

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

<b>Catalogue Number</b>	CS-O-61972
<b>Product Name</b>	1,2,4,7,8-pentachlorodibenzo-p-dioxin
<b>CAS No.</b>	58802-08-7
<b>Category</b>	Building Blocks
<b>Synonyms</b>	1,2,4,7,8-pentachlorodibenzo[b,e][1,4]dioxine
<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:** Not available

Not available

#### Hazard Statement(s)

Code	Statement
Not available	Not available

#### Precautionary Statement(s)

Code	Statement
Not available	Not available

### SECTION 3: Composition / information on ingredients

#### 3.1 Substance

Component : 1,2,4,7,8-pentachlorodibenzo-p-dioxin  
CAS Number : 58802-08-7  
Molecular Formula : C<sub>12</sub>H<sub>3</sub>Cl<sub>5</sub>O<sub>2</sub>  
Molecular Weight : 356.40  
Parent Chemical : -  
Synonyms : 1,2,4,7,8-pentachlorodibenzo[b,e][1,4]dioxine  
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. Get medical attention if symptoms occur.
- Skin contact: Wash with plenty of soap and water. Get medical attention if irritation or symptoms occur.
- 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/effects, acute and delayed

- Not available.

##### 4.3 Indication of 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 (e.g., water spray, dry chemical, foam, carbon dioxide).
- Unsuitable extinguishing media: Not available.

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

- May form hazardous decomposition products under fire conditions.
- Hazardous combustion products: Hydrogen chloride and chlorinated organic compounds; carbon oxides. (Exact composition not available.)

##### 5.3 Advice for firefighters

- Wear self-contained breathing apparatus (SCBA) and full protective gear.
- Avoid inhalation of smoke and decomposition products.
- Cool containers with water spray if exposed to fire.

### SECTION 6: Accidental release measures

#### SECTION 6: Accidental release measures

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

- Evacuate unnecessary personnel.
- Avoid breathing dust/vapors and avoid contact with skin and eyes.
- Use appropriate personal protective equipment (see Section 8).

#### 6.2 Environmental precautions

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

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

- Avoid generating dust.
- Collect spilled material using inert absorbent or by careful sweeping/scooping into a suitable, labeled container.
- Clean contaminated area with suitable cleaning method; dispose of waste in accordance with local regulations.

#### 6.4 Reference to other sections

- See Section 8 for exposure controls/personal protection 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 formation of dust and aerosols.
- Avoid contact with skin, eyes, and clothing.
- Use only with adequate ventilation; local exhaust recommended.
- Wash thoroughly after handling.

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

- Store in tightly closed container in a cool, dry, well-ventilated place.
- Protect from moisture and incompatible materials.
- Incompatible materials: Strong oxidizing agents (general precaution). Specific incompatibilities: Not available.

##### 7.3 Specific end use(s)

- Laboratory/research use. Not available for other uses.

### 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 ventilation. Use local exhaust or fume hood where dust or vapors may be generated.
- Personal protective equipment (PPE):
  - Eye/face protection: Safety glasses with side shields or chemical splash goggles.
  - Skin protection: Protective gloves (chemical-resistant). Protective clothing as appropriate.
  - Respiratory protection: If ventilation is inadequate or exposure is possible, use a NIOSH/EN-approved respirator suitable for particulates/organic vapors as appropriate. Specific selection: Not available.

- Hygiene measures: Do not eat, drink, or smoke when using this product. Wash hands after handling. Remove contaminated clothing and wash before reuse.
- 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
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

Property	Value
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, flames, ignition sources. Avoid dust generation. Other conditions: Not available.

#### 10.5 Incompatible materials

- Strong oxidizing agents. Additional incompatibilities: Not available.

#### 10.6 Hazardous decomposition products

- Hydrogen chloride, chlorinated organic compounds, carbon oxides. Exact 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: Exposure to large amounts of CDDs causes chloracne, a severe skin disease with acne-like lesions that occur mainly on the face and upper body. CDDs may also cause liver damage and induce long-term alterations in glucose metabolism and subtle changes in hormonal levels. In addition, studies have shown that CDDs may disrupt the endocrine system and weaken the immune system, as well as cause reproductive damage and birth defects, central and peripheral nervous system pathology, thyroid disorders, endometriosis, and diabetes. (L177, L178)

- STOT-single exposure: No data available.

- STOT-repeated exposure: Exposure to large amounts of CDDs causes chloracne, a severe skin disease with acne-like lesions that occur mainly on the face and upper body. CDDs may also cause liver damage and induce long-term alterations in glucose metabolism and subtle changes in hormonal levels. In addition, studies have shown that CDDs may disrupt the endocrine system and weaken the immune system, as well as cause reproductive damage and birth defects, central and peripheral nervous system pathology, thyroid disorders, endometriosis, and diabetes. (L177, L178)

- Aspiration hazard: No data available.

Likely routes of exposure

- No data available.

Symptoms related to the physical, chemical and toxicological characteristics

- CDDs cause their toxic effects by binding to the aryl hydrocarbon receptor and subsequently altering the transcription of certain genes. The affinity for the Ah receptor depends on the structure of the specific CDD. The change in gene expression may result from the direct interaction of the Ah receptor and its heterodimer-forming partner, the aryl hydrocarbon receptor nuclear translocator, with gene regulatory elements or the initiation of a phosphorylation/dephosphorylation cascade that subsequently activates other transcription factors. The affected genes include several oncogenes, growth factors, receptors, hormones, and drug-metabolizing enzymes. The change in transcription/translation of these genes is believed to be the cause of most of the toxic effects of CDDs. (L177)

## 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

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.

- Recommended disposal method: Use a licensed chemical waste contractor/incineration facility where permitted.

- 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

#### SECTION 15: Regulatory information

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

- Regulatory status (GHS/CLP/OSHA/REACH/TSCA/DSL/ENCS/AICS, etc.): Not available.

##### 15.2 Chemical safety assessment

- No data available.

### SECTION 16: Other information

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- Product name: 1,2,4,7,8-pentachlorodibenzo-p-dioxin
- CAS No.: 58802-08-7
- Catalog No.: CS-O-61972
- Synonyms: 1,2,4,7,8-pentachlorodibenzo[b,e][1,4]dioxine
- Supplier: Clearsynth Labs Ltd., Mumbai, India
- Emergency phone: +91-22-245045900

#### Disclaimer:

- The information provided is based on available product information and is believed to be accurate; however, no warranty is expressed or implied. Users are responsible for determining suitability for their particular application and for compliance with applicable regulations.
- Revision date: Not available.

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