

Section I - Identification
Product Identity: 2,3,3',4,4'-Pentachlorobiphenyl 99% (BZ# 105)

Product Number: ERP-101

Manufacturer: Cerilliant Corporation
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Section II - Hazard Information
Target Organs: Liver, kidney, central nervous system, skin

Signal Words: Warning

GHS/CLP Classification:

STOT, repeated exposure-Cat 2



Aquatic toxicity, acute-Cat 1

Aquatic toxicity, chronic-Cat 1

Hazard Statements:

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P273 Avoid release to the environment.

P314 Get medical advice/attention if you feel unwell.

P501 Dispose of contents/container to an approval disposal plant.

EU Directives Classification:
Symbol of Danger: N
Indication of Danger: Dangerous to the environment

Risk Phrases:

R33 Danger of cumulative effects.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S35 This material and its container must be disposed of in a safe way.

S60 This material and its container must be disposed of as hazardous waste.

S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

Section III - Composition/Information on Ingredients

Hazardous Components	CAS Number	Molecular Formula	Molecular Weight	EC Number	CLP Index Number	%
2,3,3',4,4'-Pentachlorobiphenyl (BZ# 105)	32598-14-4	C ₁₂ H ₅ Cl ₅	326.43	N/A	N/A	100

Section IV - First Aid Measures
Eye Contact: Flush eyes with copious amounts of water for a minimum of 15 minutes and consult a physician.

Ingestion: Do not induce vomiting. Rinse mouth with water and consult a physician.

Skin Contact: Wash affected areas with copious amounts of water and consult a physician.

Inhalation: Remove to fresh air. If breathing is disturbed, give artificial respiration while transporting to a medical facility.

Section V - Fire Fighting Measures
Flash point: N/A

Flammable Limits:
Method Used: N/A

LEL: N/A **UEL:** N/A

Autoignition Temperature: N/A

Extinguishing Media: Water spray, chemical, or carbon dioxide extinguisher.

Special Fire Fighting Procedures: Wear SCBA and protective clothing to prevent contact with skin and eyes.

Unusual Fire and Explosion Hazards: N/A

Section VI - Accidental Release Measures

Evacuate area. Remove all sources of ignition. Use inert absorbent to pick up all spilled material. Transfer to a suitable waste container with non-sparking tools. Wash spill site with appropriate cleaning agents to remove residual traces of spilled material.

Section VII - Handling and Storage
Handling: Do not breathe dust or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged, repeated exposure. Wash thoroughly after handling.

Storage: Room Temperature. Protect from light. Keep container closed. Keep away from ignition sources.

Section VIII - Exposure Controls/Personal Protection

As appropriate to quantity handled.

Ventilation-Local Exhaust: Use with forced ventilation.

General Mechanical: Normal laboratory air exchange.

Respiratory Protection: NIOSH approved cartridge type respirator with organic vapor cartridge with HEPA pre-filter recommended.

Eye Protection: Safety glasses with side shields or chemical safety goggles.

Protective Gloves: Compatible chemical resistant gloves.

Other Protective Clothing or Equipment: Lab Coat

Work/Hygienic Practices: Only experienced personnel should be allowed to handle this material.

Exposure Limits				
	OSHA PEL	ACGIH TLV	DFG MAK	Other Limits
2,3,3',4,4'-Pentachlorobiphenyl (BZ# 105)	N/A	N/A	N/A	NIOSH REL TWA 0.001 mg/m3 [PCBs]

Section IX- Physical and Chemical Properties
Boiling Point (°C): N/A

Melting Point (°C): N/A

Specific Gravity (Water =1): N/A

Vapor Pressure (mm Hg): 6.53E-06 @ 25 °C

Vapor Density (Air =1): N/A

Evaporation Rate (Butyl Acetate =1): N/A

Solubility in Water: 0.0034 mg/L @ 25 °C

Appearance and Odor: White solid

Section X- Stability and Reactivity
Stability: Stable

Conditions to Avoid: N/A

Incompatible Materials: Strong oxidizing agents

Hazardous Decomposition Products: carbon monoxide, carbon dioxide and chlorine

Section XI- Toxicological Information
Routes of Entry: Inhalation: Yes Ingestion: Yes Skin: Yes

Carcinogenicity: **IARC:** Group 2A- Probably carcinogenic to humans

NTP: Reasonably anticipated to be a carcinogen.

OSHA: N/A

Symptoms of Exposure: Exposure to polychlorinated biphenyls can cause skin irritation and rash, chloracne, hyperpigmentation of skin, eye and mucous membrane irritation, nausea, vomiting, loss of weight, abdominal pain, jaundice, edema, headache, dizziness, nervousness, fatigue, muscular weakness, peripheral neuropathies, blindness, personality changes, irritability, liver and kidney damage and immune system damage.

Toxicity Data:

intraperitoneal-mouse LD50: 400 mg/kg

The toxicological properties of 2,3,3',4,4'-Pentachlorobiphenyl 99% (BZ# 105) have not been fully investigated. It should be assumed to have toxic effects and, therefore, procedures appropriate for the safe handling of hazardous chemicals should be followed.

Section XII- Ecological Information

Fish: Pimephales promelas (fathead minnow) LC50: 0.034 mg/L/96H

Section XIII- Disposal Considerations

Waste materials should be disposed of under conditions that meet Federal, State, and Local environmental control regulations. Contact a licensed waste disposal specialist to dispose of this material.

Section XIV- Transport Information

DOT		IATA	
Proper Shipping Name:	Polychlorinated biphenyls, solid	Proper Shipping Name:	Polychlorinated biphenyls, solid
UN Number:	3432	UN Number:	3432
Class:	9	Class:	9
Packing Group:	II	Packing Group:	II
PIH:	N	PIH:	N
Small quantities exempted		Small quantities exempted	

Section XV- Regulatory Information
SARA 302: No

SARA 313: Listed

CERCLA RQ (pounds): 1

Section XVI- Other Information

The information contained herein is believed to be accurate and is supplied in good faith. Cerilliant Corporation makes no warranty with respect to and assumes no legal responsibility for use or reliance upon this information. Individuals receiving this data must exercise their own judgement in determining its suitability for a particular purpose.