

## GHS Classification

**ID1101**

**methylphosphonic dichloride**

**CAS 676-97-1**

Date Classified: May 24, 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	Classification not possible	-	-	-	Although HSDB (2002) has the statement which indicates flame retardancy, there is no test data, and it cannot be classified.
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	Classification not possible	-	-	-	No data available
11 Self-heating substances and mixtures	Classification not possible	-	-	-	Test methods applicable to solid (melting point <= 140degC) substances are not available.
12 Substances and mixtures, which in contact with water, emit flammable gases	Not classified	-	-	-	Although Sittig's Handbook of Toxic and Hazardous Chemicals and Carcinogenes (4th, 2002) has the description that "it reacts with water and hydrochloric acids/hydrogen hydrochloric acids steam is produced", both of them are nonflammable. So it carried out the outside of category.
13 Oxidizing liquids	Not applicable	-	-	-	Solid (GHS definition)
14 Oxidizing solids	Classification not possible	-	-	-	No data available
15 Organic peroxides	Not applicable	-	-	-	Organic compounds 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)	Classification not possible	-	-	-	No data available
1 Acute toxicity (dermal)	Classification not possible	-	-	-	No data available
1 Acute toxicity (inhalation: gas)	Not applicable	-	-	-	Solid (GHS definition)
1 Acute toxicity (inhalation: vapour)	Category 1	Skull and crossbones	Danger	Fatal if inhaled	Since this product has low melting point (32degC (Sax (11th, 2004)) and 35-37degC (HSDB (2002))), it is thought that the inhalation test is done with vapor. Therefore, it was classified as Category 1 from rat LC50 = 26ppm/4h (RTECS (1997)). In addition, 26ppm/4h is equivalent to 0.141mg/L/4h.
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	-	-	-	No data available
2 Skin corrosion / irritation	Category 1A-1C	Corrosion	Danger	Causes severe skin burns and eye damage	In Priority 2, the this product was very corrosiveness, and since there was description that the contact to the human skin causes a critical burned (SITTIG (4th, 2002)), it was set as Category 1A-1C. [view] It is more desirable to be set as Category 1A from a viewpoint of safety, when further categorizing needs to be performed.
3 Serious eye damage / eye irritation	Category 1	Corrosion	Danger	Causes serious eye damage	In Priority 2, the this product has strong causticity, and there is the description that the contact to human eye causes severe burns (SITTIG (4th, 2002)). So it was classified into Category 1.
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)-	No data available
5 Germ cell mutagenicity	Classification not possible	-	-	-	No data available

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 2 (respiratory(inhalation))	Health hazard	Warning	May cause damage to organs (respiratory(inhalation))	The substance was classified as Category 2 (respiratory system (inhalation)) because there is a report in Priority 2 that it causes irritation in humans after inhalation, and that it may cause pulmonary edema at a higher concentration (SITTIG (4th, 2002)).
9	Specific target organs/systemic toxicity following repeated exposure	Category 2 (respiratory organs)	Health hazard	Warning	May cause damage to organs (respiratory organs) through prolonged or repeated	Since there was description that lungs irritations or bronchitis is occued on humans (SITTIG (4th, 2002) in Priority 2), it was classified into Category 2 (respiratory systems).
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.