

GHS Classification

ID1066

dicadmium selenide sulphide

CAS 12214-12-9

Date Classified: Apr. 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	Classification not possible	-	-	-	No data available
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	-	-	-	The use is for a pigment, and even if it contacts the normal temperature air, it does not ignite spontaneously.
11 Self-heating substances and mixtures	Classification not possible	-	-	-	No data 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	Not applicable	-	-	-	Inorganic compounds containing no oxygen and halogen.
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 5	-	Warning	May be harmful if swallowed	It was classified as category 5 from rat LD50= 2425mg/kg (RTECS (2004)). * Since this product has little data, refer also to the classification result of the cadmium sulfides (ID No.0252, CAS No.1306-23-6) which is one of the component for each item of the healthy hazards.
1 Acute toxicity (dermal)	Classification not possible	-	-	-	No data available
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	Classification not possible	-	-	-	No data available
3 Serious eye damage / eye irritation	Category 2A-2B	Exclamation mark	Warning	Causes serious eye irritation	Although there was no data about this product, it irritates to the eye as selenium compound in ACGIH-TLV(2004). Since there was no data used as the index of subdivision, it was classified into Category 2A-2B. [Indication] 2A is recommended based on the safety, when the Category needs to subdivide.
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)-	No data available
5 Germ cell mutagenicity	Classification not possible	-	-	-	Without data. (It has classified with 3A as an inorganic cadmium compound according to MAK/BAT (2004). Germ-cell mutagenicity is suspected.)

6	Carcinogenicity	Category 1A-1B	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 classification as cadmium compounds in IARC53 (1993), NTP RoC (11th, 2005), and industrial hygiene academic society advice (2004) (Group 1, Known to be human carcinogens, 1, respectively) corresponds to Category 1A, and the classification as cadmium compounds in IRIS (1992) and ACGIH-TLV (2004) (B1, B2, respectively) corresponds to Category 1B. Since the newness etc. of sources of the both Category were almost equivalent, it was classified into Category 1A-1B. [Indication] 1A is recommended based on the safety, when the Category needs to subdivide.
7	Toxic to reproduction	Category 1B	Health hazard	Danger	May damage fertility or the unborn child	It is supposed that reproductive toxicity is observed in sire as cadmium in California Proposition 65 (California EPA/OEHHA, 2005). It was considered as Category 1B.
8	Specific target organs/systemic toxicity following single exposure	Category 3 (respiratory tract irritation)	Exclamation mark	Warning	May cause respiratory irritation or may cause drowsiness and dizziness (respiratory tract)	No data available. NOTE: Classified into Category 3 (Respiratory tract irritation). It is based on the evidence that selenium compounds are respiratory tract irritants (ACGIH-TLV (2004)).
9	Specific target organs/systemic toxicity following repeated exposure	Category 1 (kidneys)	Health hazard	Danger	Causes damage to organs (kidneys) through prolonged or repeated	Although there is no data about this product, it is supposed that it has effect on the kidney by repeated exposure of cadmium compounds in ACGIH-TLV (2004) of Priority 1 document. It was classified into Category 1 (kidney).
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.