GHS Classification

ID932 halothane

CAS 151-67-7 Date Classified: Jun. 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 applicable	–	–	–	There are no chemical groups associated with explosive properties present in the molecules.
2	Flammable gases	Not applicable	–	–	–	Liquid (GHS definition)
3	Flammable aerosols	Not applicable	–	–	–	Not aerosol products
4	Oxidizing gases	Not applicable	–	–	–	Liquid (GHS definition)
5	Gases under pressure	Not applicable	–	–	–	Liquid (GHS definition)
6	Flammable liquids	Not classified	–	–	–	Non-combustible (ICSC(J), 2005; etc.).
7	Flammable solids	Not applicable	–	–	–	Liquid (GHS definition)
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 classified	–	–	–	Non-combustible (ICSC (J), 1995; etc.)
10	Pyrophoric solids	Not applicable	–	–	–	Liquid (GHS definition)
11	Self-heating substances and mixtures	Not classified	–	–	–	Non-combustible (ICSC(J), 1995; etc.)
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 metaloids(B, Si, P, Ge, As, Se, Sn, Sb, Te, Bi, Po, At).
13	Oxidizing liquids	Not applicable	–	–	–	Organic compounds containing chlorine and fluorine (but not oxygen) and these elements are chemically bonded only to carbon and hydrogen (but not to other elements).
14	Oxidizing solids	Not applicable	–	–	–	Liquid (GHS definition)
15	Organic peroxides	Not applicable	–	–	–	Containing no -0-0- structure
16	Corrosive to metals	Classification not possible	–	–	–	Liquid at a test temperature, 55degC. 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)	Not classified	–	–	–	SPECIES: Rat ENDPOINT: LD50 VALUE: 5680 mg/kg REFERENCE SOURCE: RTECS (2005)
1	Acute toxicity (dermal)	Classification not possible	–	–	–	No data available
1	Acute toxicity (inhalation: gas)	Not applicable	–	–	–	Liquid (GHS definition)
1	Acute toxicity (inhalation:	Not classified	–	–	–	Based on rat LC50 (4 hour exposure with vapor): 120000mg/m3 (= 120mg/L), it was classified as out of Category.
1	Acute toxicity (inhalation: dust, mist)	Classification not possible	–	–	–	No data available
2	Skin corrosion / irritation	Classification not possible	–	–	–	No data available
3	Serious eye damage / eye irritation	Category 2A	Exclamation mark	Warning	Causes serious eye irritation	Severe irritant property was acknowledged by the ocular irritation tests with the rabbits (RTECS (2005)). However, it was unstated about irreversible lesions, therefore we classified it as Category 2A.
4	Respiratory/skin sensitization	Respiratory sensitization: Classification not possible; Skin sensitization: Classification not	–	–	–	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 a group 3 in IARC (1987) and A4 in ACGIH (2001), it was considered as the outside of Category.
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 1 (heart cardiovascular system, liver); Category 3 (narcotic effects)	Health hazard; Exclamation mark	Danger; Warning	Cause damage to organs (heart cardiovascular system, liver); May cause respiratory irritation or may cause drowsiness and dizziness (narcotic effects)	Because of descriptions in ACGIH (7th, 2001) referring to that depression in central nervous systems were clear as acute toxicity in humans, and of a description referring to anesthetic actions classified in Category 3 and descriptions indicating amnesia, paralysis to pain sensation, and respiratory depression, and of descriptions indicating control of cardiovascular systems, arrhythmia, blood vessel extension, and liver lesions (hepatitis, necrosis). So it was judged as Category 1 (cardiovascular systems, liver) and Category 3 (anesthetic actions).
9	Specific target organs/systemic toxicity following repeated exposure	Classification not possible	–	–	–	Although there is description that the change was observed in the ultrastructure of the nerve cell in 4 or 8-week inhalation exposure test in the rat (IARC (1975) and ACGIH (7th, 2001)), it was not considered to be the impact which indicates the classification since the kind and the part of nerve cell, and effects on nervous function and a toxicological meaning were unknown, therefore we presupposed that we could not classify it because of the 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)	Classification not possible	–	–	–	Insufficient data available.
11	Hazardous to the aquatic environment (chronic)	Classification not possible	–	–	–	Classification not possible due to lack of data