

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

<b>Catalogue Number</b>	CS-BX-00792
<b>Product Name</b>	Dimethylmercury
<b>CAS No.</b>	593-74-8
<b>Category</b>	Fine Chemicals
<b>Synonyms</b>	Not available
<b>Brand</b>	Clearsynth Labs Ltd.
<b>Identified uses</b>	Laboratory Chemicals
<b>Uses advised against</b>	Not available
<b>Company</b>	Clearsynth Labs Ltd. Mumbai, India
<b>Emergency Phone #</b>	+91-22-245045900
<b>REACH No.</b>	Not available

### SECTION 2: Hazards identification

**Disclaimer:** This is sample MSDS. Please email [sales@clearsynth.com](mailto: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
H300	Not available
H310	Not available
H330	Not available
H373	Not available

H400	Not available
H410	Not available
H225	Not available
H351	Not available
H360	Not available
H362	Not available
H370	Not available
H372	Not available

### Precautionary Statement(s)

Code	Statement
P260	Not available
P262	Not available
P264	Wash hands thoroughly after handling.
P270	Not available
P271	Use only outdoors or in a well-ventilated area.
P273	Not available
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	Not available
P301+P316	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.
P316	Not available
P319	Get medical help if you feel unwell.
P320	Not available
P321	Specific treatment (see ... on this label).
P330	Not available
P361+P364	Not available
P391	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
P203	Not available
P210	Not available
P233	Not available
P240	Not available
P241	Not available
P242	Not available
P243	Not available
P263	Not available
P303+P361+P353	Not available
P308+P316	Not available
P318	Not available
P370+P378	Not available
P403+P235	Not available

### SECTION 3: Composition / information on ingredients

#### 3.1 Substance

Component : Dimethylmercury

CAS Number : 593-74-8

Molecular Formula : C2H6Hg

Molecular Weight : 230.66

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:

- Extremely toxic substance. Seek immediate medical attention.
- Remove victim from exposure. Ensure responders use appropriate personal protective equipment.
- Show this Safety Data Sheet to the physician in attendance.

Inhalation:

- Move person to fresh air. Keep at rest.

- If breathing is difficult, qualified personnel should provide oxygen.
- If not breathing, provide artificial respiration by trained personnel.
- Get immediate medical attention.

#### Skin contact:

- Immediately remove contaminated clothing and shoes.
- Rinse skin with plenty of water and wash with soap.
- Get immediate medical attention.

#### Eye contact:

- Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.
- Continue rinsing.
- Get immediate medical attention.

#### Ingestion:

- Rinse mouth. Do NOT induce vomiting.
- Never give anything by mouth to an unconscious person.
- Get immediate medical attention.

#### 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

- 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.
- No data available.

##### Unsuitable extinguishing media:

- No data available.

#### 5.2 Special hazards arising from the substance or mixture

- Extremely toxic substance.
- Thermal decomposition may release toxic and/or corrosive fumes.
- No data available.

#### 5.3 Advice for firefighters

- Wear self-contained breathing apparatus (SCBA) and full protective gear.
- Prevent fire-fighting water from entering drains, surface water, or soil.
- Use water spray to cool unopened containers if exposed to fire.
- No data available.

## SECTION 6: Accidental release measures

### SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

- Evacuate area. Restrict access.
- Avoid breathing vapors/mists. Avoid contact with skin and eyes.
- Use appropriate PPE including chemical-resistant gloves and respiratory protection as required.
- 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, waterways, and soil.

### 6.3 Methods and material for containment and cleaning up

- Contain spill. Absorb with inert absorbent material.
- Collect in suitable, tightly closed containers for disposal.
- Decontaminate spill area using methods appropriate for mercury/organomercury contamination.
- Dispose of contaminated materials as hazardous waste.

### 6.4 Reference to other sections

- See Section 8 for exposure controls/personal protection.
- See Section 13 for disposal considerations.

## SECTION-7: Handling and storage

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

- For laboratory/industrial use only by trained personnel.
- Avoid all contact and inhalation exposure.
- Handle in a chemical fume hood or closed system.
- Do not eat, drink, or smoke when using this product.
- Wash hands thoroughly after handling.
- Keep container tightly closed.

#### 7.2 Conditions for safe storage, including any incompatibilities

- Store tightly closed in a cool, dry, well-ventilated place.
- Store locked up.
- Keep away from incompatible materials.
- Protect from heat and sources of ignition.
- Incompatibilities: No data available.

#### 7.3 Specific end use(s)

- No data 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 (chemical fume hood) or closed handling systems.
- Provide eyewash station and safety shower.

### Personal protective equipment (PPE):

#### Eye/face protection:

- Safety glasses with side shields or chemical splash goggles.

#### Skin protection:

- Wear appropriate chemical-resistant gloves.
- Wear protective clothing to prevent skin contact.

#### Respiratory protection:

- Use appropriate respirator if ventilation is inadequate or exposure is possible.
- Respirator selection must be based on hazard and workplace concentrations.

#### Hygiene measures:

- Remove contaminated clothing and wash before reuse.
- Avoid contact with skin, eyes, and clothing.

#### Environmental exposure controls:

- Avoid release to the environment. Use appropriate containment.

## 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

Property	Value
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

- No data available.

##### 10.3 Possibility of hazardous reactions

- No data available.

##### 10.4 Conditions to avoid

- Heat, flames, sparks.
- Exposure to incompatible materials.
- No data available.

##### 10.5 Incompatible materials

- No data available.

##### 10.6 Hazardous decomposition products

- Toxic fumes may be released upon decomposition.
- No data 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: High-affinity binding of the divalent mercuric ion to thiol or sulfhydryl groups of proteins is believed to be the major mechanism for the activity of mercury. Through alterations in intracellular thiol status, mercury can promote oxidative stress, lipid peroxidation, mitochondrial dysfunction, and changes in heme metabolism. Mercury is known to bind to microsomal and mitochondrial enzymes, resulting in cell injury and death. For example, mercury is known to inhibit aquaporins, halting water flow across the cell membrane. It also inhibits the protein LCK, which causes decreased T-cell signalling and immune system depression. Mercury is also believed to inhibit neuronal excitability by acting on the postsynaptic neuronal membrane. It also affects the nervous system by inhibiting protein kinase C and alkaline phosphatase, which impairs brain microvascular formation and function, as well as alters the blood-brain barrier. Organic mercury exerts developmental effects by binding to tubulin, preventing microtubule assembly and causing mitotic inhibition. Mercury also produces an autoimmune response, likely by modification of major histocompatibility complex (MHC) class II molecules, self peptides, T-cell receptors, or cell-surface adhesion molecules. (L7, A8, A25, A26)
- 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

- High-affinity binding of the divalent mercuric ion to thiol or sulfhydryl groups of proteins is believed to be the major mechanism for the activity of mercury. Through alterations in intracellular thiol status, mercury can promote oxidative stress, lipid peroxidation, mitochondrial dysfunction, and changes in heme metabolism. Mercury is known to bind to microsomal and mitochondrial enzymes, resulting in cell injury and death. For example, mercury is known to inhibit aquaporins, halting water flow across the cell membrane. It also inhibits the protein LCK, which causes decreased T-cell signalling and immune system depression. Mercury is also believed to inhibit neuronal excitability by acting on the postsynaptic neuronal membrane. It also affects the nervous system by inhibiting protein kinase C and alkaline phosphatase, which impairs brain microvascular formation and function, as well as alters the blood-brain barrier. Organic mercury exerts developmental effects by binding to tubulin, preventing microtubule assembly and causing mitotic inhibition. Mercury also produces an autoimmune response, likely by modification of major histocompatibility complex (MHC) class II molecules, self peptides, T-cell receptors, or cell-surface adhesion molecules. (L7, A8, A25, A26)

## 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/unused material:

- Dispose of as hazardous waste in accordance with local/regional/national/international regulations.
- Do not discharge to drains or the environment.

###### Contaminated packaging:

- Dispose of as hazardous waste. Do not reuse empty container.

###### Additional information:

- No data 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

- No data available.

15.2 Chemical safety assessment

- No data available.

### SECTION 16: Other information

SECTION 16: Other information

Product identifier:

- Product name: Dimethylmercury
- CAS No.: 593-74-8
- Catalog No.: CS-BX-00792
- Supplier: Clearsynth Labs Ltd., Mumbai, India
- Emergency phone: +91-22-245045900

Revision information:

- No data available.

Disclaimer:

- The information provided is believed to be accurate but is not exhaustive and is intended only as guidance for safe handling, use, processing, storage, transportation, disposal, and release. It does not constitute a warranty of any kind.

- No data available.

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