

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

Catalogue Number	CS-MM-56662
Product Name	Dicyclohexylmethane-4,4-diisocyanate
CAS No.	5124-30-1
Category	Fine Chemicals
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:

Skin irritation (Category 2)

Serious eye damage/eye irritation (Category 2)

2.2 Label Elements

Signal Word: Warning



Hazard Statement(s)

Code	Statement
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.

H331	Not available
H334	Not available
H335	Not available
H330	Not available
H361	Not available
H370	Not available
H372	Not available
H411	Toxic to aquatic life with long lasting effects.
H314	Not available
H318	Causes serious eye damage.

Precautionary Statement(s)

Code	Statement
P233	Not available
P260	Not available
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P264+P265	Not available
P271	Use only outdoors or in a well-ventilated area.
P272	Not available
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	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.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present.
P316	Not available
P319	Get medical help if you feel unwell.
P321	Specific treatment (see ... on this label).
P332+P317	If skin irritation occurs: Get medical help.
P333+P317	Not available

P337+P317	If eye irritation persists: Get medical help.
P342+P316	Not available
P362+P364	Take off contaminated clothing and wash it before reuse.
P403	Not available
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulation
P320	Not available
P203	Not available
P270	Not available
P273	Not available
P308+P316	Not available
P318	Not available
P391	Not available
P301+P330+P331	Not available
P302+P361+P354	Not available
P305+P354+P338	Not available
P317	Not available
P363	Not available

SECTION 3: Composition / information on ingredients

3.1 Substance

Component : Dicyclohexylmethane-4,4-diisocyanate

CAS Number : 5124-30-1

Molecular Formula : C₁₂H₂₀N₂O₂

Molecular Weight : 262.35

Parent Chemical : Not available

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 contaminated clothing and shoes. Seek medical attention if symptoms occur or persist.

Inhalation: Move person to fresh air. Keep at rest. If breathing is difficult, seek medical attention.

Skin contact: Wash immediately with plenty of soap and water. Seek medical attention if irritation or sensitization symptoms occur.

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. 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. Not available.

SECTION 5: Firefighting measures

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media: Use extinguishing measures appropriate to local circumstances and the surrounding environment (e.g., dry chemical, foam, carbon dioxide, water spray).

Unsuitable extinguishing media: Not available.

5.2 Special hazards arising from the substance or mixture

May decompose under fire conditions to release hazardous fumes/gases. Not available.

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 vapors/mists. Avoid contact with skin and eyes. Use appropriate personal protective equipment. Ensure adequate ventilation.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Avoid release to the environment. Prevent entry into drains, sewers, or waterways.

6.3 Methods and material for containment and cleaning up

Contain spill. Absorb with inert absorbent material. Collect in suitable, closed containers for disposal. Clean contaminated area. Dispose of waste in accordance with local regulations.

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

Use only with adequate ventilation. Avoid breathing vapors/mists. Avoid contact with skin, eyes, and clothing. Keep container tightly closed when not in use. Do not eat, drink, or smoke when using this product. Wash 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. Store away from incompatible materials.

Incompatible materials: Not available.

7.3 Specific end use(s)

Fine chemical. 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: Provide adequate ventilation, including local exhaust as appropriate.

Personal protective equipment (PPE):

- Eye/face protection: Safety glasses with side shields or chemical splash goggles.
- Skin protection: Protective gloves and protective clothing. Select glove material based on permeation and degradation data (not available).
- Respiratory protection: Use appropriate respiratory protection if ventilation is inadequate or exposure is likely. Selection should be based on workplace risk assessment.

Hygiene measures: 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
pH	No data available
Solubility	No data available

Property	Value
a) Physical State	No data available

Property	Value
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

Not available.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Not available.

10.4 Conditions to avoid

Heat, moisture, and incompatible materials. Not available.

10.5 Incompatible materials

Not available.

10.6 Hazardous decomposition products

Not available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

- Acute toxicity: LC50: 0.307 mg/L over 4 hours (Inhalation, Rat) (T84) For more Human Toxicity Excerpts (Complete) data for METHYLENE BIS(4-CYCLOHEXYLISOCYANATE) (6 total), please visit the HSDB record page.
- Skin corrosion/irritation: No data available.
- Serious eye damage/eye irritation: No data available.
- Respiratory or skin sensitization: irritation eyes, skin, respiratory system; skin, resp sensitization; chest tightness, dyspnea (breathing difficulty), cough, dry throat, wheezing, pulmonary edema; skin blisters /SIGNS AND SYMPTOMS/ Exposure of humans to methylene bis(4-cyclohexylisocyanate) has resulted in skin sensitization but only rarely in pulmonary sensitization.
- Germ cell mutagenicity: No data available.
- Carcinogenicity: No data available.
- Reproductive toxicity: No data available.
- STOT-single exposure: No data available.
- STOT-repeated exposure: Exposure to high levels of cyanide for a short time harms the brain and heart and can even cause coma, seizures, apnea, cardiac arrest and death. Chronic inhalation of cyanide causes breathing difficulties, chest pain, vomiting, blood changes, headaches, and enlargement of the thyroid gland. Skin contact with cyanide salts can irritate and produce sores. (L96, L97)
- Aspiration hazard: No data available.

Likely routes of exposure

- Exposure to high levels of cyanide for a short time harms the brain and heart and can even cause coma, seizures, apnea, cardiac arrest and death. Chronic inhalation of cyanide causes breathing difficulties, chest pain, vomiting, blood changes, headaches, and enlargement of the thyroid gland. Skin contact with cyanide salts can irritate and produce sores. (L96, L97)

Symptoms related to the physical, chemical and toxicological characteristics

- Cyanide is an inhibitor of cytochrome c oxidase in the fourth complex of the electron transport chain (found in the membrane of the mitochondria of eukaryotic cells). It complexes with the ferric iron atom in this enzyme. The binding of cyanide to this cytochrome prevents transport of electrons from cytochrome c oxidase to oxygen. As a result, the electron transport chain is disrupted and the cell can no longer aerobically produce ATP for energy. Tissues that mainly depend on aerobic respiration, such as the central nervous system and the heart, are particularly affected. Cyanide is also known produce some of its toxic effects by binding to catalase, glutathione peroxidase, methemoglobin, hydroxocobalamin, phosphatase, tyrosinase, ascorbic acid oxidase, xanthine oxidase, succinic dehydrogenase, and Cu/Zn superoxide dismutase. Cyanide binds to the ferric ion of methemoglobin to form inactive cyanmethemoglobin. (L97)

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 or the environment.

Contaminated packaging: Dispose of as unused product or according to local regulations.

Waste codes: Not available.

SECTION 14: Transport information

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14.1 UN number

Not available.

14.2 UN proper shipping name

Not available.

14.3 Transport hazard class(es)

Not available.

14.4 Packing group

Not available.

14.5 Environmental hazards

Not available.

14.6 Special precautions for user

Not available.

14.7 Maritime 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

Not available.

SECTION 16: Other information

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Catalog No.: CS-MM-56662

CAS No.: 5124-30-1

Supplier: Clearsynth Labs Ltd., Mumbai, India

Emergency phone: +91-22-245045900

Revision date: Not available

Disclaimer: The information provided is based on data available at the time of preparation and is intended for guidance in safe handling, use, processing, storage, transportation, disposal, and release. It does not constitute a warranty of any kind. Not available.

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