

GHS Classification

ID219

CAS 104-94-9

Physical Hazards

p-Anisidine

Date Classified: Jul. 24, 2006 (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	-	-	-	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	Classification not possible	-	-	-	No data available
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	-	-	-	Not ignite spontaneously on coming into contact with air at normal temperatures
11 Self-heating substances and mixtures	Classification not possible	-	-	-	No data 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	-	-	-	Solid (GHS definition)
14 Oxidizing solids	Not applicable	-	-	-	Organic compounds containing oxygen and the oxygen is chemically bonded only to carbon and hydrogen (but not to other elements).
15 Organic peroxides	Not applicable	-	-	-	Containing no -O-O- structure
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 4	Exclamation mark	Warning	Harmful if swallowed	It was set as Category 4 based on Rat LD50 value: 1400mg/kg (ACGIH 7th, 2001, IARC 27, 1982, Japan Society for Occupational Health recommendation, 1996).
1 Acute toxicity (dermal)	Category 5	-	Warning	May be harmful in contact with skin	It was set as Category 5 based on rat LD50 value: 3200mg/kg (Japan Society for Occupational Health recommendation, 1996).
1 Acute toxicity (inhalation: gas)	Not applicable	-	-	-	Solid (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	Classification not possible	-	-	-	Classification not possible due to lack of data
3 Serious eye damage / eye irritation	Classification not possible	-	-	-	Insufficient data available.
4 Respiratory/skin sensitization	Respiratory sensitization: Classification not possible; Skin sensitization: Classification not possible	-	-	-	Respirator: No data Skin : HSDB (2006) describes that this is a mild sensitization, and HSFS (1998) and SITTIG (4th, 2002) describe that this may induce skin allergy, but these do not fit the skin sensitization criteria since they do not fall into neither an epidemiologic survey report nor a case report. Therefore we classified this as uncategorizable because of insufficient data
5 Germ cell mutagenicity	Classification not possible	-	-	-	Although there are positive results from the multiple parameter in vitro mutagenicity tests (the bacterial reverse mutation test and the chromosome aberration test using mammalian cultured cells) (ACGIH 7th, 2001, NTP DB, 2006), there are also negative results from the bacterial reverse mutation tests (NTP DB, 2006, IARC 27, 1982, Japan Society of Occupational Health Recommendations, 1996). So it was decided that the substance could not be classified due to insufficient data.
6 Carcinogenicity	Not classified	-	-	-	It is classified into A4 (ACGIH 7th, 2001) according to ACGIH and classified into group 3 (IARC Suppl.7, 1987) according to IARC. So it was set as the outside of Category.
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)	Due to the description that cyanosis occurred by methemoglobinemia in human exposure in industrial hygiene academic society advice (1996), it was classified into Category 1 (blood).
9	Specific target organs/systemic toxicity following repeated exposure	Category 1 (blood)	Health hazard	Danger	Causes damage to organs (blood) through prolonged or repeated exposure	Due to the description that anemia and reticulocytosis increasing were observed within the concentration of the guidance value range of Category 1 in the inhalation exposure test using mice in ACGIH (7th, 2001), it was classified into 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 48-hour EC50=180microg/L of Crustacea (Daphnia magna) (MOE Risk Assessment No.3, 2004).
11 Hazardous to the aquatic environment (chronic)	Not classified	-	-	-	Since rapidly degrading (BOD: 65.3% (existing chemical safety inspections data)), and less bio-accumulative (log Kow=0.95 (PHYSPROP Database, 2005)).