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

Catalogue Number	CS-O-61973
Product Name	1,2,3,4,7-Pentachlorodibenzodioxin
CAS No.	39227-61-7
Category	Building Blocks
Synonyms	1,2,3,4,7-pentachlorodibenzo[b,e][1,4]dioxine
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: 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 : 1,2,3,4,7-Pentachlorodibenzodioxin
CAS Number : 39227-61-7
Molecular Formula : C12H3Cl5O2
Molecular Weight : 356.40
Parent Chemical : -
Synonyms : 1,2,3,4,7-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: Seek medical attention if symptoms occur or persist. Show this SDS to medical personnel.
- Inhalation: Move person to fresh air. Keep at rest. If breathing is difficult, seek medical attention.
- Skin contact: Remove contaminated clothing and shoes. Wash skin with soap and water. Seek medical attention if irritation or symptoms develop.
- 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 unless directed by medical personnel. 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. 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, alcohol-resistant foam, dry chemical, carbon dioxide).
- Unsuitable extinguishing media: Not available.

5.2 Special hazards arising from the substance or mixture
- Hazardous combustion products: Hydrogen chloride, carbon oxides, and chlorinated organic compounds may form. Other decomposition products: Not available.

5.3 Advice for firefighters
- Wear self-contained breathing apparatus (SCBA) and full protective gear.
- Avoid inhalation of combustion/decomposition fumes.
- 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 dust formation.
- Use appropriate personal protective equipment (see Section 8).
- 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, surface water, and soil.

6.3 Methods and material for containment and cleaning up
- Collect spilled material using methods that minimize dust generation.
- Place in a suitable, closed container for disposal.
- Clean contaminated area with appropriate methods. Do not flush to drain.

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
- Handle in accordance with good industrial hygiene and safety practice.
- Avoid breathing dust/fume. Avoid contact with skin and eyes.
- Use only with adequate ventilation (e.g., fume hood).
- Keep container tightly closed when not in use.

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

7.3 Specific end use(s)
- Building block / research and development use. Not for food, drug, or household use.

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
- Appropriate engineering controls: Use local exhaust ventilation or fume hood to minimize exposure.
- Personal protective equipment (PPE):
- Eye/face protection: Safety glasses with side shields or chemical splash goggles.
- Skin protection: Protective gloves (material not available). Wear protective clothing.
- Respiratory protection: If ventilation is inadequate or dust/aerosols may form, use appropriate respiratory protection (type not available).
- 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
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, open flame, and sources of ignition. Other conditions: Not available.

10.5 Incompatible materials
- Not available.

10.6 Hazardous decomposition products
- Hydrogen chloride, carbon oxides, and chlorinated organic compounds. Additional 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: 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 trascription 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

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
- 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.
- Incineration or disposal via a licensed hazardous waste contractor may be appropriate.
- 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
- Not available.

15.2 Chemical safety assessment
- No data available.

SECTION 16: Other information

SECTION 16: Other information

- Product name: 1,2,3,4,7-Pentachlorodibenzodioxin
- Catalog no.: CS-O-61973
- CAS no.: 39227-61-7
- Synonyms: 1,2,3,4,7-pentachlorodibenzo[b,e][1,4]dioxine
- 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 are responsible for determining suitability for their particular use and for compliance with applicable laws and regulations.
- Revision date: Not available.

DISCLAIMER

This MSDS is system-generated. Please verify and confirm all data, statements, and values with the Support Team before use or distribution.