

## GHS Classification

**ID1411**

**CAS 61788-33-8**

**Physical Hazards**

### Polychlorinated terphenyls

Date Classified: Oct. 23, 2006 (Environmental Hazards: Mar. 31, 2006)

Reference Manual: GHS Classification Manual (Feb. 10, 2006)

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Explosives	Not applicable	—	—	—	Containing no chemical groups with explosive properties
2 Flammable gases	Not applicable	—	—	—	Classified as "liquid" or "solid" according to GHS definition
3 Flammable aerosols	Not applicable	—	—	—	Not aerosol products
4 Oxidizing gases	Not applicable	—	—	—	Classified as "liquid" or "solid" according to GHS definition
5 Gases under pressure	Not applicable	—	—	—	Classified as "liquid" or "solid" according to GHS definition
6 Flammable liquids	Classification not possible (liquid)	—	—	—	No data available. However, PCBs whose physicochemical properties are very similar to those of PCTs have the flash points of 170–380degC (EHC 140 (1993)), and therefore the flash points of PCTs may exceed 93degC, which is "Not classified."
7 Flammable solids	Not classified (solid)	—	—	—	PTCs had previously been used as fire-retardants (EHC 140 (1993)). Classified into Class 9 (UN#3151 (Polyhalogenated Biphenyls (liquid; excluding polychlorinated biphenyls (UN#2315, liquid); those with concentrations of not more than 50mg/kg are not included in the Dangerous Goods list), or Polyhalogenated Terphenyls (liquid; those with concentrations of not more than 50mg/kg are not included in the Dangerous Goods list)), UN#3152 (Polyhalogenated Biphenyls (solid; excluding polychlorinated biphenyls (UN#3432, solid); those with concentrations of not more than 50mg/kg are not included in the Dangerous Goods list), or Polyhalogenated Terphenyls (solid; those with concentrations of not more than 50mg/kg are not included in the Dangerous Goods list)) (UN Recommendation on the Transport of Dangerous Goods).
8 Self-reactive substances and mixtures	Not applicable	—	—	—	Containing no chemical groups with explosive or self-reactive properties
9 Pyrophoric liquids	Not classified (liquid)	—	—	—	considered non-pyrophoric when in contact with air at ordinary temperatures since the substance had previously been used as a fire-retardant (EHC 140 (1993)). Classified into Class 9 (UN#3151 (Polyhalogenated Biphenyls (liquid; excluding polychlorinated biphenyls (UN#2315, liquid); those with concentrations of not more than 50mg/kg are not included in the Dangerous Goods list), or Polyhalogenated Terphenyls (liquid; those with concentrations of not more than 50mg/kg are not included in the Dangerous Goods list)) (UN Recommendation on the Transport of Dangerous Goods).
10 Pyrophoric solids	Not classified (solid)	—	—	—	considered non-pyrophoric when in contact with air at ordinary temperatures since the substance had previously been used as a fire-retardant (EHC 140 (1993)). Classified into Class 9 (UN#3152 (Polyhalogenated Biphenyls (solid; excluding polychlorinated biphenyls (UN#3432, solid); those with concentrations of not more than 50mg/kg are not included in the Dangerous Goods list), or Polyhalogenated Terphenyls (solid; those with concentrations of not more than 50mg/kg are not included in the Dangerous Goods list)) (UN Recommendation on the Transport of Dangerous Goods).
11 Self-heating substances and mixtures	Classification not possible (liquid or solid with melting point of <=140degC), Not classified (melting point of >140degC)	—	—	—	Test methods applicable to liquid or solid substances with melting point of <=140degC are not available (test temperature: 140degC), whereas those with melting point of >140degC cannot be classified due to lack of data. Classified into Class 9 (UN#3151 (Polyhalogenated Biphenyls (liquid; excluding polychlorinated biphenyls (UN#2315, liquid); those with concentrations of not more than 50mg/kg are not included in the Dangerous Goods list), or Polyhalogenated Terphenyls (liquid; those with concentrations of not more than 50mg/kg are not included in the Dangerous Goods list)), UN#3152 (Polyhalogenated Biphenyls (solid; excluding polychlorinated biphenyls (UN#3432, solid); those with concentrations of not more than 50mg/kg are not included in the Dangerous Goods list), or Polyhalogenated Terphenyls (solid; those with concentrations of not more than 50mg/kg are not included in the Dangerous Goods list)) by the UN Recommendation on the Transport of Dangerous Goods, which is "Not classified."
12 Substances and mixtures, which in contact with water, emit flammable gases	Not applicable	—	—	—	Containing no metals or metalloids (B, Si, P, Ge, As, Se, Sn, Sb, Te, Bi, Po, At)
13 Oxidizing liquids	Not applicable	—	—	—	Organic compounds containing chlorine (but not oxygen and fluorine), with the chlorine bound to carbon and hydrogen (but not to other elements)
14 Oxidizing solids	Not applicable	—	—	—	Organic compounds containing chlorine (but not oxygen and fluorine), with the chlorine bound to carbon and hydrogen (but not to other elements)
15 Organic peroxides	Not applicable	—	—	—	Organic compounds containing no "—O—O—" structure
16 Corrosive to metals	Not classified	—	—	—	Classified into Class 9 (UN#3151 (Polyhalogenated Biphenyls (liquid; excluding polychlorinated biphenyls (UN#2315, liquid); those with concentrations of not more than 50mg/kg are not included in the Dangerous Goods list), or Polyhalogenated Terphenyls (liquid; those with concentrations of not more than 50mg/kg are not included in the Dangerous Goods list)), UN#3152 (Polyhalogenated Biphenyls (solid; excluding polychlorinated biphenyls (UN#3432, solid); those with concentrations of not more than 50mg/kg are not included in the Dangerous Goods list), or Polyhalogenated Terphenyls (solid; those with concentrations of not more than 50mg/kg are not included in the Dangerous Goods list)) (UN Recommendation on the Transport of Dangerous Goods).

**Health Hazards**

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Acute toxicity (oral)	Category 5	—	Warning	May be harmful if swallowed	Based on the mouse LD50 (oral route) value of 2,100mg/kg (RTECS (2006)).
1 Acute toxicity (dermal)	Classification not possible	—	—	—	No data available
1 Acute toxicity (inhalation: gas)	Not applicable	—	—	—	Due to the fact that the substance is a liquid or solid according to the GHS definition and inhalation of its gas is not expected.
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	—	—	—	No data available
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	—	—	—	No data available
2 Skin corrosion / irritation	Classification not possible	—	—	—	No data available

3	Serious eye damage / eye irritation	Classification not possible	—	—	—	No data available
4	Respiratory/skin sensitization	Respiratory sensitization: Classification not possible Skin sensitization: Classification not possible	(Respiratory sensitization) — (Skin sensitization) —	(Respiratory sensitization) — (Skin sensitization) —	(Respiratory sensitization) — (Skin sensitization) —	Respiratory sensitization: No data available Skin sensitization: No data available
5	Germ cell mutagenicity	Classification not possible	—	—	—	No data available
6	Carcinogenicity	Classification not possible	—	—	—	No data available
7	Toxic to reproduction	Classification not possible	—	—	—	No data available
8	Specific target organs/systemic toxicity following single exposure	Classification not possible	—	—	—	Insufficient data available
9	Specific target organs/systemic toxicity following repeated exposure	Category 2 (skin, liver)	Health hazard	Warning	May cause damage to organs through prolonged or repeated exposure (skin, liver)	Based on the evidence from animal studies including "loss of hair on the head, neck and back, facial swelling, swelling of eyelids and lips, and hepatocellular hypertrophy" (MOE Risk Assessment Vol. 4 (2005)). The effects on experimental animals were observed at dosing levels within the guidance value ranges for Category 2.  Note: Since the study on which assessment of the liver effects is based used the test material containing 5% PCB (ID 0199 (published): classified as Category 1 (skin, liver)) as a contaminant, the effects observed might potentially be attributable to PCB.
10	Aspiration hazard	Classification not possible	—	—	—	No data available

### Environmental Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
11 Hazardous to the aquatic environment (acute)	Classification not possible	—	—	—	No data available
11 Hazardous to the aquatic environment (chronic)	Classification not possible	—	—	—	No data available