

GHS Classification

ID1107

zinc nitrate

CAS 7779-88-6

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 classified	-	-	-	Not classified based on UNRTDG No. 1514, Class: 5.1, PGIII, though containing N-O bonds as chemical groups associated with explosive properties present. The substance has a high reactivity and could explode by the contact of the combustible, fire, or heat (HSDB, 2003).
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 (HSDB, 2003). (However, this product is high reactive and combustion may be promoted by a contact with combustible (HSDB, 2003))
8 Self-reactive substances and mixtures	Not applicable	-	-	-	Classified in oxidizing solids
9 Pyrophoric liquids	Not applicable	-	-	-	Solid (GHS definition)
10 Pyrophoric solids	Not classified	-	-	-	Non-combustible (HSDB, 2003)
11 Self-heating substances and mixtures	Not classified	-	-	-	Not combustible. (HSDB (2003))
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	Category 2	Flame over circle	Danger	May intensify fire; oxidizer	UNRTDG No. 1514, Class: 5.1; PG II.
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 4	Exclamation mark	Warning	Harmful if swallowed	Category 4 based on SPECIES: Rat;female ENDPOINT: LD50; VALUE: 1400mg/kg; REFERENCE SOURCE: HSDB (2003)
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 2	Exclamation mark	Warning	Causes skin irritation	From description that shows "the skin reddening/hurts and the skin is stimulated" (ICSC, 1994;HSFS, 2003), and description that "the zinc salts of strong acids indicates skin corrosivity" (PIM G020 (Poisons Information Monographs, WHO/IPCS), 1994), it was set as category 2.
3 Serious eye damage / eye irritation	Category 2B	-	Warning	Causes eye irritation	Due to the description that "it irritates to the eye, causes redness, pain and bleary eyes" (ICSC, 1994;HSFS, 2003), it has slight irritation. Therefore, it was 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 it is categorized as zinc compounds into I in IRIS (2005) (corresponding to outer Category) , due to insufficient data, it cannot be classified.
7 Toxic to reproduction	Classification not possible	-	-	-	No data available

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)	The substance was classified as Category 3 (airway irritant) because of the reports of airway irritant properties in Priority 2 documents (ICSC, 1994; HSFS, 2003).
9	Specific target organs/systemic toxicity following repeated exposure	Classification not possible	-	-	-	No data available
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.