

GHS Classification

ID1338

hydroxylammonium chloride

CAS 5470-11-1

Date Classified: May 24, 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 because of non-combustible (but explodes over 115degC, according to ICSC(J), 1997), though the substance is a hydroxylamine containing N-O bonds as chemical groups associated with explosive properties present.
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) (1997))
8 Self-reactive substances and mixtures	Not classified	-	-	-	Although the grouping relevant to explosive (N-O) is included, explosion is not caused if not exposed to high. Moreover, the grouping relevant to autoreactive was not included, it carried out the outside of Category. (However, in Japan, it is designated as second sort self-reactive substance as hydroxylamine etc. in fire defense laws with the serious occurrence of explosion accident of hydroxylamine.)
9 Pyrophoric liquids	Not applicable	-	-	-	Solid (GHS definition)
10 Pyrophoric solids	Not classified	-	-	-	Non-combustible (ICSC (J), 1997)
11 Self-heating substances and mixtures	Not classified	-	-	-	Not combustible (ICSC(J) (1997))
12 Substances and mixtures, which in contact with water, emit flammable gases	Not applicable	-	-	-	The chemical structure of the substance does not contain metals or metalloids(B, Si, P, Ge, As, Se, Sn, Sb, Te, Bi, Po, At).
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)	Category 3	Skull and crossbones	Danger	Toxic if swallowed	Based on the oral LD50 = 141mg/kg in rats (RTECS (1997)), 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 2	Exclamation mark	Warning	Causes skin irritation	Since there is the description which indicates skin stimulation (redness, pain) in Priority 2 (ICSC (1997)) and R36/38 is indicated of European risk phrases, it was set as category 2.
3 Serious eye damage / eye irritation	Category 2A-2B	Exclamation mark	Warning	Causes serious eye irritation	There is the description (redness, pain) which indicates the ocular stimulus in Priority 2 (ICSC(1997)), and EU risk phrases is R36/38. So it is set as Category 2A-2B. [Display] When the detailed categorization needs to be performed, it is desirable to be set as Category 2A from a viewpoint of safety.
4 Respiratory/skin sensitization	Respiratory sensitization: Classification not possible; Skin sensitization: Category 1	(Respiratory sensitization)-; (Skin sensitization)Exclamation mark	(Respiratory sensitization)-; (Skin sensitization)Warning	(Respiratory sensitization)-; (Skin sensitization)May cause allergic skin reaction	Respiratory sensitization: no data available. Skin sensitization : in addition to the description (ICSC(1995), SITIG(4th, 2002)) in Priority 2 "sensitization of the skin may be carried out by repetition or long-term contact", the EU risk phrases is R43, and it is German MAK Liszt's Sensitization substance (Sh), it is referred to as Category 1.
5 Germ cell mutagenicity	Classification not possible	-	-	-	Classification not possible due to lack of data
6 Carcinogenicity	Classification not possible	-	-	-	No data available
7 Toxic to reproduction	Classification not possible	-	-	-	Classification not possible due to lack of data

8	Specific target organs/systemic toxicity following single exposure	Category 2 (blood system); Category 3 (respiratory tract irritation)	Health hazard; Exclamation mark	Warning	May cause damage to organs (blood system); May cause respiratory irritation or may cause drowsiness and dizziness (respiratory tract irritation)	Since there was description that in Priority 2, "it stimulates eyes, the skin, and a respiratory tract to humans. It effects on red blood cells, and methemoglobin is generated" (ICSC (1997)), it was considered as Category 2 (blood) and Category 3 (respiratory irritant).
9	Specific target organs/systemic toxicity following repeated exposure	Classification not possible	-	-	-	Since there is no information which can be used for a classification in Priority 1 and 2, it cannot be classified because of insufficient data.
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	-	-	-	Insufficient data available.
11 Hazardous to the aquatic environment (chronic)	Classification not possible	-	-	-	Classification not possible due to lack of data