# GHS Classification

**ID753** **4,4'-oxybisbenzenamine**

**CAS 101-80-4** Date Classified: Jul. 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 | – | – | – | It is an organic compound whose flash point is 218 degC (Lange (16th, 2005)), and does not ignite in the air at room temperature. |
| 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 metaloids(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 (but not to other elements). |
| 15 | Organic peroxides | Not applicable | – | – | – | Organic compounds containing no -0-0- 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 | SPECIES: Rat<br>ENDPOINT: LD50<br>VALUE: 725 mg/kg<br>REFERENCE SOURCE: HSDB (2003) |
| 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 | Not classified | – | – | – | It was classified as out of Category from the statement of no stimulativeness in rat examination (DFGOTvol.6 (1994)). |
| 3 | Serious eye damage / eye irritation | Not classified | – | – | – | It was carried out the outside of Category from the statement of having no stimulativeness (DFGOTvol.6 (1994)) by the examination of the rabbit. |
| 4 | Respiratory/skin sensitization | Respiratory sensitization: Classification not possible; Skin sensitization: Category1 | (Respiratory sensitization)-; (Skin sensitization)Exclamation mark | (Respiratory sensitization)-; (Skin sensitization)Warning | (Respiratory sensitization)-; (Skin sensitization)May cause allergic skin reaction | Respiratory sensitization: Since there is no data, it cannot be classified. Skin sensitization: It was classified into Category 1 according to the statemen that a test with guinea pigs identified the sensitization (DFGOTvol.6 (1994)). |
| 5 | Germ cell mutagenicity | Classification not possible | – | – | – | For In vitro examination, we found the descriptions that it gave positive by the Ames test (HSDB (2003)), and it gave positive for the chromosome aberration test (DFGOTvol.6 (1994)). Although we found a statement that it gave negative (HSDB (2003)) by the in vivo irregular DNA composition examination in the rat and the mouse, we could not classify it for the insufficiency of data. |

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| 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 classified into 2. From it being classified into 2B according to IARC, and being classified into 2B in Japan Society for Occupational Health. |
| 7 | Toxic to reproduction | Classification not possible | – | – | – | Although it is classified into Repr.Cat.3;R62 in EU, it cannot be classified due to no supported data. |
| 8 | Specific target organs/systemic toxicity following single exposure | Classification not possible | – | – | – | No data available. |
| 9 | Specific target organs/systemic toxicity following repeated exposure | Category 2 (blood, central nervous system) | Health hazard | Warning | May cause damage to organs (blood, central nervous system) through prolonged or repeated exposure | It was classified into Category 2 according to the statement in which cyanosis, respiratory destress, and lethargy were acknowledged in feeding administration to a rat within the guidance value of Category 2 (DFGOTvol.6 (1994)). |
| 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 |