

GHS Classification

ID633

Aspirin

CAS 50-78-2

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	-	-	-	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	Classification not possible	-	-	-	No data available
8 Self-reactive substances and mixtures	Not classified	-	-	-	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	-	-	-	Not ignite spontaneously on coming into contact with air at normal temperatures
11 Self-heating substances and mixtures	Classification not possible	-	-	-	No data available
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 classified	-	-	-	Organic compounds containing oxygen (but not chlorine and fluorine) chemically bonded only to carbon and hydrogen (but not to other elements).
14 Oxidizing solids	Not applicable	-	-	-	Organic compounds containing oxygen (but not chlorine and fluorine) and the oxygen is chemically bonded only to carbon and hydrogen (but not to other elements).
15 Organic peroxides	Not applicable	-	-	-	Organic compounds containing no -O-O- structure
16 Corrosive to metals	Classification not possible	-	-	-	Melting point: >55degC and solid. Test methods 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	SPECIES: Rat; ENDPOINT: LD50; VALUE: about 1500mg/kg; REFERENCE SOURCE: IUCLID (2000)
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 3	-	Warning	Causes mild skin irritation	There are findings in animal studies that irritation is mild (IUCLID (2000)), ut that there is irritation on humans (ACGIH (2001), ICSC (J) (1998)).
3 Serious eye damage / eye irritation	Category 2A	Exclamation mark	Warning	Causes serious eye irritation	There is moderate irritation with a rabbit (IUCLID (2000)).
4 Respiratory/skin sensitization	Respiratory sensitization: Category 1; Skin sensitization: Classification not possible	(Respiratory sensitization)Health hazard (Skin sensitization)-	(Respiratory sensitization)Da nger (Skin sensitization)-	(Respiratory sensitization)May cause allergy or asthma symptoms pr breathing difficulties if inhaled; (Skin sensitization)-	There is knowledge of respiratory sensitization (ACGIH (2001), IUCLID (2000)). As there is no data on the skin sensitization, it cannot be classified..
5 Germ cell mutagenicity	Classification not possible	-	-	-	We found no information on the mammals in vivo genotoxicity study, and we found the negative results for almost all the in vitro mutagenicity tests (IUCLID (2000)).
6 Carcinogenicity	Not classified	-	-	-	Although there is no classification by an evaluation organization, anticancer effects is seen by the animal studies (IUCLID (2000)). It is used as an anticancer drugs (PATTY (5th, 2001)).
7 Toxic to reproduction	Category 1A	Health hazard	Danger	May damage fertility or the unborn child	There is a report which indicates reproductive toxicity on humans. (RTECS(2005))

8	Specific target organs/systemic toxicity following single exposure	Category 2 (lung, kidneys, stomach)	Health hazard	Warning	May cause damage to organs (lung, kidneys, stomach)	Since a description stating that effects were observed in human lung, kidney and stomach is found in (RTECS (2005)) of Priority 2, it was set as Category 2.
9	Specific target organs/systemic toxicity following repeated exposure	Category 2 (liver, auditory organ, blood system, central nervous system)	Health hazard	Warning	May cause damage to organs (liver, auditory organ, blood system, central nervous system) through prolonged or	Although effects on liver, hearing, blood systems and a central nervous system are seen in humans (RTECS (2005)), it was classified to as Category 2 because of the literature of Priority 2.
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)	Not classified	-	-	-	It carried out the outside of Category from 48-hour EC50 > 100mg/L of Crustacea (Daphnia magna) (IUCLID, 2000).
11 Hazardous to the aquatic environment (chronic)	Not classified	-	-	-	Since not water-insoluble (aqueous solubility = 4600 mg/L (PHYSPROP Database, 2005)) and acute toxicity is low.