

GHS Classification

ID120

2-Ethoxyethyl acetate; Ethylene glycol monoethyl ether acetate

CAS 111-15-9

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	-	-	-	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 3	Flame	Warning	Flammable liquid and vapour	The flash point is 51.1degC (c.c.) (ICSC, 2003) which is classified into Category 3. Classified into Class 3 and Packing Group III (UN#1172) (UN Recommendations on the Transport of Dangerous Goods)
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	Not classified	-	-	-	Not pyrophoric when in contact with air at ordinary temperatures: the auto-ignition temperature is 379degC (ICSC, 2003)
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	Not classified	-	-	-	Classified into Class 3 (UN Recommendations on the Transport of Dangerous Goods, UN#1172)

Health Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Acute toxicity (oral)	Category 5	-	Warning	May be harmful if swallowed	Based on the testing data of rat LD50 (oral route) of 2,700mg/kg (MOE Risk Assessment Vol. 2, 2003).
1 Acute toxicity (dermal)	Classification not possible	-	-	-	No data available
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)	Not classified	-	-	-	Because the LC50 value (4 hours) of 24.2mg/L (4,470ppm), calculated from the testing data of rat LC50 (8 hour inhalation exposure) of 12.1mg/L (MOE Risk Assessment vol. 2 (2003)), exceeded the saturated vapour concentration (3,080ppm) under a saturated vapour pressure of 2.34mmHg (25degC), the substance was hence not classified based on standard values of mist.
2 Skin corrosion / irritation	Category 3	-	Warning	Causes mild skin irritation	Based on the description in the report on rabbit skin irritation tests (CERI Hazard Data 2001-68 (2002)): The results of 24-hour application suggest "mild irritation" of the skin, though those of 4-hour application are not available.
3 Serious eye damage / eye irritation	Category 2B	-	Warning	Causes eye irritation	Based on the evidence of "mild irritation" from rabbit eye irritation tests (CERI-NITE Hazard Data 2001-68 (2002)).
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: No data available
5 Germ cell mutagenicity	Not classified	-	-	-	Based on the absence of data on multi-generation mutagenicity tests and germ cell mutagenicity tests in vivo, and negative data on somatic cell mutagenicity tests in vivo, described in CERI Hazard Data 2001-68 (2002) and NTP DB (Access on December 2005).
6 Carcinogenicity	Classification not possible	-	-	-	No data available
7 Toxic to reproduction	Category 1B	Health hazard	Danger	May damage fertility or the unborn child	Based on the description in the report on rat teratogenicity studies (CERI Hazard Data 2001-68 (2002)): Visceral malformations (cardiac, umbilical cord malformations) and skeletal malformation (symphysis, undulated ribs) are observed in the embryo at dose levels not toxic to the dam.
8 Specific target organs/systemic toxicity following single exposure	Classification not possible	-	-	-	Insufficient data available
9 Specific target organs/systemic toxicity following repeated exposure	Classification not possible	-	-	-	Based on the evidence from animal studies including adverse effects on the testes and kidneys. The amount of exposure, however, is not applicable to the dosage that can be classified; the toxicity within the range of the classification is unknown.
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 3	-	-	Harmful to aquatic life	It was classified into Category 3 from 96 hours LC50=40mg/L of the fish (Grunion) (CERI Hazard Data, 2002).
11 Hazardous to the aquatic environment (chronic)	Not classified	-	-	-	Since there was rapidly degrading (the decomposition by BOD: 86.9% (Existing Chemical Safety Inspections Data)) and the bio-accumulation was low (log Kow=-0.59 (PHYSPROP Database, 2005)), it was classified into Not classified.