GHS Classification

ID1150 cadmium distearate, pure

CAS 2223-93-0 Date Classified: Sep. 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	–	–	–	Even if it contacts the normal temperature air, it does not ignite spontaneously. (Since it is a kind of metal soap and the melting point is also as high as 103 – 110 degC.)
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 (almost 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 -0-0- 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 4	Exclamation mark	Warning	Harmful if swallowed	Category 4 based on SPECIES: Rat; ENDPOINT: LD50;VALUE:1125mg/kg; REFERENCE SOURCE: RTECS (2004)
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)	Category 2	Skull and crossbones	Danger	Fatal if inhaled	It was set as Category 2 based on rat LC50 = 0.13mg/L/2H (0.065mg/L/4H by 4-hour exchange) (RTECS, 2004).
2	Skin corrosion / irritation	Classification not possible	–	–	–	No data available
3	Serious eye damage / eye irritation	Category 2B	–	Warning	Causes eye irritation	There is the description that it irritates to the eye (HSDB (2005)) as cadmium dust, and it was classified into Category 2B.
4	Respiratory/skin sensitization	Respiratory sensitization: Classification not possible; Skin sensitization: Classification not	(Respiratory sensitization)–; (Skin sensitization)–	(Respiratory sensitization)–; (Skin sensitization)–	(Respiratory sensitization)–; (Skin sensitization)–	No data available
5	Germ cell mutagenicity	Classification not possible	–	–	–	No data. In addition, the inorganic cadmium compound is classified into the germ cell mutagenicities 3A (equivalent to GHS Category 1B-2) according to MAK/BAT (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 classification as cadmium compounds in IARC58 (1993), NTP RoC(11th, 2005), and industrial hygene academic society advice (2005) (Group 1, Known to be human carcinogens, 1, respectively) corresponds to Category 1A, and the classification as cadmium compounds in IRIS(1992), ACGIH-TLV(2005) (B1, A2, respectively) corresponds to Category 1B. But more severe classification is applied. Therefore, it was classified into Caategory 1A.
7	Toxic to reproduction	Classification not possible	-	-	-	Although HSDB (2005) has a description that the testicular inflammation was induced by oral administration to rats, and a description that teratogenic is suspected in humans by SITTIG (4th, 2002), data is insufficient, it cannot classify.
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 (kidneys); Category 2 (blood)	Health hazard	Danger	Causes damage to organs (kidneys) through prolonged or repeated exposure; May cause damage to organs (blood) through prolonged	Because in ACGIH-TLV (2005) of Priority 1 document, it is supposed that cadmium compounds have renal effects and HSDB (2005) in Priority 2 document also had a description of the renal effect by this product, it classified into Category 1 (kidney). Moreover, because HSDB (2005) in Priority 2 document had a description of the effect on human blood, it classified into Category 2 (blood).
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=6microg/L of fishes (Rainbow trout), and others (AQUIRE, 2003).
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.