



The Power to Question

SAFETY DATA SHEET

Santa Cruz Biotechnology, Inc.

Revision date 30-May-2018

Version 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name 1,2,3,7,8-Pentachlorodibenzofuran
Product Code SC-397802

Recommended use of the chemical and restrictions on use

For research use only. Not intended for diagnostic or therapeutic use.

Details of the supplier of the safety data sheet

Santa Cruz Biotechnology, Inc.
10410 Finnell Street
Dallas, TX 75220
831.457.3800
800.457.3801
scbt@scbt.com

Emergency telephone number

Chemtrec
1.800.424.9300 (Within USA)
+1.703.527.3887 (Outside USA)

2. HAZARDS IDENTIFICATION

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification

Acute toxicity - Oral Category 1
Acute toxicity - Dermal Category 1
Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2A
Specific target organ toxicity (single exposure) Category 3

Label elements

Signal word Danger
Hazard statements Causes skin irritation
Causes serious eye irritation
May cause respiratory irritation

Symbols/Pictograms



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not get in eyes, on skin, or on clothing
Wear protective gloves/protective clothing/eye protection/face protection
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area



Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 If eye irritation persists: Get medical advice/attention
 IF ON SKIN: Gently wash with plenty of soap and water
 Immediately call a POISON CENTER or doctor/physician
 Remove/Take off immediately all contaminated clothing
 Wash contaminated clothing before reuse
 If skin irritation occurs: Get medical advice/attention
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 Call a POISON CENTER or doctor/physician if you feel unwell
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
 Rinse mouth
 Store locked up Store in a well-ventilated place. Keep container tightly closed
 Dispose of contents/container to an approved waste disposal plant

Precautionary Statements - Storage

Precautionary Statements - Disposal

Hazards not otherwise classified (HNOC)

Hazards not otherwise classified (HNOC) Not applicable

Other Information

Other hazards Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life.

NFPA

Health hazards -
 Flammability -
 Stability -
 Physical and chemical properties -



HMIS

Health hazards -
 Flammability -
 Physical hazards -
 Personal protection -

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS No 57117-41-6
 Molecular Weight 340.42
 Formula C₁₂H₃Cl₅O

Chemical name	CAS No.	Weight-%	Oral LD50	Dermal LD50	Inhalation LC50
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	>98	-	-	-

4. FIRST AID MEASURES

First Aid Measures

General advice Consult a physician if necessary. Remove to fresh air.
 Eye contact Wash with plenty of water.
 Skin Contact Wash skin with soap and water.
 Inhalation Remove to fresh air If breathing is difficult, give oxygen If not breathing, give artificial respiration
 Ingestion Never give anything by mouth to an unconscious person. Clean mouth with water.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.



Indication of any immediate medical attention and special treatment needed

Note to physicians

Treat symptomatically.

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media No information available.

Specific hazards arising from the chemical

Specific hazards arising from the chemical Thermal decomposition can lead to release of toxic/corrosive gases and vapors.

Hazardous combustion products Carbon oxides. Phosgene.

Explosion data

Sensitivity to Mechanical Impact No information available.

Sensitivity to Static Discharge No information available.

Protective equipment and precautions for firefighters

Protective equipment and precautions for firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Personal precautions Ensure adequate ventilation, especially in confined areas.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Use personal protective equipment as required. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE**Precautions for safe handling**

Advice on safe handling Thermal decomposition can lead to release of toxic/corrosive gases and vapors.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store at 4 °C.

Incompatible materials None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters**



Exposure Guidelines This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering Controls Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).
Skin and Body Protection Wear protective gloves and protective clothing.
Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Solid
Appearance No information available
Odor No information available

Property

pH No information available
Melting point/freezing point 226 °C
Boiling point No information available
Flash point No information available
Liquid Density No information available
Evaporation rate No information available
Upper flammability limits No information available
Lower flammability limit No information available
Vapor pressure No information available
Vapor density No information available
Specific gravity No information available
Water solubility No information available
Solubility in other solvents No information available
Partition coefficient No information available
Autoignition temperature No information available
Decomposition temperature 226 °C
Kinematic viscosity No information available
Explosive properties No information available
Oxidizing properties No information available

Values

10. STABILITY AND REACTIVITY

Reactivity Not applicable

Chemical stability Stable under recommended storage conditions.
Possibility of Hazardous Reactions None under normal processing.
Hazardous polymerization No information available.
Conditions to avoid Extremes of temperature and direct sunlight.
Incompatible materials Strong oxidizing agents.
Hazardous Decomposition Products Carbon oxides. Phosgene.



11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation	No data available.
Eye contact	No data available.
Skin Contact	No data available.
Ingestion	No data available.

Information on toxicological effects

Symptoms	No information available.
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity	No information available.
Carcinogenicity	The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
1,2,3,7,8-Pentachlorodibenzofuran 57117-41-6	-	Group 3	-	-

IARC (International Agency for Research on Cancer) Not classifiable as a human carcinogen

Numerical measures of toxicity - Product Information

Unknown acute toxicity	No information available
The following values are calculated based on chapter 3.1 of the GHS document	
ATEmix (oral)	0 mg/kg
ATEmix (dermal)	5 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity	Very toxic to aquatic life with long lasting effects
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0% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

Persistence and degradability	No information available.
Bioaccumulation	No information available.
Mobility	No information available.

13. DISPOSAL CONSIDERATIONS

Disposal of wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging	Do not reuse container.

14. TRANSPORT INFORMATION

DOT

UN/ID no	UN2811
Hazard Class	6.1
Packing Group	I
Proper shipping name	Toxic solids, organic, n.o.s.



Description UN2811, Toxic solids, organic, n.o.s., 6.1, I
 Emergency Response Guide Number 154

IMDG

UN/ID no UN2811
 Hazard Class 6.1
 Packing Group I
 Proper shipping name Toxic solid, organic, n.o.s.
 Description UN2811, Toxic solid, organic, n.o.s. (, 1,2,3,7,8-Pentachlorodibenzofuran), 6.1, I, Marine pollutant
 Special Provisions 274
 EmS-No F-A, S-A

IATA

UN/ID no UN2811
 Hazard Class 6.1
 Packing Group I
 Proper shipping name Toxic solid, organic, n.o.s.
 Description UN2811, Toxic solid, organic, n.o.s., 6.1, I
 ERG Code 6L

15. REGULATORY INFORMATION**International Inventories**

All of the components in the product are on the following Inventory lists

No information available

X - Listed

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
 ENCS - Japan Existing and New Chemical Substances
 IECS - China Inventory of Existing Chemical Substances
 KECL - Korean Existing and Evaluated Chemical Substances
 PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute health hazard Yes
 Chronic Health Hazard No
 Fire hazard No
 Sudden release of pressure hazard No
 Reactive hazard No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical name	California Proposition 65
1,2,3,7,8-Pentachlorodibenzofuran - 57117-41-6	Carcinogen



U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
1,2,3,7,8-Pentachlorodibenzofuran 57117-41-6	X	Not Listed	Not Listed

16. OTHER INFORMATION

Revision note

No information available

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet