

GHS Classification

ID1204

lead hexafluorosilicate

CAS 25808-74-6

Date Classified: Aug. 22, 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 (BGIA, GESTIS-database on hazardous substances, Accessed in 2006)
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 (BGIA, GESTIS-database on hazardous substances, Accessed in 2006)
11 Self-heating substances and mixtures	Not classified	-	-	-	Non-combustible (GESTIS-database on hazardous substances, accessed in 2006)
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)	Classification not possible	-	-	-	No data available
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, fluoride irritates to the eye in ACGIH-TLV(2005). So it was classified into Category 2A-2B. In addition, it is difficult to subdivide the Category.
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	-	-	-	No data. In addition, in ATSDR (draft, 2005), there is the description that lead induces chromosome aberration to humans, and the inorganic lead compound is classified into the germ cell mutagenicities 3A (equivalent to GHS Category 1B-2) according to MAK/BAT (2005).

6	Carcinogenicity	Category 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)	There is no data of this product. But as lead compounds, it corresponds to Category 1B (inorganic lead compounds, Group 2A) in IARC87 (2004), it corresponds to Category 1B-2(Reasonably anticipated to be human carcinogens) in NTPRoC (11th, 2005), it corresponds to Category 2 (B-2, A3, 2B, respectively) in IRIS (1993), ACGIH-TLV (2005), and industrial hygiene academic society advice (2005). According these results, It was classified into Category 1B according to Group 2A of IARC87 (2004).
7	Toxic to reproduction	Category 1A	Health hazard	Danger	May damage fertility or the unborn child	Although there was no this product data, in ACGIH-TLV (2005) and ATSDR (draft, 2005) which is Priority 1 documents, say that lead (inorganic lead compound) causes reproductive toxicity in humans. So it was set as Category 1A.
8	Specific target organs/systemic toxicity following single exposure	Category 1 (central nervous system, blood system, kidneys); Category 3 (respiratory tract irritation)	Health hazard	Danger	Causes damage to organs (central nervous system, blood system, kidneys); May cause respiratory irritation or may cause drowsiness and dizziness (respiratory tract	Although there is no data about this product, since there is description that "almost the same symptom in acute effects and chronic effects are is observed" as human impact of inorganic lead compound in CERH Hazard Data 2001-9 (2001) of Priority 1 document, and in ACGIH-TLV (2005), inorganic lead compound has effect on the central nervous systems, blood, and renal, it was considered as Category 1 (a central nervous system, blood, kidney). Moreover, in ACGIH-TLV (2005), it is supposed that fluoride has respiratory irritant. It was considered as Category 3 (respiratory irritant).
9	Specific target organs/systemic toxicity following repeated exposure	Category 1 (bone, central nervous system, blood, kidneys)	Health hazard	Danger	Causes damage to organs (bone, central nervous system, blood, kidneys) through prolonged or	Although there is no data of this product, since there is a description of the influence on a bone (fluorosis) of fluoride (ACGIH-TLV (2005) of Priority 1 document), and of the influence on a central nervous system, blood, and the kidney of an inorganic lead compound, it was classified into Category 1 (bone, central nervous system, blood, and 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.