

GHS Classification

ID257

Cadmium hydroxide

CAS 21041-95-2

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 (water solubility: 0.15mg/100g (20degC), Lide (84th,2003))
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 3	Skull and crossbones	Danger	Toxic if swallowed	Based on the rat LD50 (oral route) of 300mg/kg (HSDB (1999)).
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	-	-	-	Insufficient data available
3 Serious eye damage / eye irritation	Classification not possible	-	-	-	Insufficient 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	Classification not possible	-	-	-	No data available 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)), "hypercalcaemia, 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
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
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