

GHS Classification

ID1142

dimercury dichloride

CAS 7546-30-7

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	Not classified	-	-	-	Non-combustible (ICSC (J) (2000))
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	-	-	-	Non-combustible (ICSC (J), 2000)
11 Self-heating substances and mixtures	Not classified	-	-	-	Not combustible (ICSC(J) (2000))
12 Substances and mixtures, which in contact with water, emit flammable gases	Not classified	-	-	-	Stable to water (the water solubility is obtained)
13 Oxidizing liquids	Not applicable	-	-	-	Solid (GHS definition)
14 Oxidizing solids	Classification not possible	-	-	-	No data available
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 3	Skin and eye irritation	Danger	Toxic if swallowed	SPECIES: Rat; ENDPOINT: LD50;VALUE:210mg/kg; REFERENCE SOURCE: RTECS (2003)
1 Acute toxicity (dermal)	Category 4	Exclamation mark	Warning	Harmful in contact with skin	It is based on rat dermal LD50= 1500mg/kg (RTECS, 2003).
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	Category 2	Exclamation mark	Warning	Causes skin irritation	From description (ICSC, 2000;CICAD, 50, 2003 ;DFGOT [as inorganic mercury compounds], vol.15, 2001 [as inorganic mercury compounds]) that the possibility indicates humans skin irritation. It thought that there was irritation and was set as Category 2.
3 Serious eye damage / eye irritation	Category 2B	-	Warning	Causes eye irritation	It was classified into Category 2B due to the description that it irritates to the human eye (ICSC, 2000) .
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: since metallic mercury and inorganic mercury compound (as Hg) were made into those with skin sensitization (MAK/BAT, 2005; DFGOT, vol.15, 2001), they were set to category 1.
5 Germ cell mutagenicity	Category 2	Health hazard	Warning	Suspected of causing genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)	In ATSDR (1999), it estimated that mercury and mercury compounds induced chromosomal abnormality to the animal somatic cell in an in vivo. So they were set to Category 2.
6 Carcinogenicity	Not classified	-	-	-	As inorganic mercury compounds, since it is categorized as IARC Group 3 (IARC, 58, 1993) and ACGIH A4 (ACGIH-TLV, 2004), it was out of the Category.

7	Toxic to reproduction	Category 2	Health hazard	Warning	Suspected of damaging fertility or the unborn child	As mercury and mercury compounds or inorganic mercuries, the effect on generating (California EPA, Proposition 65 List of Chemicals, 2005) and reproductive (ACGIH-TLV, 2004) are described. And it was set as Category 2.
8	Specific target organs/systemic toxicity following single exposure	Category 1 (kidneys); Category 3 (respiratory tract irritation)	Health hazard; Exclamation mark	Danger; Warning	Causes damage to organs (kidneys); May cause respiratory irritation or may cause drowsiness and dizziness (respiratory tract irritation)	Since as description in the humans in Priority 1 document, target organ as inorganic mercury compounds is the kidney (DFGOT, vol.15, 2001), and respiratory irritant was described as description in the humans in Priority 2 document (ICSC, 2000), it was considered as Category 1 (kidney) and Category 3 (respiratory irritant).
9	Specific target organs/systemic toxicity following repeated exposure	Category 1 (central nervous system, kidneys)	Health hazard	Danger	Causes damage to organs (central nervous system, kidneys) through prolonged or repeated exposure	Because of the description in Priority 1 document that it affects central nervous system and kidneys of human body as inorganic mercury compounds or calomel-containing laxatives (ACGIH-TLV, 2004; EHC, 118, 1991; CICAD, 50, 2003), and of suggestion in Priority 2 document that it affects nervous system and a kidney (ICSC, 2000), it was classified into Category 1 (central nervous system, 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.