GHS Classification

ID840 tetrasodium 3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[5-amino-4-hydroxynaphthalene-2,7-disulphonate]

CAS 72-57-1 Date Classified: May 24, 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
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	-	-	-	http://www8.cao.go.jp/cstp/index.html
12	Substances and mixtures, which in contact with water, emit flammable gases	Not classified	-	-	-	"Sol in water forming a deep blue soln." (Merck, 2006)
13	Oxidizing liquids	Not applicable	-	-	-	Solid (GHS definition)
14	Oxidizing solids	Classification not possible	-	-	-	No data available
15	Organic peroxides	Not applicable	-	-	-	Containing no -O-O- structure
16	Corrosive to metals	Classification not possible	-	-	-	Liquid at a test temperature, 55degC. 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)	Not classified	-	-	-	Not classified because of SPECIES: Rat; ENDPOINT: LD50; VALUE: :6200mg/kg; REFERENCE SOURCE: HSDB (2006), RTECS (2006)
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	-	-	-	There is description that death was not acknowledged by rat 1-hour exposure (4-hour equivalent 0.1184mg/L) in the 0.4735mg/L concentration (HSDB (2006)). But there is no other data and the category could not be specified. Therefore, it cannot be classified since data is insufficient.
2	Skin corrosion / irritation	Classification not possible	-	-	-	There is statement that skin irritations symptoms were not acknowledged by repeated administration in the test which used the rabbit (HSDB (2006)). But there is no statement which negated hazard clearly in Priority 1, it could not be classified due to shortage of data for carrying out the outside of Category.
3	Serious eye damage / eye irritation	Classification not possible	-	-	-	There is the description that irritation was not acknowledged, even if it applies to a human eyes (HSDB (2006) and SITTIG (4th, 2002)). But it cannot be classified, since there was no statement which negates hazard clearly in Priority 1, and the data is insufficient for set as the outside of Category.
4	Respiratory/skin sensitization	Respiratory sensitization: Classification not possible; Skin sensitization: Classification not	-	-	-	No data available
5	Germ cell mutagenicity	Classification not possible	-	-	-	Although there was a positive result with in vivo chromosomal aberration test on rats in RTECS (2006), and it would be classified into Category 2 assuming the target sector was marrow cells and would be Category 1B with spermatogenous cells, the target sector was unknown. So it could not be specified or be classified.

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 group 2B (IARC Suppl.7, 1987) in IARC and 2B in Japan Assoc. of Industrial Health (industrial hygene academic society recommentation, 2005). So it was considered as Category 2.
7	Toxic to reproduction	Category 2	Health hazard	Warning	Suspected of damaging fertility or the undorn child	There is no description of general toxicity of parent animals. However, there is a description that although the route of administration is unknown, teratogenicity was observed in a mouse, a rat, and a guinea pig (IARC 8 (1975)) . Moreover, there is a description that impact on fertility and developmental anomaly were observed in pregnant rat oral administration examination (RTECS (2006)). Therefore, it was classified into Category 2.
8	Specific target organs/systemic toxicity following single exposure	Classification not possible	–	–	–	No data available.
9	Specific target organs/systemic toxicity following repeated exposure	Classification not possible	–	–	–	No data available
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