

GHS Classification

ID213

Benzenamine, 2-methoxy-5methyl-

CAS 120-71-8

Date Classified: Jun. 20, 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	-	-	-	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 by regulated examination methods, though "Flammable" (ICSC (J) (1994))
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	Classification not possible	-	-	-	No data available
11 Self-heating substances and mixtures	Classification not possible	-	-	-	Test methods applicable to liquid or solid substances at 140degC 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	-	-	-	Solid (GHS definition)
14 Oxidizing solids	Not applicable	-	-	-	Organic compounds containing oxygen (but not chlorine and fluorine) 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	-	-	-	No data 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	Based on rat LD50 values: 1450mg/kg (CERI Hazard Data, 2002, DFGOT vol.4, 1992, IARC 27, 1982) and 2210mg/kg (DFGOT vol.4, 1992), the value of the lower one was adopted and it was set as Category 4.
1 Acute toxicity (dermal)	Classification not possible	-	-	-	No data available
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	Category 2	Exclamation mark	Warning	Causes skin irritation	Although exposure time was unknown, from description that it moderately stimulated rabbit skin (DFGOT (vol.4, 1992)), it was classified as Category 2 .
3 Serious eye damage / eye irritation	Category 2A	Exclamation mark	Warning	Causes serious eye irritation	From description that there was severe stimulation in the eye of the rabbit of DFGOT (4 vol. 1992), it was set as Category 2A .
4 Respiratory/skin sensitization	respiratory sensitization: Classification not possible; Skin sensitization: Classification not possible	-	-	-	No data available
5 Germ cell mutagenicity	Not classified	-	-	-	The substance was regarded as outside the categories because there are negative results from the micronucleus test using mouse erythrocytes, which is an in vivo mutagenicity test using somatic cells (NTP DB, 2006).

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 is classified into the category 2 in EU (assessment time is not clear, EU-Annex I, 2006). But it is classified into group 2B in IARC (IARC Suppl.7, 1987), into 2B in Japan Society for Occupational Health (the 1991 proposal, Japan Society for Occupational Health recommendation, 2005), and classified into R according to NTP (NTP RoC 11th, 2005). So it was set as Category 2 based on IARC, Japan Society for Occupational Health, and NTP which have clear assessment period.
7	Toxic to reproduction	Classification not possible	-	-	-	No data available
8	Specific target organs/systemic toxicity following single exposure	Category 2 (blood system)	Health hazard	Warning	May cause damage to organs (blood system)	Due to the description that increasing methemoglobin concentration was observed in the dosage range of the guidance value of Category 2 in the oral study using the mouse in CERl Hazard Data (2002), it was classified into Category 2 (blood).
9	Specific target organs/systemic toxicity following repeated exposure	Not classified	-	-	-	Due to the descriptions that in long period oral feeding administration study using rats and mice in NTP TR142 (1979), the serious toxic effects except carcinogenesis was not observed even the over dose of the guidance value range of Category 2 (also quoted in CERl Hazard Data description, 2002, DFGOT vol.4, 1992, IARC 27, 1982), and that in occupational exposure example no health problems were observed in DFGOT (vol.4, 1992), it was out of Category.
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	-	-	-	Insufficient data available.
11 Hazardous to the aquatic environment (chronic)	Classification not possible	-	-	-	Classification not possible due to lack of data