

## GHS Classification

**ID861**

**Methanesulfonyl chloride, trichloro-**

**CAS 594-42-3**

Date Classified: Jun. 20, 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	-	-	-	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	-	-	-	Flash point: none (Lange, 14th, 1992), non-combustible (ICSC(J), 2003), UNRTDG Class: 6.1
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), 2003) UNRTDG Class: 6.1
10 Pyrophoric solids	Not applicable	-	-	-	Liquid (GHS definition)
11 Self-heating substances and mixtures	Not classified	-	-	-	Non-combustible (ICSC(J) (2003)) UNRTDG Class: 6.1
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 classified	-	-	-	UNRTDG Class: 6.1
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	-	-	-	UNRTDG Class: 6.1

**Health Hazards**

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Acute toxicity (oral)	Category 3	Skull and crossbones	Danger	Toxic if swallowed	The value was classified to category 3 after the lower value was adopted. This value based on the following data: Rat LD50 value: 83mg/kg (DFGOT vol.1, 1991 and PATTY 4th, 1994) and 800mg/kg (PATTY 4th, 1994).
1 Acute toxicity (dermal)	Category 4	Exclamation mark	Warning	Harmful in contact with skin	It was set as Category 4 based on rabbit LD50 value: 1410mg/kg (DFGOT vol.1, 1991 and PATTY 4th, 1994).
1 Acute toxicity (inhalation: gas)	Not applicable	-	-	-	Liquid (GHS definition)
1 Acute toxicity (inhalation: vapour)	Category 1	Skull and crossbones	Danger	Fatal if inhaled	Based on rat LC50 (1 hour) value: 11ppm (4-hour equivalent: 0.042mg/L) (DFGOT vol.1, 1991) and 16ppm (4-hour equivalent: 0.061 mg/L) (PATTY 4th, 1994), it was classified as Category 1. The vapor pressure with these concentration indicates steam with almost no mist, it was classified by the ppm concentration standard.
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	-	-	-	No data available
2 Skin corrosion / irritation	Category 2	Exclamation mark	Warning	Causes skin irritation	It was set as Category 2 from description that skin of guinea pig and rabbit were stimulated seriously (PATTY (4th, 1994)).
3 Serious eye damage / eye irritation	Category 2A	Exclamation mark	Warning	Causes serious eye irritation	Based on the description that severe irritation was acknowledged by applying to the eye of the rabbit (PATTY (4th, 1994)), it was set as Category 2A.
4 Respiratory/skin sensitization	Respiratory sensitization: Classification not possible; Skin sensitization: Classification not possible	-	-	-	No data available
5 Germ cell mutagenicity	Classification not possible	-	-	-	Classification not possible due to lack of data
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 1 (lung)	Health hazard	Danger	Cause damage to organs (lung)	From description in PATTY (4th, 1994) that pulmonary edemas was seen in the inhalation exposure test on rats, mice, and cats, with the concentration of the guidance value range of Category 1, and description in DFGOT (vol.1, 1991) and PATTY (4th, 1994) that pulmonary edemas was seen in humans in evidence of accidental exposure, it was set as Category 1 (pneumoconiosis).
9	Specific target organs/systemic toxicity following repeated exposure	Category 1 (lung)	Health hazard	Danger	Causes damage to organs (lung) through prolonged or repeated	Based on the description that in the 2-weeks inhalation exposure test using the rat, pulmonary edemas were observed with the concentration in the Category 1 guidance value range (PATTY (4th, 1994)), it was classified into Category 1 (lung).
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.