

## GHS Classification

**ID1022**

**aluminium phosphide**

**CAS 20859-73-8**

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 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 (ICSC (J) (1997))
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 (ICSC (J), 1997)
11 Self-heating substances and mixtures	Not classified	-	-	-	Not combustible (ICSC(J) (1997))
12 Substances and mixtures, which in contact with water, emit flammable gases	Category 1	Flame	Danger	In contact with water releases flammable gases which may ignite spontaneously	Category 1 UNRTDG No. 1397, Class: 4.3, PG I
13 Oxidizing liquids	Not applicable	-	-	-	Solid (GHS definition)
14 Oxidizing solids	Not applicable	-	-	-	Inorganic compounds containing no oxygen and halogen.
15 Organic peroxides	Not applicable	-	-	-	Inorganic compound
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)	Category 2	Skull and crossbones	Danger	Fatal if swallowed	SPECIES: Rat ENDPOINT: LD50 VALUE: 11.5mg/kg REFERENCE SOURCE: PATTY (5th,2001)
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)	Not applicable	-	-	-	There is a description about vapor pressure "1000degC is still very low" (Pesticide Manual, 13th, 2003). Therefore, it was thought that exposure to vapors at room temperatures was almost impossible, and it was regarded to be out of classification.
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	-	-	-	Data suitable for a classification according to relationships with phosphines not found, and it cannot be classified.
2 Skin corrosion / irritation	Category 2	Exclamation mark	Warning	Causes skin irritation	There is description which indicates skin irritation on human (SITTIG (4th, 2002), HSFS (1998), ICSC (J) (1997)). But the test data used as the determined indicators of Category 2 or 3 was not found, it was set as Category 2 from a viewpoint of safety.
3 Serious eye damage / eye irritation	Category 2A-2B	Exclamation mark	Warning	Causes serious eye irritation	Although it has descriptions which indicate eye irritation to the human (SITTIG, HSFS (1998), ICSC (J)(1997) (4th, 2002)), the test data used as the index of subdivision was not found. So it was classified into Category 2A-2B. [Indication] 2A is recommended based on the safety, when the Category needs to be detail.
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 (cardiovascular system, respiratory, nervous system, liver, kidneys)	Health hazard	Warning	May cause damage to organs (cardiovascular system, respiratory, nervous system, liver, kidneys)	The substance was classified as Category 2 (cardio-vascular system, respiratory system, nervous system, kidneys, liver) based on the 2 reports about rats in RTECS (2004) in Priority 2, and reports about effects in humans in ICSC (J) (1997), SITTIG (4th, 2002), RTECS (2004), and HSDB (2003) in Priority 2.
9	Specific target organs/systemic toxicity following repeated exposure	Classification not possible	-	-	-	Although we found the statements of influence in human lungs, the kidney, and liver in SITTIG (4th, 2002) and HSFS (1998), there was no corroborative data, therefore we could not classify it because of the lack of data.
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)	Category 1	Environment	Warning	Very toxic to aquatic life	It was classified into Category 1 from 96-hour LC50=0.178mg/m3 of fishes (Bluegill) (EHC73, 1988).
11 Hazardous to the aquatic environment (chronic)	Category 1	Environment	Warning	Very toxic to aquatic life with long lasting effects	Classified into Category 1, since acute toxicity was Category 1, and it is a metallic compound, behavior in water and bioaccumulative potential are unknown.