

GHS Classification

ID837

tetrachloro-1,2-difluoroethane

CAS 76-12-0

Date Classified: Aug. 22, 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	Not classified	-	-	-	Non-combustible
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 applicable	-	-	-	Solid (GHS definition)
10 Pyrophoric solids	Not classified	-	-	-	Non-combustible solids
11 Self-heating substances and mixtures	Not classified	-	-	-	Not combustible
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	-	-	-	Solid (GHS definition)
14 Oxidizing solids	Not applicable	-	-	-	Organic compounds containing oxygen (but not chlorine and fluorine) and the oxygen is chemically bonded only to carbon (but not to other elements).
15 Organic peroxides	Not applicable	-	-	-	Organic compounds containing no -O-O- structure
16 Corrosive to metals	Classification not possible	-	-	-	No data available on corrosion to metals

Health Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Acute toxicity (oral)	Not classified	-	-	-	In test using rats, mortality is not seen in 25g/kg (EHC113(1990) PATTY (5th, 2001)). Since this value was over the value of 5000mg/kg (oral: 2000mg/kg (Category 4) *2.5), it was set to outside of Category.
1 Acute toxicity (dermal)	Not classified	-	-	-	In rabbit test, death is not observed at 7.5g/kg(PATTY (5th, 2001)). Since this value was over 5000mg/kg (dermal: 2000mg/kg (Category 4) *2.5), it was set as the outside of Category.
1 Acute toxicity (inhalation: gas)	Not applicable	-	-	-	Solid (GHS definition)
1 Acute toxicity (inhalation: vapour)	Not classified	-	-	-	LC values for rat inhalation exposure: 15000ppm (equivalent 124.79mg/L) (PATTY (5th, 2001), ACGIH (2001)) and LC50: 125000mg/m3 (equivalent: 15000ppm) (RTECS (2004)) are considered to be inhalation steam study, since the saturated vapor pressure concentration at 20degC is 52320ppm or less. Moreover, since it was over the value of 12500ppm (gas 5000ppm (Category 4) *2.5), it was classified as out of 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	Since erythema (erythema) was accepted with the rabbit (EHC 113 (1990)), it was set as Category 2.
3 Serious eye damage / eye irritation	Category 2B	-	Warning	Causes eye irritation	As the test results with the guinea pigs is MILD (RTECS(2004), it was set as Category 2B.
4 Respiratory/skin sensitization	Respiratory sensitization: Classification not possible; Skin sensitization: Not classified	(Respiratory sensitization)-; (Skin sensitization)-	(Respiratory sensitization)-; (Skin sensitization)-	(Respiratory sensitization)-; (Skin sensitization)-	We classified it as "Out Of Category" based on the information (PATTY (5th, 2001)) (EHC 113 (1990)) that it has no sensitizing property for the guinea pigs. Since there was no data, respiratory sensitizing property could not be classified.
5 Germ cell mutagenicity	Not classified	-	-	-	It was classified as out of Category. Based on the result was negative in dominant lethal examination of the mouse (EHC 113 (1990)) (DFGOT vol.1 (1991)).
6 Carcinogenicity	Not classified	-	-	-	It was considered as the out of Category. Based on the test result that although there is no rating administrative information, carcinogenicity was not observed (DFGOT vol.1 (1991)).
7 Toxic to reproduction	Classification not possible	-	-	-	No data available

8	Specific target organs/systemic toxicity following single exposure	Classification not possible	-	-	-	In rat inhalation exposure, slight decrease in the central nervous system at 10000ppm (4-hour equivalent: 7070ppm), death by the stimulativeness of critical lungs 20000-30000ppm (4-hour equivalent: 10000 - 18000ppm), and death by pulmonary hemorrhage in 5000ppm (4-hour equivalent: 10750 ppm) are acknowledged (PATTY(5th, 2001) DFGOTvol.1 (1991)) but all were the given doses exceeding the guidance value of Category 2, it is not adopted as a category. Since there is no other effective data, it cannot classify.
9	Specific target organs/systemic toxicity following repeated exposure	Classification not possible	-	-	-	Although symptoms were observed in lungs, liver, the spleen, and the central nervous system, all were set to out of Category with the dose exceeding a guidance value.
10	Aspiration hazard	Classification not possible	-	-	-	No data available on chemical pneumonia

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.