

GHS Classification

ID871

Disodium disulphite

CAS 7681-57-4

Date Classified: Aug. 18, 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
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
11 Self-heating substances and mixtures	Not classified	-	-	-	Air oxidations Speeds is very slow.
12 Substances and mixtures, which in contact with water, emit flammable gases	Not classified	-	-	-	The aqueous solution is stable.
13 Oxidizing liquids	Not applicable	-	-	-	Solid (GHS definition)
14 Oxidizing solids	Not classified	-	-	-	Reducing substance
15 Organic peroxides	Not applicable	-	-	-	Inorganic substance
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; ENDPOINT: LD50; 1310mg/kg; (Ave. value)
1 Acute toxicity (dermal)	Classification not possible	-	-	-	Classification not possible due to lack of data
1 Acute toxicity (inhalation: gas)	Not applicable	-	-	-	Solid
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	-	-	-	Nonvolatile solid
2 Skin corrosion / irritation	Classification not possible	-	-	-	Although an animal experiment shows unstimulation, there is also information that an irritation is given to humans with concentrated solution.
3 Serious eye damage / eye irritation	Category 2B	-	Warning	Causes eye irritation	Since there is a Mild stimulate and has been recovered in three days (ECETOC Report), it was set as "Category 2B".
4 Respiratory/skin sensitization	Respiratory sensitization: Category 1; Skin sensitization: Category 1	(Respiratory sensitization)Health hazard; (Skin sensitization)Exclamation mark	(Respiratory sensitization)Danger; (Skin sensitization)Warning	(Respiratory sensitization)May cause allergy or asthma symptoms or breathing difficulties if inhaled; (Skin sensitization)May cause allergic skin reaction	In the human epidemiological information, although in a few cases, allergy by the inhalation, skin contacts and oral intakes is reported. It is said that it happens to the human with sulfite oxidase deficiency. The incidence rate is not high. (Specialist opinion confirmed)
5 Germ cell mutagenicity	Not classified	-	-	-	The result of in vivo tests was negative with mutagenicity test on mice and generation of mice. Although the positive result was found with in vitro examination, it was classified as "out of Category." by the guideline. [The basis sentence was corrected according to expert's opinion]
6 Carcinogenicity	Not classified	-	-	-	Since it was considered as a class 3 in IARC and A4 in ACGIH, it was considered as "out of Category".
7 Toxic to reproduction	Not classified	-	-	-	It was considered as out of Category since the adverse effect was not reported in examination of many generations.

8	Specific target organs/systemic toxicity following single exposure	Category 3 (respiratory tract irritation)	-	-	may cause respiratory irritation or may cause drowsiness and dizziness (respiratory tract irritation)	Since there was information that shows respiratory stimulus in human exposure to aerosol, it was set as "Category 3 (respiratory irritation)."
9	Specific target organs/systemic toxicity following repeated exposure	Category 1 (respiratory organs)	Health hazard	Danger	Causes damage to organs (respiratory organs) through prolonged or repeated exposure	Since there is a report of asthma in laundry workers and food ingestion person (ACGIH (2001), it was classified into Category 1 (respiratory tracts). (It was amended by expert's opinion)
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 3	-	-	Harmful to aquatic life	It was classified into Category 3 from 48-hour EC50=88.76mg/L of Crustacea (Daphnia magna) (SIDS, 2004).
11 Hazardous to the aquatic environment (chronic)	Category 3	-	-	Harmful to aquatic life with long lasting effects	Classified into Category 3, since acute toxicity was Category 3, and behavior in water is unknown, though supposed less bioaccumulative.