GHS Classification

ID1071 **copper acetoarsenite**

CAS 12002-03-8 Date Classified: Jun. 20, 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	–	–	–	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	Not classified	–	–	–	Non-combustible (HSDB, 2003)
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-combustible (HSDB, 2003)
11	Self-heating substances and mixtures	Not classified	–	–	–	Not combustible. (HSDB (2003))
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	Not classified	–	–	–	UNRTDG No. 1585, Class: 6.1; PG II (Not 5.1).
15	Organic peroxides	Not applicable	–	–	–	Inorganic compound
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 2	Skull and crossbones	Danger	Fatal if swallowed	SPECIES: Rat; ENDPOINT: LD50; VALUE: 22 mg/kg; REFERENCE SOURCE: RTECS (2003)
1	Acute toxicity (dermal)	Category 5	–	Warning	May be harmful in contact with skin	It is based on rat dermal LD50 value = 2400mg/kg (RTECS, 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)	Classification not possible	–	–	–	No data available
2	Skin corrosion / irritation	Category 3	–	Warning	Causes mild skin irritation	From description that irritation may be indicated in the human skin (SITTIG, 4th, 2002;HSFS, 1999), and description that irritation is indicated as inorganic arsenic compound (HSDB, 2003; DFGOT vol.21, 2005), it was judged that it had slight irritation and it was set as Category 3.
3	Serious eye damage / eye irritation	Category 2B	–	Warning	Causes eye irritation	Due to the descriptions that it may irritate to human eye (SITTIG 4th, 2002;HSFS, 1999), and that the dust of this product or arsenic compound shows irritation in human eye with the possibility (HSDB, 2003), it was classified into Category 2B.
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: it is not firm conclusions although skin sensitization may be shown to humans as an inorganic arsenic compound (ATSDR, 2005; PIM 42, 1996), in addition, the description in the humans "development of the skin sensitization of inorganic arsenic is rare"of EHC 224 (2001), and there is a negative report in a guinea pig examination (maximization test) as an inorganic arsenic compound (ATSDR, 2005; EHC 224, 2001), it was presupposed that it cannot classify according to the shortage of data.
5	Germ cell mutagenicity	Category 2	Health hazard	Warning	Suspected of causing genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)	There is only Ames test data (negative) in this material (HSDB, 2003). But chromosome aberration or micronucleus is induced to humans (peripheral blood) or rodents (marrow) as an inorganic arsenic compound (DFGOT vol.21, 2005; EHC 224, 2001; PATTY 5th, 2001; IARC Suppl.7, 1987; IARC 84, 2004; ATSDR draft, 2005), it is set as Category 2. In addition, the inorganic arsenic compound (As+3) was negative in the dominant fatality examination and the mouse energy proto-cell chromosomal aberration test (ATSDR draft, 2005).

6	Carcinogenicity	Category 1A	Health hazard	Danger	May cause cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)	The finding of this product is not observed, but inorganic arsenic compound is categorized into human carcinogen in IARC(IARC Suppl.7, 1987; IARC 84, 2004), ACGIH(ACGIH 7th, 2001), DFG(MAK/BAT, 2005), NTP(NTP RoC 11th, 2005). Therefore, it was clasiffied into Category 1A.
7	Toxic to reproduction	Category 2	Health hazard	Warning	Suspected of damaging fertility or the undorn child	Although there is no data of this product, in ACGIH (7th, 2001), ATSDR (draft, 2005), EHC 224 (2001), and DFGOT Vol.21 (2005), there was an opposite report. But the reproductive and developmental toxicity knowledge by inorganic arsenic was indicated to laboratory animals, it was considered as Category 2.
8	Specific target organs/systemic toxicity following single exposure	Category 1 (nervous system); Category 2 (digestive system, cardiovascular system); Category 3 (respiratory tract irritation)	Health hazard; Exclamation mark	Danger; Warning	Cause damage to organs (nervous system); May cause damage to organs (digestive system, cardiovascular system); May cause respiratory irritation or may cause drowsiness and dizziness (respiratory tract	Although there are no data for this substance, the substance was classified as Category 1 (nervous system), Category 2 (gastrointestinal system, cardio-vascular system) and Category 3 (airway irritant). Because there are reports of the effects of the substance itself on the nervous system (EHC 224, 2001), of the effects of the substance in the form of an inorganic arsenic compound on the gastrointestinal system, cardio-vascular system and nervous system (EHC 224, 2001; HSG 70, 1992), and also of airway irritant properties (HSDB, 2003; HSG 70, 1992; HSFS, 1999).
9	Specific target organs/systemic toxicity following repeated exposure	Category 2 (skin, digestive system, nervous system, lung, liver, cardiovascular system)	Health hazard	Warning	May cause damage to organs (skin, digestive system, nervous system, lung, liver, cardiovascular system) through prolonged or repeated exposure	Although there is no data of this product itself, since it effects on the skin, a gastrointestinal, nervous systems, lungs, liver, and a cardiovascular system by an inorganic arsenic (EHC 224, 2001;HSG 70, 1992), it was classified into Category 2 (the skin, a gastrointestinal, a nervous systems, lungs, liver, cardiovascular system).
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 96-hour LC50=286microg/L of fishes (Coho salmon) (HSDB, 2004).
11	Hazardous to the aquatic environment (chronic)	Category 1	Environment	Warning	Very toxic to aquatic life with long lasting effects	Classified into Category 1, since acute toxicity was Category 1, and it is a metallic compound, behavior in water and bioaccumulative potential are unknown.