Aroclor File

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Chronic Local: Irritant 2; Ingestion 2; Inhalation 2.
Chronic Systemic: Ingestion 1; Inhalation 1; Skin Absorption 1.
Fire Hazard: Moderate, when exposed to heat or flame(Section 6, p. 161).
Disaster Hazard: Dangerous; when heated to decomposition, it emits highly toxic fumes of phosgene; can react vigorously with oxidizing materials.

Countermeasures

Ventilation Control: Section 2, p. 31.
Personnel Protection: Section 3, p. 59.
Storage and Handling: Section 7, p. 179.

CHLORIDE OF LIME. See bleaching powder.

CHLORIDES

Hazard Analysis

Toxicity: Varies widely. Sodium chloride (table salt) has very low toxicity, while carbonyl chloride (phosgene) is lethal in small doses.
Disaster Hazard: Dangerous; when heated to decomposition or on contact with acids they evolve highly toxic chloride fumes.

Countermeasures

Storage and Handling: Section 7, p. 179.

CHLORINATED ANTHRACENE OIL. See carbolineum.

CHLORINATED BIPHENOLS. See chlorinated diphenyls.

CHLORINATED CAMPHENE. See "Toxaphene."

CHLORINATED DIPHENYL OXIDE

Hazard Analysis

Toxic Hazard Rating:
Acute Local: Irritant 2.
Acute Systemic: Ingestion 3; Inhalation 3.
Chronic Local: Irritant 3.
Chronic Systemic: Inhalation 3; Skin Absorption 2.
TLV: ACGIH (accepted): 0.5 milligrams per cubic meter of air.
Disaster Hazard: Dangerous; when heated to decomposition, it emits highly toxic fumes.

Countermeasures

Storage and Handling: Section 7, p. 179.
Shipping Regulations: Section 11, p. 317. MCA warning label.

CHLORINATED DIPHENYLS

General Information

Description: Colorless mobile liquid.
Constants: Bp: 340-375°C, flash p: 383°F (C.O.C.), d: 1.44 at 30°C.

Hazard Analysis

Toxic Hazard Rating:
Acute Local: Irritant 2.
Acute Systemic: Ingestion 3; Inhalation 3.
Chronic Local: Irritant 3.
Chronic Systemic: Inhalation 3; Skin Absorption 2.
TLV for chlorodiphenyl (42% chlorine) ACGIH (accepted): 1 milligram per cubic meter of air. Can be absorbed via intact skin.
TLV for chlorodiphenyl (54% chlorine) ACGIH (accepted): 0.5 milligram per cubic meter of air. Can be absorbed via intact skin.
Toxicology: Like the chlorinated naphthalenes, the chlorinated diphenyls have two distinct actions on the body, namely, a skin effect and a toxic action on the liver. The lesion produced in the liver is an acute yellow atrophy. This hepato-toxic action of the chlorinated diphenyls appears to be increased if there is exposure to carbon tetrachloride at the same time. The higher the chlorine content of the diphenyl compound, the more toxic is it liable to be. Oxides of chlorinated diphenyls are more toxic than the unoxidized materials.

The skin lesion is known as chlorsene, and consists of small pimples and dark pigmentation of the exposed areas, initially. Later, comedones and pustules develop. In persons who have suffered systemic intoxication the usual signs and symptoms are nausea, vomiting, loss of weight, jaundice, edema and abdominal pain. Where the liver damage has been severe, the patient may pass into coma and die.
Fire Hazard: Slight, when exposed to heat or flame (Section 6, p. 161).
Disaster Hazard: Dangerous; when heated to decomposition, they emit highly toxic fumes.

Countermeasures

Ventilation Control: Section 2, p. 31.
Personnel Protection: Section 3, p. 59.
First Aid: Section 1, p. 1.
Storage and Handling: Section 7, p. 179.
Shipping Regulations: Section 11, p. 317. MCA warning label.

CHLORINATED HYDROCARBONS, ALIPHATIC

Hazard Analysis

Toxicology: The substitution of a chlorine (or other halogen) atom for a hydrogen greatly increases the anesthetic action of a member of the aliphatic hydrocarbons. In addition, the chlorine derivative is usually less specific in its action and may affect other tissues of the body in addition to those of the central nervous system; in many cases the chlorine derivative is quite toxic. Thus, chloroform, in addition to its narcotic qualities, may cause liver, heart, and kidney damage.

As a general rule, the unsaturated chlorine derivatives are highly narcotic but less toxic than the saturated derivatives, thus causing degenerative changes in the liver

TOXIC HAZARD RATING CODE (For detailed discussion, see Section 1.)

0 NONE: (a) No harm under any conditions; (b) Harmful only under unusual conditions or overwhelming dosage.
1 SLIGHT: Causes readily reversible changes which disappear after end of exposure.
2 MODERATE: May involve both irreversible and reversible changes; not severe enough to cause death or permanent injury.
3 HIGH: May cause death or permanent injury after very short exposure to small quantities.
U UNKNOWN: No information on humans considered valid by authors.

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