

## GHS Classification

**ID273**

**CAS 544-92-3**

### Physical Hazards

## Copper cyanide

Date Classified: Jun. 20, 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 "solid" according to GHS definition
3 Flammable aerosols	Not applicable	—	—	—	Not aerosol products
4 Oxidizing gases	Not applicable	—	—	—	Classified as "solid" according to GHS definition
5 Gases under pressure	Not applicable	—	—	—	Classified as "solid" according to GHS definition
6 Flammable liquids	Not applicable	—	—	—	Classified as "solid" according to GHS definition
7 Flammable solids	Not classified	—	—	—	Non-flammable (HSDB, 2006)
8 Self-reactive substances and mixtures	Not applicable	—	—	—	Containing no chemical groups with explosive or self-reactive properties
9 Pyrophoric liquids	Not applicable	—	—	—	Classified as "solid" according to GHS definition
10 Pyrophoric solids	Not classified	—	—	—	Non-combustible (HSDB, 2006)
11 Self-heating substances and mixtures	Not classified	—	—	—	Non-combustible (HSDB, 2006)
12 Substances and mixtures, which in contact with water, emit flammable gases	Not classified	—	—	—	Stable to water (substantially insoluble, Merck (13th, 2001))
13 Oxidizing liquids	Not applicable	—	—	—	Classified as "solid" according to GHS definition
14 Oxidizing solids	Not applicable	—	—	—	Inorganic compounds containing no oxygen or halogen
15 Organic peroxides	Not applicable	—	—	—	Not organic compounds
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 4	Exclamation mark	Warning	Harmful if swallowed	Based on the rat LD50 (oral route) value of 1,265mg/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 "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
3 Serious eye damage / eye irritation	Classification not possible	—	—	—	No data available
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: Copper is classified into "Skin Sensitizing Substance" by the Japanese Society of Occupational Allergy, and "Skin Sensitizing Substance: Group 2" by the Japan Society for Occupational Health. (Note that the category refers to the substance concerned and its compounds, but does not identify all substances causing respiratory/skin sensitization.) These classifications apply to the present substance. Copper cyanide is thus classified into Category 1, though no data are available on animal and/or epidemiological studies for sensitization.
5 Germ cell mutagenicity	Classification not possible	—	—	—	No data available As for the health hazards, refer to "ID850, Copper, CAS: 7440-50-8."
6 Carcinogenicity	Classification not possible	—	—	—	No data available As for the health hazards, refer to "ID850, Copper, CAS: 7440-50-8."
7 Toxic to reproduction	Classification not possible	—	—	—	No data available As for the health hazards, refer to "ID850, Copper, CAS: 7440-50-8."
8 Specific target organs/systemic toxicity following single exposure	Classification not possible	—	—	—	No data available

9	Specific target organs/systemic toxicity following repeated exposure	Category 1 (central nervous system, respiratory organs) Category 2 (kidneys, spleen, liver, blood system)	Health hazard	Danger Warning	Causes damage to organs through prolonged or repeated exposure (central nervous system, respiratory organs) May cause damage to organs through prolonged or repeated exposure (kidneys, spleen, liver, blood)	Based on the human evidence including "headache, weakness, dysgeusia, dysosmia, dizziness, irritation of the pharynx, vomiting, dyspnea, lacrimation, salivation and anterior chest pain" (CICAD 61 (2004)), "the central nervous system is considered to be the most sensitive organ; respiratory depression is observed" (HSDB (2003)), and the evidence from animal studies including "tremor, spasm, laboured breathing" (CICAD 61 (2004)), "hemoglobin deposition in the cytoplasm of the proximal renal tubular epithelium, granular deposition in the spleen and liver, hyperplasia of the hematogenous tissues and hemolytic anemia" (IRIS (1987)). The effects on experimental animals were observed at dosing levels within the guidance value ranges for Category 2.
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