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

Catalogue Number	CS-T-20140
Product Name	Dimethyl Disulfide
CAS No.	624-92-0
Category	Pesticide Standards
Synonyms	1,2-dimethyldisulfane
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)
Acute toxicity (Category 4)

2.2 Label Elements

Signal Word: Warning



Hazard Statement(s)

Code	Statement
H225	Not available
H301	Not available

H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Not available
H336	Not available
H370	Not available
H400	Not available
H410	Not available
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H330	Not available
H335	Not available
H411	Toxic to aquatic life with long lasting effects.
H401	Not available
H320	Not available
H361	Not available
H372	Not available
H373	Not available

Precautionary Statement(s)

Code	Statement
P210	Not available
P233	Not available
P240	Not available
P241	Not available
P242	Not available
P243	Not available
P260	Not available
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.

P264+P265	Not available
P270	Not available
P271	Use only outdoors or in a well-ventilated area.
P272	Not available
P273	Not available
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P316	Not available
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P303+P361+P353	Not available
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 presen
P308+P316	Not available
P316	Not available
P319	Get medical help if you feel unwell.
P321	Specific treatment (see … on this label).
P330	Not available
P333+P317	Not available
P337+P317	If eye irritation persists: Get medical help.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	Not available
P391	Not available
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Not available
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulatio
P284	Not available
P301+P317	Not available
P317	Not available
P320	Not available
P332+P317	If skin irritation occurs: Get medical help.

P203	Not available
P318	Not available

SECTION 3: Composition / information on ingredients

3.1 Substance

Component : Dimethyl Disulfide
CAS Number : 624-92-0
Molecular Formula : C2H6S2
Molecular Weight : 94.19
Parent Chemical : -
Synonyms : 1,2-dimethyldisulfane
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. Wash contaminated clothing before reuse.
- Move affected person to fresh air. Keep at rest.
- Seek medical attention if symptoms persist or are severe.

Inhalation:
- Remove to fresh air.
- If breathing is difficult, get medical attention.

Skin contact:
- Wash immediately 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.
- Get medical attention if irritation persists.

Ingestion:
- Rinse mouth.
- Do NOT induce vomiting unless directed by medical personnel.
- Get 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:
- Dry chemical, carbon dioxide (CO2), alcohol-resistant foam.
- Water spray/fog may be used for cooling containers.

Unsuitable extinguishing media:
- Not available.

5.2 Special hazards arising from the substance or mixture
- Vapors may form explosive mixtures with air.
- Combustion may produce sulfur oxides and other irritating/toxic fumes.

5.3 Advice for firefighters
- Wear self-contained breathing apparatus (SCBA) and full protective gear.
- Cool containers exposed to fire with water spray.
- 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
- Evacuate unnecessary personnel.
- Ensure adequate ventilation.
- Avoid breathing vapors/mist.
- Wear appropriate personal protective equipment (see Section 8).
- Eliminate all ignition sources.

6.2 Environmental precautions
- Prevent further leakage or spillage if safe to do so.
- Avoid release to the environment. Prevent entry into drains, surface waters, and soil.

6.3 Methods and material for containment and cleaning up
- Contain spill with inert absorbent material (e.g., sand, earth, vermiculite).
- Collect into suitable, labeled containers for disposal.
- Wash spill area after material pickup, if appropriate.

6.4 Reference to other sections
- See Section 8 for personal protective equipment.
- See 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 contact with skin and eyes.
- Avoid breathing vapors/mist.
- Keep away from heat, sparks, open flames, and hot surfaces.
- Use non-sparking tools and explosion-proof equipment where required.
- Practice good industrial hygiene.

7.2 Conditions for safe storage, including any incompatibilities
- Store in a cool, dry, well-ventilated place.
- Keep container tightly closed.
- Store away from ignition sources.
- Keep away from incompatible materials.
- Incompatible materials: Not available.

7.3 Specific end use(s)
- Pesticide standard / laboratory use. No data available.

SECTION 8: Exposure controls / personal protection

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Occupational exposure limits:
- Not available.

8.2 Exposure controls
Engineering controls:
- Provide local exhaust ventilation or general dilution ventilation to maintain exposure below applicable limits.
- Use explosion-proof ventilation/electrical equipment where appropriate.

Personal protective equipment (PPE):
Eye/face protection:
- Safety glasses with side shields or chemical splash goggles.

Skin protection:
- Wear protective gloves resistant to chemicals.
- Wear appropriate protective clothing.

Respiratory protection:
- If ventilation is inadequate, use appropriate respiratory protection.
- Respirator selection should be based on workplace exposure assessment.

Hygiene measures:
- Wash hands thoroughly 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
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

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
- Heat, sparks, open flames, and other ignition sources.
- Incompatible conditions: Not available.

10.5 Incompatible materials
- Not available.

10.6 Hazardous decomposition products
- Sulfur oxides and other irritating/toxic fumes may be generated during combustion or thermal decomposition.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
- Acute toxicity: LC50 (rat) = 15.85 mg/m3/2hr /GENOTOXICITY/ In a cytogenetic assay, human lymphocytes were exposed to dimethyl disulfide (99.98% pure) at 3.7, 11.1, 33.3, 100 or 300 ug/mL with and without metabolic activation. The cytotoxic concentration was observed to be > or = 300 ug/mL. Positive and negative (dimethyl sulfoxide) controls were included. An appropriate response was observed in the positive control. A statistically significant induction of chromosome aberrations was observed only at the toxic concentration of 300 ug/mL. Dimethyl disulfide (dissolved in DMSO) was soluble in culture medium at a maximum concentration of 1 mg/mL.
- Skin corrosion/irritation: /LABORATORY ANIMALS: Acute Exposure/ Rabbits (four males, two females; strain not specified) were exposed to dimethyl disulfide undiluted via the dermal route at unspecified dose under semi-occlusive conditions for 4 hours. The Primary Skin Irritation score was 2.02 after 48 hours and an average score of 1.10 was observed after 14 days. Dimethyl disulfide was irritating to the skin of rabbits in this study.
- Serious eye damage/eye irritation: No data available.
- Respiratory or skin sensitization: Dimethyl disulfide is irritating to rabbit skin and eyes; it is not a skin sensitizer in guinea pigs.
- Germ cell mutagenicity: /GENOTOXICITY/ In a cytogenetic assay, human lymphocytes were exposed to dimethyl disulfide (99.98% pure) at 3.7, 11.1, 33.3, 100 or 300 ug/mL with and without metabolic activation. The cytotoxic concentration was observed to be > or = 300 ug/mL. Positive and negative (dimethyl sulfoxide) controls were included. An appropriate response was observed in the positive control. A statistically significant induction of chromosome aberrations was observed only at the toxic concentration of 300 ug/mL. Dimethyl disulfide (dissolved in DMSO) was soluble in culture medium at a maximum concentration of 1 mg/mL.
- 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
- EASILY ABSORBED! Redness. Further see Inhalation.

Symptoms related to the physical, chemical and toxicological characteristics
- Not available.

SECTION 12: Ecological information

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 Endocrine disrupting properties
- No data available.

12.7 Other adverse effects
- No data available.

SECTION 13: Disposal considerations

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Product:
- 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 in accordance with applicable regulations.

Waste code:
- Not available.

SECTION 14: Transport information

SECTION 14: Transport information

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

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Not available.

SECTION 16: Other information

SECTION 16: Other information

Product identification:
- Product name: Dimethyl Disulfide
- CAS No.: 624-92-0
- Synonym(s): 1,2-dimethyldisulfane
- Catalog No.: CS-T-20140
- Supplier: Clearsynth Labs Ltd., Mumbai, India
- Emergency phone: +91-22-245045900

Revision information:
- Not available.

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- The information provided is believed to be accurate based on available data; however, no warranty is expressed or implied. Users are responsible for determining suitability for their particular application and for compliance with applicable laws and regulations.

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