POLYCHLORINATED BIPHENYLS (PCBs) FACT SHEET

North Carolina Division of Public Health • Occupational and Environmental Epidemiology Branch

Chemical Information

- Manufactured as smaller, varying groups of 209 related chlorinated chemicals.
- No known natural sources.
- Oily, colorless liquid or colorless to light yellow solid.
- Some can exist in air as a vapor.
- Do not burn easily.
- Good insulators.
- Persistent in the environment and are found in areas very far away from where they were used.
- Build up in the
 environment and can cause
 harmful health effects.
 Higher concentrations are
 seen in animals at the top
 of the food chain, such as
 predatory fish.
- Bind strongly to soil, sediment, and biota.
- Were previously used in fluorescent lighting fixtures, coolants and lubricants in transformers, capacitors, and other electrical equipment.

Hazards Identification

Acute Exposure:

- May produce irritation of the skin, nose, throat, and lungs.
- Damage to the liver.
- Can cause coughing and/or difficulty in breathing.

Chronic Exposure:

- Repeated or prolonged contact with skin may cause acne-like skin rash or darkening.
- May cause liver damage, anemia, thyroid changes, damage to the reproductive and nervous systems.
- High exposure can damage to the nervous or immune systems.
- Liver cancer and non-Hodgkin's lymphoma are associated with exposure to PCBs.
- Most people are exposed primarily through contaminated fish. PCBs can be passed from the mother to the fetus or through breast milk.

Stability & Reactivity

Incompatible with strong oxidizers.

Handling & Storage

• Should be stored in closed containers, in ventilated areas with appropriate air pollution control equipment.

