GHS Classification

ID1000 Disodium sulfide

CAS 1313-82-2 Date Classified: Mar. 23, 2006 (Environmental Hazards: Feb. 10, 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	–	–	–	UNRTDG Class: 4.2
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	–	–	–	UNRTDG Class: 4.2
11	Self-heating substances and mixtures	Category 1	Flame	Danger	Self-heating; may catch fire	UNRTDG Class: 4.2, PGII
12	Substances and mixtures, which in contact with water, emit flammable gases	Not classified	–	–	–	UNRTDG Class: 4.2
13	Oxidizing liquids	Not applicable	–	–	–	Solid (GHS definition)
14	Oxidizing solids	Not applicable	–	–	–	Containing no oxygen , chlorine and fluorine.
15	Organic peroxides	Not applicable	–	–	–	Inorganic substance
16	Corrosive to metals	Not classified	–	–	–	UNRTDG Class: 4.2

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	Rat LD50 value=208mg/kg (RTECS (Access on Aug 2005), IUCLID(2000), HSDB (Access on Jun 2005)) and 254mg/kg (IUCLID(2000)). Based on the data above, the lowest value was adopted for category
1	Acute toxicity (dermal)	Classification not possible	–	–	–	Since there are only data of rabbit dermal LD50 <340mg/kg (IUCLID (2000)) and data is insufficient, it cannot be classified.
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 description that caustic is indicated to the skin of the humans (ICSC (J) (2002) and IUCLID (2000)), that it is a caustic substances (HSFS (1999)), and that skin caustic is admitted by the test using the rabbit (IUCLID (2000), HSDB (Access on Jun 2005)).
3	Serious eye damage / eye irritation	Category 1	Corrosion	Danger	Causes serious eye damage	There is the description that causticity was indicated to the eye (ICSC (J) (2002)), on the description that it was a caustic substance (HSFS (1999)), and on the descriptions that the burn injury was caused by eye contact in occupational exposure examples(IUCLID (2000) and HSDB (Access on Jun 2005)). So we classified it as Category 1.
4	Respiratory/skin sensitization	Respiratory sensitization: Classification not possible; Skin sensitization: Classification not	(Respiratory sensitization)-; (Skin sensitization)-	(Respiratory sensitization)-; (Skin sensitization)-	(Respiratory sensitization)-; (Skin sensitization)-	No data available
5	Germ cell mutagenicity	Not classified	–	–	–	There is a negative result by the micronucleus test (performing sector is unknown) which used the mouse, which is the in vivo mutagenicity test (IUCLID (2000)). So it carried out the outside of Category.
6	Carcinogenicity	Classification not possible	–	–	–	Since it is not evaluated in the institution indicated in the technical indicator, it cannot be classified.
7	Toxic to reproduction	Classification not possible	–	–	–	No data available
8	Specific target organs/systemic toxicity following single exposure	Category 2 (respiratory organs)	Health hazard	Danger	May cause damage to organs (respiratory organs)	There is a report of the substance showing corrosive properties to airways in ICSC (J) (2002). It also shows corrosive properties to skin and eyes, so it was judged that the target organ was respiratory organs to classify the substance 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	–	–	–	No 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 48-hour LC50=550microg/L of Crustacea (Water flea) (AQUIRE, 2003).
11	Hazardous to the aquatic environment (chronic)	Not classified	–	–	–	Toxicity factor is considered to be strong base as aqueous solution, but toxic effect is eased by the buffer action in the environmental water.