

GHS Classification

ID658

CAS 569-61-9

Physical Hazards

4,4'-(4-aminocyclohexa-2,5-dienylidene)methylene)dianiline hydrochloride

Date Classified: Apr. 20, 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	Classification not possible	-	-	-	No data available
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	Classification not possible	-	-	-	No data available
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	-	-	-	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 classified	-	-	-	Reducing substance (IARC 57 (1993))
15 Organic peroxides	Not applicable	-	-	-	Containing no -O-O- structure
16 Corrosive to metals	Classification not possible	-	-	-	Melting point: 268-270degC (decomposes) (HSDB, 2005). 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 5	-	Warning	May be harmful if swallowed	SPECIES: Mouse ENDPOINT: LD50 VALUE: 5000 mg/kg REFERENCE SOURCE: RTECS(2004)
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	Classification not possible	-	-	-	No data available
3 Serious eye damage / eye irritation	Classification not possible	-	-	-	As a result of applying to eye of rabbit, it is only described as "injurious to rabbit eyes"(HSDB (2005)), and since Category was not able to be specified. So it cannot classify.
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)-	No data available

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)	We categorized it as Category 2. Since the DNA damage induction was acknowledged by an in vivo genotoxicity study (comet study; single cell gel electrophoresis assay of mouse) (RTECS (2004), and we found the positive result in the in vitro mutagenicity test of multiple indices (Reverse mutation (- S9), Forward mutation, gene mutation for lymphoma cell of the mouse etc) (IARC 57 (1993)).
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 set as category 2. Based on being classified into 2B (1993) according to IARC, into 2B (2005) according to Occupational Health Society, and into R (1996) according to NTP.
7	Toxic to reproduction	Classification not possible	-	-	-	No data available
8	Specific target organs/systemic toxicity following single exposure	Classification not possible	-	-	-	No data available.
9	Specific target organs/systemic toxicity following repeated exposure	Not classified	-	-	-	In the test by 13-week (about 90 days) feeding administration using rats and mice, remarkable influence is not acknowledged except for the goiter and the fatty degeneration of a liver in 4000 ppm and hyperplasia of thyroid gland and the basophilic hyperplasia in hypophysis in more than 2000 ppm (= approx. 200 mg/kg) in the case of the rat. Furthermore, for two-year carcinogenicity tests carried out under the same conditions in the rats and mice, a significant toxic change of non-neoplastic is not described, although the increase mortality rate accompanying increased the frequency of tumors is mostly seen in 1000-2000 ppm (= approx. 50-150 mg/kg). As mentioned above, since serious toxic impact dose through oral exposure for 90 days was considered to be around 2000 ppm (= approx. 200 mg/kg), it carried out the outside of Category with reference to the guidance value.
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	-	-	-	No data available
11 Hazardous to the aquatic environment (chronic)	Classification not possible	-	-	-	No data available.