

GHS Classification

ID391

Salicylaldehyde

CAS 90-02-8

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 applicable	—	—	—	Containing no chemical groups with explosive properties
2 Flammable gases	Not applicable	—	—	—	Classified as "liquid" according to GHS definition
3 Flammable aerosols	Not applicable	—	—	—	Not aerosol products
4 Oxidizing gases	Not applicable	—	—	—	Classified as "liquid" according to GHS definition
5 Gases under pressure	Not applicable	—	—	—	Classified as "liquid" according to GHS definition
6 Flammable liquids	Category 4	—	Warning	Combustible liquid	The flash point is 78degC (c.c.) (NFPA (13th, 2002)) which is classified into Category 4.
7 Flammable solids	Not applicable	—	—	—	Classified as "liquid" according to GHS definition
8 Self-reactive substances and mixtures	Not applicable	—	—	—	Containing no chemical groups with explosive or self-reactive properties
9 Pyrophoric liquids	Classification not possible	—	—	—	No data available
10 Pyrophoric solids	Not applicable	—	—	—	Classified as "liquid" according to GHS definition
11 Self-heating substances and mixtures	Classification not possible	—	—	—	Test methods applicable to liquid substances are not available
12 Substances and mixtures, which in contact with water, emit flammable gases	Not applicable	—	—	—	Containing no metals or metalloids (B, Si, P, Ge, As, Se, Sn, Sb, Te, Bi, Po, At)
13 Oxidizing liquids	Not applicable	—	—	—	Organic compounds containing oxygen (but not fluorine and chlorine), with the oxygen bound to carbon and hydrogen (but not to other elements)
14 Oxidizing solids	Not applicable	—	—	—	Classified as "liquid" according to GHS definition
15 Organic peroxides	Not applicable	—	—	—	Organic compounds containing no "-O-O-" structure
16 Corrosive to metals	Classification not possible	—	—	—	No data 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	Based on the rat LD50 (oral route) value of 520mg/kg (CERI Hazard Data 2001-50 (2002)).
1 Acute toxicity (dermal)	Category 3	Skull and crossbones	Danger	Toxic in contact with skin	Based on the rat LD50 (dermal route) value of 600mg/kg representing the lower of the two testing data, 600mg/kg (CERI Hazard Data 2001-50 (2002)) and the rabbit LD50 (dermal route) of 3,000mg/kg (CERI Hazard Data 2001-50 (2002)).
1 Acute toxicity (inhalation: gas)	Not applicable	—	—	—	Due to the fact that the substance is "liquid" according to the GHS definition and inhalation of its gas is not expected.
1 Acute toxicity (inhalation: dust, mist)	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	Based on the description in the report on the rabbit skin irritation tests (CERI Hazard Data 2001-50 (2002)): "Moderate skin irritation" (though the results are not those of 4-hour application).
3 Serious eye damage / eye irritation	Classification not possible	—	—	—	No data available
4 Respiratory/skin sensitization	Respiratory sensitization: Classification not possible Skin sensitization: Classification not possible	(Respiratory sensitization) - (Skin sensitization) -	(Respiratory sensitization) - (Skin sensitization) -	(Respiratory sensitization) - (Skin sensitization) -	Respiratory sensitization: No data available Skin sensitization: The substance is considered non-sensitizing based on the description in the report on a Maximization test (CERI Hazard Data 2001-50 (2002)): "Application of 2% vaseline base induced no sensitization in 33 human volunteers." However, classification is not possible, with only one set of data showing "negative" available.
5 Germ cell mutagenicity	Classification not possible	—	—	—	Based on the absence of data on in vivo mutagenicity/genotoxicity tests and no strong positive data on mutagenicity tests in vitro (several indices), described in CERI Hazard Data 2001-50 (2002).
6 Carcinogenicity	Classification not possible	—	—	—	No data available
7 Toxic to reproduction	Classification not possible	—	—	—	Insufficient data available
8 Specific target organs/systemic toxicity following single exposure	Classification not possible	—	—	—	No data available
9 Specific target organs/systemic toxicity following repeated exposure	Category 2 (liver)	Health hazard	Warning	Causes damage to organs through prolonged or repeated exposure	Based on the evidence from animal studies including "hepatocyte swelling with vacuolated cytoplasm" (Report by the Ministry of Health, Labour and Welfare (1996)). The effects on experimental animals were observed at dosing levels within the guidance value ranges for Category 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)	Category 2	-	-	Toxic to aquatic life	It was classified into Category 2 from 96 hours LC50=2200microg/L of the fish (Fathead Minnows) (MOE Risk Assessment vol. 3, 2004).
11	Hazardous to the aquatic environment (chronic)	Not classified	-	-	-	Since there was rapidly degrading (the decomposition by BOD: 88.1%(salicylic acid (decomposition product)) (Existing Chemical Safety Inspections Data)) and the bio-accumulation was low (log Kow=1.81(PHYSPROP Database (2005))), it was classified into Not classified.