

GHS Classification

ID1199

CAS 16893-85-9

Physical Hazards

Silicate(2-), hexafluoro-, disodium

Date Classified: Aug. 22, 2006 (Environmental Hazards: Mar. 31, 2006)

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) (1994))
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), 1994)
11 Self-heating substances and mixtures	Not classified	-	-	-	Not combustible (ICSC(J) (1994))
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	Not classified	-	-	-	UNRTDG No. 2674, Class: 6.1; PG III (Not 5.1).
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	Skull and crossbones	Danger	Toxic if swallowed	Based on the LD50 = 125mg/kg in the oral administration tests with rats (RTECS, 2003; IUCLID, 2000; HSDB, 2003), the substance was classified as Category 3.
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	Category 3	-	Warning	Causes mild skin irritation	From the description of redness and the pain which stimulate the human skin (ICSC, 1994;SITTIG, 2002) and the description of a mild degree stimulus and weak congestion in the rabbit skin (RTECS, 2003;IUCLID, 2000), it thought that there was mild irritation and it was set as category 3.
3 Serious eye damage / eye irritation	Category 2A	Exclamation mark	Warning	Causes serious eye irritation	Due to the descriptions that it irritates to the eye, causes redness and pain (ICSC, 1994;SITTIG, 2002), and that irritates to rabbit eye and the obstacle to cornea (RTECS, 2003;IUCLID, 2000), it was classified into Category 2A.
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	-	-	-	There is no result of in vivo mutagenicity test and there is the result that the in vitro mutagenicity test (Ames test) is negative (IUCLID, 2000). But it cannot be classified because of insufficient data.
6 Carcinogenicity	Classification not possible	-	-	-	Although fluoride was classified into A4 (corresponding to outer Category) in ACGIH-TLV (2005), due to insufficient data, it cannot be classified.
7 Toxic to reproduction	Classification not possible	-	-	-	Although there is no developmental toxicity in fluoride according to MAK/BAT (2005), it cannot be classified since data is insufficient.

8	Specific target organs/systemic toxicity following single exposure	Category 2 (heart); Category 3 (respiratory tract irritation)	Health hazard	Warning	May cause damage to organs (heart); May cause respiratory irritation or may cause drowsiness and dizziness (respiratory tract irritation)	It was considered as Category 2 (heart) base on the description that "calcium metabolism is affected and a heart problem is produced" in ICSC (1994) of Priority 2 document. Moreover, it was considered as Category 3 (respiratory irritant) based on the description that fluoride has an airway irritation in ACGIH-TLV (2005) of Priority 1 document, in addition, "an airway is stimulated" in ICSC (1994) of priority 2 document.
9	Specific target organs/systemic toxicity following repeated exposure	Category 1 (bone)	Health hazard	Danger	Causes damage to organs (bone) through prolonged or repeated exposure	It is classified into Category 1 (bone) based on the description of the effect on a bone (fluorosis) of fluoride (ACGIH-TLV (2005) of Priority 1 document), and in addition, the description of "a bone is affected and fluorosis is occurred" (ICSC (1994) of priority 2 document).
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 3	-	-	Harmful to aquatic life	It was classified into Category 3 from 96-hour LC50=49000microg/L of fishes (Bluegill) (AQUIRE, 2003).
11 Hazardous to the aquatic environment (chronic)	Category 3	-	-	Harmful to aquatic life with long lasting effects	Classified into Category 3, since acute toxicity was Category 3, and behavior in water and bioaccumulative potential are unknown.