

GHS Classification

ID1270

fentin acetate

CAS 900-95-8

Date Classified: Feb. 20, 2007 (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	-	-	-	There are no chemical groups associated with explosive properties present in the molecules.
2 Flammable gases	Not applicable	-	-	-	Solid (GHS definition)
3 Flammable aerosols	Not applicable	-	-	-	Not aerosol products
4 Oxidizing gases	Not applicable	-	-	-	Solid (GHS definition)
5 Gases under pressure	Not applicable	-	-	-	Solid (GHS definition)
6 Flammable liquids	Not applicable	-	-	-	Solid (GHS definition)
7 Flammable solids	Classification not possible	-	-	-	Although it is flammable (there is a description that the flash point is 185 plus or minus 5 degC in PM (13th, 2003)), there is no test data, and it cannot be classified.
8 Self-reactive substances and mixtures	Not applicable	-	-	-	There are no chemical groups associated with explosive or self-reactive properties present in the molecule.
9 Pyrophoric liquids	Not applicable	-	-	-	Solid (GHS definition)
10 Pyrophoric solids	Not classified	-	-	-	Non-pyrophoric when in contact with air at a room temperature and used as agricultural chemicals.
11 Self-heating substances and mixtures	Classification not possible	-	-	-	Test methods applicable to solid (melting point <= 140degC) substances are not available.
12 Substances and mixtures, which in contact with water, emit flammable gases	Not classified	-	-	-	Stable to water (insoluble in water)
13 Oxidizing liquids	Not applicable	-	-	-	Solid (GHS definition)
14 Oxidizing solids	Classification not possible	-	-	-	No data available
15 Organic peroxides	Not applicable	-	-	-	Organic compounds containing no -O-O- structure
16 Corrosive to metals	Classification not possible	-	-	-	Test methods applicable to solid substances are not 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 oral LD50 values : 140mg/kg and 298mg/kg (JMPR 827, 1991), we adopted the lower value (140mg/kg) to classify the substance as Category 3.
1 Acute toxicity (dermal)	Category 3	Skull and crossbones	Danger	Toxic in contact with skin	It was set as Category 3 from rat dermal LD50 = 450mg/kg (PIM(Poisons Information Monograph) 589, 1994; RTECS, 2004; HSDB, 2003).
1 Acute toxicity (inhalation: gas)	Not applicable	-	-	-	Solid (GHS definition)
1 Acute toxicity (inhalation: vapour)	Classification not possible	-	-	-	No data available
1 Acute toxicity (inhalation: dust, mist)	Category 1	Skull and crossbones	Danger	Fatal if inhaled	From rat inhalation LC50 value (male: 0.044mg/L/4H, female: 0.069mg/L/4H)(JMPR 827, 1991), the lower male data (male: 0.044mg/L/4H) was adopted, and it was set as Category 1.
2 Skin corrosion / irritation	Not classified	-	-	-	Since irritation was not indicated to skin of rabbits (CICAD 13, 1999; JMPR 827, 1991), it carried out the outside of Category.
3 Serious eye damage / eye irritation	Category 1	Corrosion	Danger	Causes serious eye damage	Since a strong injury was indicated and it did not recover to the eye of a rabbit (CICAD 13, 1999; JMPR 827, 1991), it was set as Category 1.
4 Respiratory/skin sensitization	Respiratory sensitization: Classification not possible; Skin sensitization: Category 1	(Respiratory sensitization)-; (Skin sensitization)Exclamation mark	(Respiratory sensitization)-; (Skin sensitization)Warning	(Respiratory sensitization)-; (Skin sensitization)May cause allergic skin reaction	Respiratory sensitization: no data available. Skin sensitization: since it was considered as the positive in guinea pig skin sensitization test (the Buehler method) (CICAD 13, 1999), it was referred to as Category 1.
5 Germ cell mutagenicity	Not classified	-	-	-	There is the negativity in rat and mouse dominant fatality test (JMPR 827, 1991; PIM (Poisons Information Monograph) 589 and 1994), and there is the conclusion of "Triphenyl tin compound does not indicate genotoxicity" in CICAD 13 (1999) as a result of evaluation of a series of triphenyl tin. So it is classified as the out of the Category. In addition, in the Ames test, it is considered as negative (JMPR 827, 1991). Moreover, although the positivity in an in vivo mouse peripheral blood small core test and an in vitro small core test was reported recently (RTECS, 2004), the grade of the reaction was weak. So all judged the weights of hazards to humans to be a not high.

6	Carcinogenicity	Not classified	-	-	-	The carcinogenic is not acknowledged in the carcinogenic tests using mouse (PIM (Poisons Information Monograph) 589, 1994), not considered that triphenyl tin is not carcinogenic (CICAD 13, 1999). In addition, the organotin compounds was set to A4 (not classified with a the human carcinogen) in ACGIH (ACGIH-TLV, 2005). Therefore, it carried out the outside of category.
7	Toxic to reproduction	Category 2	Health hazard	Warning	Suspected of damaging fertility or the unborn child	Since influences on reproduction or generating (increase in embryo absorption, reduction in the number of implantation and the number of survival fetus, hydroureter, and omphalocele) were seen in rats or rabbits at the dose which indicates maternal toxicity (JMPPR 827, 1991; PIM (Poisons Information Monograph) 589, 1994), and the influence of triphenyl tin compounds on reproduction and generating was seen in laboratory animals (CICAD 13, 1999). So it was set to Category 2.
8	Specific target organs/systemic toxicity following single exposure	Category 1 (central nervous system); Category 3 (respiratory tract irritation)	Health hazard	Danger	Causes damage to organs (central nervous system); May cause respiratory irritation or may cause drowsiness and dizziness (respiratory tract irritation)	Since influence on central nervous systems, such as headache and nausea, is observed in humans (CICAD 13, 1999), moreover, although there is no data of this product itself, and the potential of respiratory irritant (ATSDR, 2005; ACGIH 7th, 2001) is indicated as an organic tin compounds, it was considered as Category 1 (central nervous system) and Category 3 (respiratory irritant).
9	Specific target organs/systemic toxicity following repeated exposure	Category 1 (immune system)	Health hazard	Danger	Causes damage to organs (immune system) through prolonged or repeated exposure	Since suppression of immune responses to tetanus toxoids in a guinea pig is observed in the guidance concentration range of Category 1 (CICAD 13, 1999), and, triphenyl tin compounds may affect an immunity system and may impair this function (CICAD 13, 1999), it was classified into Category 1 (immune systems).
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	-	-	-	Insufficient data available.
11 Hazardous to the aquatic environment (chronic)	Classification not possible	-	-	-	Classification not possible due to lack of data