, unconsciousness may occur from oxygen deficiency.
- Frostbite/cryogenic burns possible if released as cold gas or from rapidly expanding gas.

4.3 Indication of any immediate medical attention and special treatment needed

- Treat symptomatically.
- Provide supportive care; monitor oxygenation.
- For frostbite: do not rub; protect affected area; seek medical attention.

SECTION 5: Firefighting measures

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

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

5.2 Special hazards arising from the substance or mixture

- Extremely flammable gas.
- Gas may form explosive mixtures with air.
- Containers may rupture when heated.
- Vapors/gas may travel to ignition source and flash back.
- Hazardous combustion products: Not available.

5.3 Advice for firefighters

- Evacuate area. Fight fire from a safe distance.
- If safe to do so, stop gas flow; do not extinguish a leaking gas flame unless leak can be stopped.
- Cool containers with water spray from a protected position.
- Wear self-contained breathing apparatus (SCBA) and full protective gear.

SECTION 6: Accidental release measures

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6.1 Personal precautions, protective equipment and emergency procedures

- Evacuate unnecessary personnel.
- Eliminate all ignition sources. No smoking.
- Provide adequate ventilation.
- Wear appropriate PPE including eye protection and gloves; use SCBA/air-supplied respirator where oxygen deficiency may occur.

6.2 Environmental precautions

- Prevent release to confined spaces, sewers, basements, or work pits.
- Not available for specific aquatic toxicity data.

6.3 Methods and material for containment and cleaning up

- Stop leak if safe to do so.
- Ventilate area. Use explosion-proof equipment.
- For large releases: isolate area; allow gas to disperse in a safe, well-ventilated location.

6.4 Reference to other sections

- See Section 8 for exposure controls/personal protection.
- See Section 5 for fire-fighting measures.

SECTION-7: Handling and storage

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Handle as an extremely flammable compressed gas.
- Use only with adequate ventilation; use local exhaust where appropriate.
- Keep away from heat, sparks, open flames, hot surfaces, and other ignition sources.
- Ground/bond equipment as appropriate to prevent static discharge.
- Do not breathe gas. Avoid oxygen-deficient atmospheres.
- Use only compatible, rated gas-handling equipment.

7.2 Conditions for safe storage, including any incompatibilities

- Store cylinders secured upright in a cool, dry, well-ventilated area.
- Protect from sunlight and physical damage.
- Keep away from oxidizers and other incompatible materials.
- Keep cylinder valve closed when not in use; use valve protection cap where provided.
- Storage temperature: Not available.

7.3 Specific end use(s)

- Stable isotope reagent / laboratory and industrial use. Specific uses: Not 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 adequate general and local exhaust ventilation. Use explosion-proof ventilation/electrical equipment where required. Consider oxygen monitoring in confined spaces.
- Personal protective equipment (PPE):
 - Eye/face protection: Safety glasses with side shields or chemical goggles as appropriate.
 - Skin protection: Wear protective gloves suitable for gas cylinder handling; additional protection as needed.
 - Respiratory protection: If ventilation is inadequate or oxygen deficiency may occur, use SCBA or supplied-air respirator.
 - Thermal hazards: Wear appropriate protection if exposure to cold gas/rapid expansion is possible.
 - Hygiene measures: Wash hands after handling. Do not eat, drink, or smoke when using this product.

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

- Extremely flammable gas; may form explosive mixtures with air.

10.2 Chemical stability

- Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

- May react violently with oxidizing agents.
- Polymerization: Not available.

10.4 Conditions to avoid

- Heat, sparks, open flames, static discharge.
- Confined spaces and inadequate ventilation.
- Mechanical shock/damage to cylinder.

10.5 Incompatible materials

- Oxidizing agents. Other incompatibilities: Not available.

10.6 Hazardous decomposition products

- Not 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: 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

- 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

- Not available.

12.6 Endocrine disrupting properties

- Not available.

12.7 Other adverse effects

- No data available.

SECTION 13: Disposal considerations

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13.1 Waste treatment methods

- Dispose of contents/container in accordance with local/regional/national/international regulations.
- Do not discharge into confined spaces, sewers, or waterways.
- Cylinders: Return to supplier where possible. Do not puncture, cut, or weld cylinders.
- Residual gas: Vent to a safe, well-ventilated area away from ignition sources, in accordance with applicable regulations and site procedures.

SECTION 14: Transport information

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- 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: Transport cylinders secured upright. Keep away from heat and ignition sources. Ensure valve protection.
- 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

- Regulatory listings (e.g., GHS/CLP, TSCA, REACH, DSL, IECSC, etc.): Not available.

15.2 Chemical safety assessment

- Not available.

SECTION 16: Other information

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- Product name: Acetylene-d2 gas
- Catalog No.: CS-C-01519
- CAS No.: 1070-74-2
- Supplier: Clearsynth Labs Ltd., Mumbai, India
- Emergency phone: +91-22-245045900

Disclaimer

- The information provided is believed to be accurate based on available data, but no warranty is expressed or implied. Users must determine suitability for their particular application and comply with all applicable laws and regulations.

DISCLAIMER

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