

GHS Classification

ID907

phenyl hydrazine

CAS 100-63-0

Date Classified: Aug. 18, 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 classified	-	-	-	UNRTDG Class: 6.1
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	Flash point: >60degC and <=93degC
7 Flammable solids	Not applicable	-	-	-	Liquid (GHS definition)
8 Self-reactive substances and mixtures	Not classified	-	-	-	Classified in UNRTDG Class: 6.1
9 Pyrophoric liquids	Not classified	-	-	-	UNRTDG Class: 6.1
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	Not classified	-	-	-	UNRTDG Class: 6.1

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	SPECIES: Rat ENDPOINT: LD50 VALUE: 188 mg/kg REFERENCE SOURCE: PATTY (4th, 1994), ACGIH (7th, 2001)
1 Acute toxicity (dermal)	Category 2	Skull and crossbones	Danger	Fatal in contact with skin	It was set as Category 2 based on rabbit LD50 value: 90mg/kg (PATTY 4th, 1994).
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)	Classification not possible	-	-	-	No data available
2 Skin corrosion / irritation	Category 2	Exclamation mark	Warning	Causes skin irritation	It was set as Category 2 from description that it was the skin irritation (DFGOT (vol.11, 1998)).
3 Serious eye damage / eye irritation	Category 2A	Exclamation mark	Warning	Causes serious eye irritation	We classified it as Category 2A based on the description that serious purulent conjunctivitis was acknowledged in the test applied to the eyes of the rabbits (CICAD 19 (2000)).
4 Respiratory/skin sensitization	Respiratory sensitization: Classification not possible; Skin sensitization: Category 1	(Respiratory sensitization)-; (Skin sensitization)Exclamation mark	(Respiratory sensitization)-; (Skin sensitization)Warning	(Respiratory sensitization)-; (Skin sensitization)May cause allergic skin reaction	Respiratory sensitization: No data. Skin sensitization : We found the descriptions that sensitizing property was indicated in the human in ACGIH (7th, 2001) and PATTY (4th, 1994), and that allergic contact dermatitis is acknowledged in the human in DFGOT (vol.11, 1998) and CICAD 19 (2000), therefore we categorized it to be Category 1.
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 is a positive result by the micronucleus test (CICAD 19, 2000, PATTY 4th, 1994) which used the mouse red corpuscles, which are the in vivo mutagenicity tests using a somatic, and the chromosome aberration test (ACGIH 7th, 2001) using mouse bone marrow, and there was no result positive by the in vivo genotoxicity study using a germ cells. So it was set as Category 2.

6	Carcinogenicity	Category 2	Health hazard	Warning	Suspected of causing cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)	It was classified into the category 2 (EU-Annex 1, 2005) in EU. But it was classified into A3 (ACGIH 7th, 2001) in ACGIH. So it was considered as Category 2.
7	Toxic to reproduction	Classification not possible	-	-	-	No data available
8	Specific target organs/systemic toxicity following single exposure	Category 1 (blood system)	Health hazard	Danger	Cause damage to organs (blood system)	It was set as Category 1 (blood) from description in DFGOT (vol.11, 1998) and CICAD 19 (2000) that affects on blood is seen as acute toxicity in humans.
9	Specific target organs/systemic toxicity following repeated exposure	Category 1 (blood)	Health hazard	Danger	Causes damage to organs (blood) through prolonged or repeated	Based on the description that hemolytic anemia was observed in human occupational exposure examples (ACGIH (7th, 2001)), and based on the descriptions that the effects on the blood was observed with the dose of the guidance value range of Category 1 in the repetitive oral administration or the inhalation exposure test using the rat or mouse (ACGIH (7th, 2001), DFGOT (vol.11, 1998), CICAD 19 (2000) and PATTY (4th, 1994)), we classified it as Category 1 (blood).
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=0.16-0.25mg/L of fishes (Zebrafish) (CICAD19, 1999).
11 Hazardous to the aquatic environment (chronic)	Not classified	-	-	-	Since rapidly degrading (the decomposition of TOC: 97%(CICAD19, 1999)), and supposed less bio-accumulative (log Kow=1.25(PHYSPROP Database, 2005)).