GHS Classification

ID1293 copper difluoride

CAS 7789-19-7 Date Classified: Sep. 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	–	–	–	Nonflammable (if strong heat is added, it will decompose and the fumes and fluorination hydrogen gas of copper oxides (II) will occur, but there is no flammability in this product by itself).
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	–	–	–	Nonflammable (strong heating results in its decomposition and generation of fumes and fluorinated hydrogen gas of copper oxides (II), but there is no flammability in this substance itself).
11	Self-heating substances and mixtures	Not classified	–	–	–	Nonflammable (if strong heat is carried out, it will decompose and the fumes and fluorination hydrogen gas of copper oxides (II) will occur, but there is no flammability in this product by itself).
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 is no this product data, fluoride is irritating to the eyes in ACGIH-TLV (2005). So it is set as Category 2A-2B. In addition, detailed categorization is difficult.
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	–	–	–	Fluoride was categoried into A4 according to ACGIH-TLV (2005) and copper was categoried into D (both are corresponding to outside of category) according to IRIS (1991). But it was presupposed that it cannot be classified since data is insufficient.
7	Toxic to reproduction	Classification not possible	–	–	–	Although MAK/BAT (2005) states that there is no developmental toxicity in fluoride, it was judged to be unclassifiable due to insufficient data.

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)	In ACGIH-TLV (2005) of Priority 1 document, 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)	Health hazard	Danger	Causes damage to organs (bone) through prolonged or repeated	In ACGIH-TLV (2005) of Priority 1 document, it is supposed that fluoride has the influence on a bone (fluorosis). Therefore, it was classified into Category 1 (bone).
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.