

## GHS Classification

**ID162**

**Methane, trichlorofluoro-**

**CAS 75-69-4**

Date Classified: Sep. 1, 2005 (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	-	-	-	Liquid (GHS definition)
3 Flammable aerosols	Not applicable	-	-	-	Not aerosol products
4 Oxidizing gases	Not applicable	-	-	-	Liquid (GHS definition)
5 Gases under pressure	Not applicable	-	-	-	Liquid (GHS definition)
6 Flammable liquids	Not classified	-	-	-	Non-combustible (ICSC(J), 2002; etc.).
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	Not classified	-	-	-	Non-combustible (ICSC(J) (2002) ; etc.)
10 Pyrophoric solids	Not applicable	-	-	-	Liquid (GHS definition)
11 Self-heating substances and mixtures	Not classified	-	-	-	Non-combustible (ICSC(J), 2002; etc.)
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 chlorine and fluorine (but not oxygen) and these elements are 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	-	-	-	Although there is information that it corrodes metal under presence of moisture (solvents handbook (1994)), there is no data based on set test methods.

**Health Hazards**

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Acute toxicity (oral)	Not classified	-	-	-	Based on general lethal doses of rat: 3725mg/kg (ACGIH 7th, 2001), it was set as the outside of Category.
1 Acute toxicity (dermal)	Classification not possible	-	-	-	No data available
1 Acute toxicity (inhalation: gas)	Not applicable	-	-	-	Liquid (GHS definition)
1 Acute toxicity (inhalation: vapour)	Not classified	-	-	-	Based on rat LC50 (4 hours) value: 26200ppm (equivalent of 146.9mg/L) (CERI Hazard Data, 1999, Industrial Hygiene Society advice, 1993), it was classified as out of Category. The vapor pressure of 26200ppm indicates steam with almost no mist, and it was classified by the ppm concentration standard.
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	-	-	-	No data available
2 Skin corrosion / irritation	Not classified	-	-	-	There is the descriptions that although applications on the skin of rats and rabbits indicated transient mild irritation, no damage was observed (CERI Hazard Data (1999), ACGIH (7th, 2001)). And it was judged not to match the diagnostic criteria of irritation and classified as out of Category.
3 Serious eye damage / eye irritation	Not classified	-	-	-	There is description that although transient mild irritation was indicated by apply to rat and rabbit eyes, damage was not seen ( CERI Hazard Data (1999) and ACGIH (7th, 2001)), and description that although slight inflammation with a conjunctiva was acknowledged by apply to the eye of rabbit but change was not acknowledged in cornea and iris (DFGOT (vol.1 1991)). So it was judged that it did not correspond to a stimulative judgment standard, and was considered as the outside of Category.
4 Respiratory/skin sensitization	Respiratory sensitization: Classification not possible; Skin sensitization: Classification not possible	-	-	-	Respirator: No data Skin: Although EHC 113 (1990) describes that a patch test in humans found positive, there are no other cases reported and this case does not fit the skin sensitization criteria. We therefore classified this uncategorizable because of insufficient data.
5 Germ cell mutagenicity	Classification not possible	-	-	-	Although there are negative results from the unscheduled DNA synthesis test (CERI Hazard Data, 1999), which is an in vivo genotoxicity test using somatic cells, it was decided that the substance could not be classified because there are no other data from in vivo tests.
6 Carcinogenicity	Not classified	-	-	-	Not classified because of "A4" (ACGIH, 7th, 2001)

7	Toxic to reproduction	Category 2	Health hazard	Warning	Suspected of damaging fertility or the unborn child	There were the increase of embryonic/fetal death and the increase of incidence of teratosis of children only in the dose causing general toxicity to parent animals in the inhalation exposure test during pregnancy using rat and rabbit (DFGOT (vol.1, 1991)). So it was considered as in the Category 2.
8	Specific target organs/systemic toxicity following single exposure	Category 1 (heart); Category 3 (narcotic effects, respiratory tract irritation)	Health hazard and Exclamation mark	Danger; Warning	Cause damage to organs (heart); May cause respiratory irritation or may cause drowsiness and dizziness (narcotic effects, respiratory tract irritation)	There is the descriptions that the anesthetic actions, irritation to respiratory organs, and effect to the heart were observed in human exposure examples in CERH Hazard Data (1999), ACGIH (7th, 2001), EHC 113 (1990), industrial hygiene academic society advice (1993), and DFGOT (vol.1, 1991). And that also in animal studies, the anesthetic actions, irritation to respiratory organs, and effect to the heart were observed. So they were classified into Category 1 (heart) and Category 2 (anesthetic action, respiratory tract irritation).
9	Specific target organs/systemic toxicity following repeated exposure	Not classified	-	-	-	In repetitive inhalation exposure or an oral administration examination using laboratory animals in CERH Hazard Data (1999), ACGIH (7th, 2001), industrial hygiene academic society advice (1993), PATTY (4th, 1994), EHC 113 (1990), and DFGOT (vol.1, 1991), serious toxicities were not observed even at high doses exceeding the guidance value range of Category 2, and in the two to four-week exposure tests to human in CERH Hazard Data (1999), CERH hazard data, EHC 113 (1990), DFGOT (vol.1, 1991), PATTY (4th, 1994), and ACGIH (7th, 2001), serious toxicities were not observed. Based on above descriptions it was carried out the out 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	-	-	-	Insufficient data available.
11 Hazardous to the aquatic environment (chronic)	Classification not possible	-	-	-	Classification not possible due to lack of data