

GHS Classification

ID674

CAS 637-92-3

Physical Hazards

Propane, 2-ethoxy-2-methyl-

Date Classified: Apr. 20, 2006 (Environmental Hazards: Mar. 31, 2006)

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 flammable aerosol products
4 Oxidizing gases	Not applicable	-	-	-	Liquid (GHS definition)
5 Gases under pressure	Not applicable	-	-	-	Liquid (GHS definition)
6 Flammable liquids	Category 2	Flame	Danger	Highly flammable liquid and vapour	Flash point: -20degC, Boiling point: 67 to 71 degC
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	Classification not possible	-	-	-	No data available
10 Pyrophoric solids	Not applicable	-	-	-	Liquid (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	-	-	-	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 applicable	-	-	-	Organic compounds containing oxygen (but not chlorine and fluorine) chemically bonded only to carbon (but not to other elements).
14 Oxidizing solids	Not applicable	-	-	-	Liquid (GHS definition)
15 Organic peroxides	Not applicable	-	-	-	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)	Not classified	-	-	-	Based on mortality not being observed by administration up to 5000mg/kg in a rat (ACGIH (2002)), it was set as the outside of Category.
1 Acute toxicity (dermal)	Classification not possible	-	-	-	Although there are data of rabbit LD50> 2000mg/kg (RTECS (2004)), it is not known whether death is seen by that administration dose. If there is death by the administration dose up to 2000mg/kg, it will be in Category 5 and if no death is observed, it will be the outside of Category. But Category cannot be specified.
1 Acute toxicity (inhalation: gas)	Not applicable	-	-	-	Liquid (GHS definition)
1 Acute toxicity (inhalation: vapour)	Classification not possible	-	-	-	Rat LC50 is >1405ppm (RTECS (2004)), and it cannot specify the Category.
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 Draize score of P.I.I.3.03 (moderate irritant) in test on rabbits (ACGIH (2002)), it was classified as Category 2.
3 Serious eye damage / eye irritation	Category 2A	Exclamation mark	Warning	Causes serious eye irritation	Based on rabbit data: Draize Score 110 and repairable (ACGIH (2002)), it was set as Category 2A.
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. Skin sensitization: insufficient data.
5 Germ cell mutagenicity	Not classified	-	-	-	Based on the negative result for somatic cell in vivo mutagenicity test (micronucleus test) (ACGIH (2002)), we classified it as Out Of Category.
6 Carcinogenicity	Classification not possible	-	-	-	No data available
7 Toxic to reproduction	Classification not possible	-	-	-	No data available

8	Specific target organs/systemic toxicity following single exposure	Category 3 (narcotic)	-	-	May cause respiratory irritation or may cause drowsiness and dizziness (narcotic)	There is the anesthesia in mouse test (2000)), and there are dizziness and headache in human healthy volunteers with 2-hour inhalation exposure test, without the significant of dosage dependence. So it is classified into Category 3 (anaesthetic) .
9	Specific target organs/systemic toxicity following repeated exposure	Not classified	-	-	-	Toxic effects was acknowledged first time ever with a concentration which exceeds a guidance value, in the inhalation exposure examination to a rat and a mouse for four weeks or on 90 days (ACGIH (2002)). Moreover, change in organ weight was mainly observed in the dose which exceeds a guidance value by the inhalation test of a rat and a mouse (RTECS (2004)). As mentioned above, it is considered outside of Category.
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	-	-	-	No data available
11 Hazardous to the aquatic environment (chronic)	Classification not possible	-	-	-	No data available.