

GHS Classification

ID1398

Calcium hypochlorite

CAS 7778-54-3

Date Classified: Feb. 20, 2007 (Environmental Hazards: Mar. 23, 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	-	-	-	UNRTDG Class: 5.1
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 (NFPA (12th, 1997) p 49-34, Hommel, 1991) Card No.59, 59a, 59b ; etc.)
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 (NFPA (12th, 1997) p 49-34, Hommel, 1991) Card No.59, 59a, 59b etc.)
11 Self-heating substances and mixtures	Not classified	-	-	-	Non-combustible (NFPA (12th, 1997) p 49-34, Hommel(1991) Card No.59, 59a, 59b; etc.)
12 Substances and mixtures, which in contact with water, emit flammable gases	Not classified	-	-	-	UNRTDG Class: 5.1
13 Oxidizing liquids	Not applicable	-	-	-	Solid (GHS definition)
14 Oxidizing solids	Category 2	Flame over circle	Danger	May intensify fire; oxidizer	UNRTDG Class: 5.1; PG II
15 Organic peroxides	Not applicable	-	-	-	Inorganic substance
16 Corrosive to metals	Not classified	-	-	-	UNRTDG Class: 5.1

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; ENDPOINT: LD50; VALUE: :850mg/kg; REFERENCE SOURCE: RTECS (2005), IUCLID (2000), HSDB (2005)
1 Acute toxicity (dermal)	Category 5	-	Warning	May be harmful in contact with skin	It was set as Category 5 based on rabbit LD50 >2000mg/kg (IUCLID (2000)) and rabbit LDLo value: 2000mg/kg (RTECS (2005)).
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 1A-1C	Corrosion	Danger	Causes severe skin burns and eye damage	It was set as category 1A-1C from the description that the degree of middle class or serious damage is caused on the skin (HSDB (2005)), the description that the skin is stimulated seriously (HSFS (2003)), and the description that skin corrosiveness was admitted by the test using the rabbit (IUCLID (2000)).
3 Serious eye damage / eye irritation	Category 1	Corrosion	Danger	Causes serious eye damage	It is set as Category 1 from description that an eye is seriously stimulated by contact (HSFS (2003)), and description that caustic is admitted by the eye irritation tests using the animal (IUCLID (2000)).
4 Respiratory/skin 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	-	-	-	Classification not possible due to lack of data
6 Carcinogenicity	Not classified	-	-	-	Since it was classified into the group 3 according to IARC, it carried out the outside of Category.
7 Toxic to reproduction	Classification not possible	-	-	-	Although there is a statement that any effect was not found in teratogenicity studies by oral administration to pregnant rats (IUCLID (2000)), there was no statement which clearly denies the hazard in Priority 1. So it was unclassifiable.
8 Specific target organs/systemic toxicity following single exposure	Category 2 (respiratory organs)	Health hazard	Warning	May cause damage to organs (respiratory organs)	From the description in HSDB (2005) and HSFS (2003) that it stimulates lungs by inhalation, pulmonary edemas may be caused, and respiratory system is considered as target organ, so it was considered as Category 2.

9	Specific target organs/systemic toxicity following repeated exposure	Classification not possible	-	-	-	Classification not possible due to lack of data
10	Aspiration hazard	Classification not possible	-	-	-	Insufficient data available.

Environmental Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
11 Hazardous to the aquatic environment (acute)	Category 1	Environment	Warning	Very toxic to aquatic life	It was classified into Category 1 from 96-hour LC50=0.049-0.16mg/L of fishes (Bluegill) (IUCLID, 2000).
11 Hazardous to the aquatic environment (chronic)	Category 1	Environment	Warning	Very toxic to aquatic life with long lasting effects	Classified into Category 1, since acute toxicity was Category 1, though less bio-accumulative and behavior in water is unknown.