

GHS Classification

ID258

Cadmium carbonate

CAS 513-78-0

Date Classified: May 24, 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	-	-	-	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	Classification not possible	-	-	-	No data available
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	Classification not possible	-	-	-	No data available
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 (substantially insoluble, Merck (13th, 2001))
13 Oxidizing liquids	Not applicable	-	-	-	Classified as "solid" according to GHS definition
14 Oxidizing solids	Not applicable	-	-	-	Cannot be classified due to the absence of data, though being inorganic compounds containing oxygen
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) of 438mg/kg (RTECS (2005)).
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: Classification not possible	(Respiratory sensitization) - (Skin sensitization) -	(Respiratory sensitization) - (Skin sensitization) -	(Respiratory sensitization) - (Skin sensitization) -	Respiratory sensitization: No data available Skin sensitization: No data available
5 Germ cell mutagenicity	Classification not possible	-	-	-	No data available As for the germ cell mutagenicity of cadmium, refer to "ID254, Cadmium Chloride, CAS: 10108-64-2."
6 Carcinogenicity	Category 1A	Health hazard	Danger	May cause cancer	Due to the fact that the substance is classified as Category K (as Cadmium and Cadmium Compounds) by NTP (2005), Group 1 (as Cadmium and Cadmium Compounds) by IARC (1993) and Category 1 (as Cadmium and Cadmium Compounds) by the Japan Society for Occupational Health.
7 Toxic to reproduction	Classification not possible	-	-	-	No data available As for the reproductive toxicity of cadmium, refer to "ID254, Cadmium Chloride, CAS: 10108-64-2."
8 Specific target organs/systemic toxicity following single exposure	Category 1 (respiratory organs)	Health hazard	Danger	Causes damage to organs (respiratory organs)	Based on the evidence from animal studies including "discoloration and hemorrhage of the lung and gastrointestinal tract" (HSDB (1999)), "rhonchus and tachypnea" (ATSDR (1999)). The effects were observed at dosing levels within the guidance value ranges for Category 1. The acute toxicity of cadmium compounds manifests in humans as "chemical pneumonia and pulmonary edema following inhalation exposure, and acute/severe nausea, vomiting and gastralgia after oral exposure" (EHC 134 (1992)).
9 Specific target organs/systemic toxicity following repeated exposure	Classification not possible	-	-	-	No data available The chronic toxicity of cadmium compounds manifests as "renal failure, pulmonary emphysema" (EHC 134 (1992)), "hypercalcinuria, a decrease in blood phosphate levels, nephrolithiasis, osteoporosis and osteomalacia" (CaPSAR (1994)).
10 Aspiration hazard	Classification not possible	-	-	-	No data available

Environmental Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
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11	Hazardous to the aquatic environment (acute)	Classification not possible	-	-	-	Classification not possible due to lack of data
11	Hazardous to the aquatic environment (chronic)	Category 4	-	-	May cause long lasting harmful effects to aquatic life	Since although acute toxicity is not reported within the aqueous solubility concentrations, it was a metallic compound, and the underwater action was unknown, it was classified into Category 4.