

## GHS Classification

**ID1418**

**CAS 3090-36-6**

**Tributyl(lauroyloxy)stannane**

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

### Physical Hazards

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
7 Flammable solids	Classification not possible (solid)	—	—	—	No data available
8 Self-reactive substances and mixtures	Not applicable	—	—	—	Containing no chemical groups with explosive or self-reactive properties
9 Pyrophoric liquids	Classification not possible (as a liquid)	—	—	—	No data available
10 Pyrophoric solids	Classification not possible (as a solid)	—	—	—	No data available
11 Self-heating substances and mixtures	Classification not possible	—	—	—	Test methods applicable to liquid substances are not available (the melting point is 23.5degC (SRC (2006)) and 10degC (PRTR Chemicals DB (2001)) (test temperature: 140degC)).
12 Substances and mixtures, which in contact with water, emit flammable gases	Not classified	—	—	—	Stable to water (water solubility: 1.2mg/L, SRC (2006)).
13 Oxidizing liquids	Classification not possible (liquid)	—	—	—	Classification not possible due to lack of data, though being organic compounds containing oxygen bound to elements other than carbon and hydrogen
14 Oxidizing solids	Classification not possible (as a solid)	—	—	—	Classification not possible due to lack of data, though being organic compounds containing oxygen bound to elements other than carbon and hydrogen
15 Organic peroxides	Not applicable	—	—	—	Organic compounds containing no "-O-O-" structure
16 Corrosive to metals	Classification not possible	—	—	—	No data available

### Health Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Acute toxicity (oral)	Category 3	Skull and crossbones	Danger	Toxic if swallowed	Based on the mouse LD50 (oral route) value of 180mg/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
2 Skin corrosion / irritation	Classification not possible	—	—	—	No data available. As for the health hazards, refer to "ID428, Tributyl Tin Chloride, CAS: 1461-22-9."
3 Serious eye damage / eye irritation	Classification not possible	—	—	—	No data available. As for the health hazards, refer to "ID428, Tributyl Tin Chloride, CAS: 1461-22-9."
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	Category 2 (liver, kidneys)	Health hazard	Warning	May cause damage to organs (liver, kidneys)	Based on the evidence from animal studies including "fatty degeneration in the liver," renal hemorrhage and congestion, and lipid droplets in renal tubular epithelial cells" (EHC 15 (1980)). The effects on experimental animals were observed at dosing levels within the guidance value ranges for Category 2.
9 Specific target organs/systemic toxicity following repeated exposure	Classification not possible	—	—	—	No data available. Refer to "Tributyl Tin Oxide (ID: 1275, CAS: 56-35-9)."
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)	Category 1	Environment	Warning	Very toxic to aquatic life	It was classified into Category 1 from 48 hours LC50=4.7microg TBT/L(Tributyltinlaurate Equivalent: 7.9microg/L) of the crustacea (Daphnia magna) (EHC15, 1980).
11	Hazardous to the aquatic environment (chronic)	Category 1	Environment	Warning	Very toxic to aquatic life with long lasting effects	Since acute toxicity was Category 1 and there was no rapidly degrading (it was hydrolyzed, and triphenyltin hydroxide was generated, and was residue(existing chemical safety inspections data)), and since there was bio-accumulation (BCF=9210(triphenyltin hydroxide) (existing chemical safety inspections data)), it was classified into Category 1.