

GHS Classification

ID1019

phosphamidon

CAS 13171-21-6

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	Classification not possible	-	-	-	Classification not possible due to lack of data on its flash point; etc.
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	-	-	-	Uses are agricultural chemicals, and even if it contacts the normal temperature air, it does not ignite spontaneously.
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 classified	-	-	-	Stable to water (miscible in water)
13 Oxidizing liquids	Classification not possible	-	-	-	No data available
14 Oxidizing solids	Not applicable	-	-	-	Liquid (GHS definition)
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)	Category 2	Skull and crossbones	Danger	Fatal if swallowed	SPECIES: Rat ENDPOINT: LD50 VALUE: 17 mg/kg REFERENCE SOURCE: PIM(Poisons Information Monographs)454, WHO/IPCS (2001)
1 Acute toxicity (dermal)	Category 3	Skull and crossbones	Danger	Toxic in contact with skin	It was based on rat LD50 value of 374mg/kg (PIM(Poisons Information Monographs) 454, World Health Organization/IPCS, 2001).
1 Acute toxicity (inhalation: gas)	Not applicable	-	-	-	Liquid (GHS definition)
1 Acute toxicity (inhalation: vapour)	Classification not possible	-	-	-	No data available
1 Acute toxicity (inhalation: dust, mist)	Category 2	Skull and crossbones	Danger	Fatal if inhaled	The vapor pressure of this product is 0.0033Pa (20degC). Saturated vapor pressure pressures concentrations was calculated with 0.03ppm, and 0.102mg/L was 8.3ppm, it imagined it as mist. Based on rat LC50 value: 0.102mg/L/4h, 0.135mg/L/4h, 0.16mg/L/4h (all are PIM(Poisons Information Monographs) 454, WHO/IPCS, 2001), the category was carried out with calculation. LC50 = 0.105mg/L/4h.
2 Skin corrosion / irritation	Classification not possible	-	-	-	Classification not possible due to lack of data
3 Serious eye damage / eye irritation	Category 2A-2B	Exclamation mark	Warning	Causes serious eye irritation	There is the description about the human eye stimulativeness that "Most of the 32 persons felt the irritant property of the conjunctiva immediately after application" (PIM (Poisons Information Monographs) 454 (WHO/IPCS, 2001)). So we classified it as Category 2. However, the data was insufficient, so deliberate categorization of 2A and 2B was impossible. [Indication] 2A is recommended based on the safety, when the Category needs to subdivide.
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)-	Respiratory sensitization: No data. Skin sensitization: Since the data was insufficient, we could not classify it.

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)	There are two or more positive reports from the data of RTECS(2004) and HSDB(2004) in the in vivo marrow chromosomal aberration test of a rat and a mouse, and it is negative in the chromosomal aberration test with a mouse spermatocyte. So it is set as Category 2.
6	Carcinogenicity	Not classified	-	-	-	Since it can be considered that there is no clear evidence of tumor formation in rat and mouse based on the description "Male Rats:Equivocal of HSDB (2004) (former literature is NTP TR16 and 1979), Female Rats:Equivocal, Male Mice:Negative, and Female Mice:Negative". So it was considered as the outside of Category .
7	Toxic to reproduction	Not classified	-	-	-	Although in the laboratory-animals data (a teratogenicity study, 2generation reproduction study) of HSDB (2004) and Toxicology Data Review Summaries (California EPA/Dept.of Pesticide Regulation, 1990), decrease in fetus weight was seen, but in PIM (Poisons Information Monographs) 454 (WHO/IPCS, 2001), there is the knowledge in the humans "pregnancy is continued without being influenced, and normal child was born", it was thought that there was no reproductive toxicity in humans, and it was considered as the outside of Category.
8	Specific target organs/systemic toxicity following single exposure	Category 1 (nervous system, respiratory, cardiovascular system)	Health hazard	Danger	Cause damage to organs (nervous system, respiratory, cardiovascular system)	The substance was classified as Category 1 (nervous system, respiratory system, cardio-vascular system) based on the report in humans, "the target organs are nervous system, respiratory system and cardio-vascular system"(PIM (Poisons Information Monographs) 454 (WHO/IPCS, 2001), which is equivalent to Priority 1).
9	Specific target organs/systemic toxicity following repeated exposure	Category 1 (nervous system)	Health hazard	Danger	Causes damage to organs (nervous system) through prolonged or repeated exposure	We classified it into Category 1 (nervous systems) based on the Priority 1-equivalent PIM (Poisons Information Monographs) 454 (WHO/IPCS, 2001) and the description about the possibility in human, "effect on the central nervous system" and "cholinesterase inhibitors: it has accumulation effect" of ICSC(1995) of Priority 2.
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 48-hour EC50=0.01mg/L of Crustacea (Water flea) (HSDB, 2004).
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, supposed not rapidly degrading (BIOWIN), though supposed less bioaccumulative (log Kow=0.79(PHYSPROP Database, 2005)).