

GHS Classification

ID1242

CAS 7292-16-2

Physical Hazards

propaphos

Date Classified: Feb. 20, 2007 (Environmental Hazards: Mar. 31, 2006)

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	Since the flash point was 76 degC (testing method unknown), it was classified as Category 4 (GHS standards: flash point being more than 60 degC and 93 degC or less).
7 Flammable solids	Not applicable	-	-	-	Liquid (GHS definition)
8 Self-reactive substances and mixtures	Classification not possible	-	-	-	Classification not possible due to lack of data, though the substance contains N-O bonds as chemical groups with explosive or self-reactive properties present
9 Pyrophoric liquids	Not classified	-	-	-	Since the flash points is 76 degC, ignition temperature is judged to be 70 degC or more.
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	-	-	-	Since tests for such as water solubility and water soundness were performed (Agricultural Chemical Registration Data), it can be judged that it is stable in the 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 3	Skull and crossbones	Danger	Toxic if swallowed	Based on the rat LD50 values : 79.8mg/kg (male) and 72.5mg/kg (female) (Agricultural Chemical Registration Data), we adopted the lower value (LD50=72.5mg/kg) to classify the substance as Category 3.
1 Acute toxicity (dermal)	Category 2	Skull and crossbones	Danger	Fatal in contact with skin	It was set as Category 2, based on LD50 = 72.0mg/kg (the lower value among rat male LD50 = 88.5mg/kg and female LD50 = 72.0mg/kg (Agricultural Chemical Registration Data)).
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 1	Skull and crossbones	Danger	Fatal if inhaled	It was set as Category 1 based on LC50 = 0.039mg/L on the both sex rat (Agricultural Chemical Registration Data).
2 Skin corrosion / irritation	Classification not possible	-	-	-	Since there was no data about an agricultural-chemicals field object, it was presupposed that it cannot classify.
3 Serious eye damage / eye irritation	Classification not possible	-	-	-	Since there was no data about a pesticide ingredients, it was presupposed that it cannot classify.
4 Respiratory/skin sensitization	respiratory sensitization: Classification not possible; Skin sensitization: Not classified	(Respiratory sensitization)-; (Skin sensitization)-	(Respiratory sensitization)-; (Skin sensitization)-	(Respiratory sensitization)-; (Skin sensitization)-	Respiratory sensitization: no data available. Skin sensitization: by the skin sensitization study by the Maximization method in a guinea pig, based on a statement (Agricultural Chemical Registration Data) that a skin reaction was not accepted, it carried out the outside of Category.
5 Germ cell mutagenicity	Classification not possible	-	-	-	Although there is the description that it was negative in the chromosome aberration inducement test in the Chinese hamster cultured cell of in vitro and the reverse mutation test using the bacteria (Agricultural Chemical Registration Data), there is no result of human multi generation epidemiology, multi generation mutagenicity test, and germ cell in vivo mutagenicity test, the somatic cell in vivo mutagenicity test of in vitro. And there is no in vivo genotoxicity test of germ cell and somatic cell and there is no result of the multi index positive finding in in vitro mutagenicity test. So it cannot be classified
6 Carcinogenicity	Not classified	-	-	-	It carried out the outside of Category based on the statement (Agricultural Chemical Registration Data) that frequency of these neoplastic increase in the incidence and be earlier relevant to administration were not acknowledged in the carcinogenicity test of rats and mice.

7	Toxic to reproduction	Not classified	-	-	-	Based on the statement that although the general toxicity against parent animals was acknowledged in the three-generation reproduction study on rats and the reproductive toxicity examination on rats and rabbits, the effect on teratogenicity and reproductive potential was not acknowledged (Agricultural Chemical Registration Data). So it was set as the outside of Category.
8	Specific target organs/systemic toxicity following single exposure	Category 1 (systemic toxicity, nervous system, lung, liver)	Health hazard	Danger	Cause damage to organs (systemic toxicity, nervous system, lung, liver)	It was considered as Category 1 (systemicity, a nervous systems, lungs, liver) based on the description (Agricultural Chemical Registration Data) that diminished spontaneous activity, tremor, salivation, dacryorrhea, blunting of outside response, weakness like symptom, hematological adhesions of nasal periphery, bloody tears, the dirt of the abdomen, and downward recumbent position, the dirt of eyelids periphery, ataxia, respiration disorder, congestion or swelling of liver, distinguished blister formation in apicalus of pulmonary Clara cell at the dose within the range of guidance value in Category 1 (oral administration: 72.0-88.5mg/kg, inhalation (mist): 39.2 below mg/m3).
9	Specific target organs/systemic toxicity following repeated exposure	Category 1 (nervous system, liver)	Health hazard	Danger	Causes damage to organs (nervous system, liver) through prolonged or repeated	Based on description that the decrease of serum cholinesterase activity and liver parenchymal cells diffuse fatty change degenerations were observed in the repeated administration study to a rat and a mouse with the given dose (0.5-10 mg/kg or less) of guidance value within the limits of Category 1 (Agricultural Chemical Registration Data), it was classified into Category 1 (nervous system, and liver).
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 2	-	-	Toxic to aquatic life	It was classified into Category 2 from 96-hour LC50=5.2mg/L of fishes (Rainbow trout) (Agricultural Chemical Registration Data, 1983).
11 Hazardous to the aquatic environment (chronic)	Category 2	Environment	-	Toxic to aquatic life with long lasting effects	Classified into Category 2, since acute toxicity was Category 2 and supposed not rapidly degrading (BIOWIN), though supposed less bio-accumulative (log Kow=3.67(PHYSPROP Database, 2005)).