

GHS Classification

ID908

phenylphosphine

CAS 638-21-1

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	-	-	-	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	Category 4	-	Warning	Combustible liquid	60 degC < flash point <= 93 degC [special note] The only flash point data is 73 degC, however, there is inconsistencies with spontaneous combustibility information. So expert judgement is required.
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	Classification not possible	-	-	-	Although there is information that it is spontaneous-ignitable, there is no data based on a set test method.
10 Pyrophoric solids	Not applicable	-	-	-	Liquid (GHS definition)
11 Self-heating substances and mixtures	Classification not possible	-	-	-	Test methods applicable to liquid substances are not available
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 no oxygen, fluorine and chlorine.
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	-	-	-	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	-	-	-	Liquid (GHS definition)
1 Acute toxicity (inhalation: vapour)	Classification not possible	-	-	-	Based on rat LC50 (4 hours) value: 38ppm (equivalent: 0.17mg/L) (ACGIH 7th, 2001), if the test condition is vapor with mist, it corresponds to Category 1; and if it is mist, it corresponds to Category 2. However, it could not judge from the acquired information, whether it is vapor or mist, so it cannot be classified.
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	-	-	-	Based on rat LC50 (4 hours) value: 38ppm (equivalent 0.17mg/L) (ACGIH 7th, 2001), it corresponds to category 1 when the test conditions was steam or stem including mist, and category 2 when the condition was mist. But whether it is steam or mist could not be judged from the acquired information. Therefore, it cannot be classified.
2 Skin corrosion / irritation	Category 2	Exclamation mark	Warning	Causes skin irritation	There was no concrete case report. But it was set as Category 2 from description that the skin was stimulated (ICSC (2001), HSDB (2005), and HSFS (2001)).
3 Serious eye damage / eye irritation	Category 2A-2B	Exclamation mark	Warning	Causes serious eye irritation	Although there were no concrete case reports, based on the descriptions in ICSC (2001), HSDB (2005), and HSFS (2001) that it stimulates the eyes, we classified it as Category 2A-2B.
4 Respiratory/skin sensitization	Respiratory sensitization: Classification not possible; Skin sensitization: Classification not possible	-	-	-	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	Category 2	Health hazard	Warning	Suspected of damaging fertility or the unborn child	It was considered as Category 2 based on the description that severe testicular degeneration was observed at the concentration in which general toxicity is observed in an inhalation exposure test for 90 days using rat (ACGIH (7th, 2001)).
8	Specific target organs/systemic toxicity following single exposure	Category 3 (respiratory tract irritation)	Exclamation mark	Warning	May cause respiratory irritation or may cause drowsiness and dizziness (respiratory tract irritation)	Although there was no concrete case report, it was set as Category 3 (respiratory irritation) from description in ICSC (2001), HSDB (2005), and HSFS (2001) that the respiratory tract or throat is stimulated.
9	Specific target organs/systemic toxicity following repeated exposure	Category 1 (blood, nervous system)	Health hazard	Danger	Causes damage to organs (blood, nervous system) through prolonged or repeated exposure	Based on the description that in the 90-day inhalation exposure test, anemia and the effects on the nervous system was observed in the rats, and effects on the nervous system were observed in the dogs for the concentration of the guidance value range of Category 1 (ACGIH (7th, 2001)), we categorized it as Category 1 (blood, nervous system).
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.