

## GHS Classification

**ID1423**

**CAS 85409-17-2**

### Physical Hazards

**Stannane, tributyl-, mono(naphthenoyloxy) derivs**

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" according to GHS definition
3 Flammable aerosols	Not applicable	—	—	—	Not aerosol products
4 Oxidizing gases	Not applicable	—	—	—	Classified as "liquid" according to GHS definition
5 Gases under pressure	Not applicable	—	—	—	Classified as "liquid" according to GHS definition
6 Flammable liquids	Classification not possible	—	—	—	No data available
7 Flammable solids	Not applicable	—	—	—	Classified as "liquid" according to GHS definition
8 Self-reactive substances and mixtures	Not applicable	—	—	—	Containing no chemical groups with explosive or self-reactive properties
9 Pyrophoric liquids	Classification not possible	—	—	—	No data available
10 Pyrophoric solids	Not applicable	—	—	—	Classified as "liquid" according to GHS definition
11 Self-heating substances and mixtures	Classification not possible	—	—	—	Test methods applicable to liquid substances are not available.
12 Substances and mixtures, which in contact with water, emit flammable gases	Classification not possible	—	—	—	Classification not possible due to lack of data, though containing Sn (a metalloid)
13 Oxidizing liquids	Classification not possible	—	—	—	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	Not applicable	—	—	—	Classified as "liquid" according to GHS definition
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 rat LD50 (oral route) value of 224mg/kg (EHC 116 (1990)).
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 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)	Category 2	Skull and crossbones	Danger	Fatal if inhaled	Because the rat LC50 (4 hour inhalation of vapour) value of 0.152mg/L (DFGOT Vol.1 (1990)) exceeded 90% of the saturated vapour concentration (9*10 <sup>-4</sup> )ppm (equivalent to 1*10 <sup>-5</sup> mg/L) under a saturated vapour pressure of 9*10 <sup>-5</sup> Pa (20degC) (EHC 116 (1990)), the substance was considered as "mist exposure" and was classified into Category 2.
2 Skin corrosion / irritation	Classification not possible	—	—	—	Insufficient data available. DFGOT vol.1 (1990) provides evidence of human health effects: "irritation reactions range from mild to severe following 4 hour exposure to the mixture of 1% TBTO, 2% TBT naphthenate or 2% TBT linoleate."
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	—	—	—	Based on the absence of data on in vivo studies and no positive data on in vitro mutagenicity tests (several indices), described in EHC 116 (1990).
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 1 (respiratory organs)	Health hazard	Danger	Causes damage to organs (respiratory organs)	Based on the evidence from animal studies including "pulmonary edema" (DFGOT Vol.1 (1999)). The effects on experimental animals were observed at dosing levels within the guidance value ranges for Category 1.  Refer to Tributyl Tin Oxide (ID: 1275, CAS: 56-35-9).
9 Specific target organs/systemic toxicity following repeated exposure	Classification not possible	—	—	—	Insufficient data available.  Refer to Tributyl Tin Oxide (ID: 1275, CAS: 56-35-9).

10	Aspiration hazard	Classification not possible	-	-	-	No data available
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### 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