

## GHS Classification

**ID88**

**Chrysotile asbestos**

**CAS 12001-29-5**

Date Classified: Apr. 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	-	-	-	Solid (GHS definition)
3 Flammable aerosols	Not applicable	-	-	-	Not classified by the definition of flammable aerosols.
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-flammable (ATSDR (2001))
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-flammable (ATSDR, 2001)
11 Self-heating substances and mixtures	Not classified	-	-	-	Non-flammable (ATSDR, 2001)
12 Substances and mixtures, which in contact with water, emit flammable gases	Not classified	-	-	-	UNRTDG No. 2590, Class: 9, PG III
13 Oxidizing liquids	Not applicable	-	-	-	Solid (GHS definition)
14 Oxidizing solids	Not classified	-	-	-	UNRTDG No. 2590, Class: 9, PG III
15 Organic peroxides	Not applicable	-	-	-	Inorganic substance
16 Corrosive to metals	Classification not possible	-	-	-	Test methods applicable to solid substances are not 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)	Classification not possible	-	-	-	No data available
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	-	-	-	No data available
2 Skin corrosion / irritation	Classification not possible	-	-	-	No data available
3 Serious eye damage / eye irritation	Classification not possible	-	-	-	No data available
4 Respiratory/skin 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	Category 2	Health hazard	Warning	Suspected of causing genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)	Based on the genetic toxicological data in humans (SCE-positive) (ATSDR (2001) etc.) and the positive results in the in vitro mutagenicity (chromosome aberration) tests (EHC 203 (1998)), the substance was classified as Category 2.

6	Carcinogenicity	Category 1A	Health hazard	Danger	May cause cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)	It is based on each following organization's classification result. (IARC:1, Japan Society for Occupational Health:1, ACGIH:1, NTP:K, EU:1, EPA:A)
7	Toxic to reproduction	Classification not possible	-	-	-	Since data is insufficient. (The bad effect to the development (development toxicity) of child born or embryo in pregnancy and nursing period exposure test to rat, mouse and hamster is not observed (ATSDR (2001)). However, it is unknown about the effect to the reproductive potential and reproductive function by pre-mating exposure.)
8	Specific target organs/systemic toxicity following single exposure	Category 1 (lung)	Health hazard	Danger	Cause damage to organs (lung)	The data, 4mg/m <sup>3</sup> , in mice (fibrosis, 5-hour inhalation) (ATSDR2001) is 0.005mg/L when adjusted to 4 hours. Judging from the guidance values, it is classified as Category 1.
9	Specific target organs/systemic toxicity following repeated exposure	Category 1 (lung)	Health hazard	Danger	causes damage to organs (lung) through prolonged or repeated exposure	Since pulmonary fibrosis was significantly observed in chrysotile laborers (EHC 203 (1998)), and pulmonary fibrosis was observed in rat study at 0.005 mg/L (equivalent) which is the ranges of the guidance value of Category 1 (EHC 203 (1998)), 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	-	-	-	Insufficient data available.
11 Hazardous to the aquatic environment (chronic)	Classification not possible	-	-	-	Classification not possible due to lack of data