

GHS Classification

ID1197

Dipotassium hexafluorosilicate

CAS 16871-90-2

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 (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. 2655, 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	Skin and	Danger	Toxic if swallowed	Category 3 based on SPECIES: Rat; ENDPOINT: LD50; VALUE: 156mg/kg; REFERENCE SOURCE: RTECS (1998)
1 Acute toxicity (dermal)	Classification not possible	-	-	-	Classified into R24 according to EU-Annex. But there was no dermal administration examination for animals, it cannot be classified due to insufficient data.
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	-	-	-	Classified into R23 according to EU-Annex. But there was no inhalation medication examination for an animal. So it cannot classify since data is insufficient.
2 Skin corrosion / irritation	Category 3	-	Warning	Causes mild skin irritation	Since there was description (ICSC, 1994) that a stimulus of the human skin, reddening, and a pain, it thought that there was mild irritation and it was set as category 3.
3 Serious eye damage / eye irritation	Category 2B	-	Warning	Causes eye irritation	Due to the descriptions that it irritates to human eye (ICSC, 1994), it is considered it has mildly irritation. Soit is classified into Category 2B.
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 available
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 3 (respiratory tract irritation)	Exclamation mark	Warning	may cause respiratory irritation or may cause drowsiness and dizziness (respiratory tract irritation)	It was considered as Category 3 (respiratory irritant) based on the description that it has respiratory irritant in fluoride in ACGIH-TLV (2005) of Priority 1 document, in addition, and "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	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)	Classification not possible	-	-	-	No data available
11 Hazardous to the aquatic environment (chronic)	Classification not possible	-	-	-	No data available.