

GHS Classification

ID555

Benzothiazole

CAS 95-16-9

Date Classified: Oct. 23, 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 | — | — | — | Containing no chemical groups with explosive properties |
| 2 Flammable gases | Not applicable | — | — | — | Classified as "liquid" according to GHS definition |
| 3 Flammable aerosols | Not applicable | — | — | — | Not aerosol products |
| 4 Oxidizing gases | Not applicable | — | — | — | Classified as "liquid" according to GHS definition |
| 5 Gases under pressure | Not applicable | — | — | — | Classified as "liquid" according to GHS definition |
| 6 Flammable liquids | Not classified | — | — | — | The flash point is 107degC (c.c.) (IUCLID (2000)) |
| 7 Flammable solids | Not applicable | — | — | — | Classified as "liquid" according to GHS definition |
| 8 Self-reactive substances and mixtures | Not applicable | — | — | — | Containing no chemical groups with explosive or self-reactive properties |
| 9 Pyrophoric liquids | Classification not possible | — | — | — | No data available |
| 10 Pyrophoric solids | Not applicable | — | — | — | Classified as "liquid" according to GHS definition |
| 11 Self-heating substances and mixtures | Classification not possible | — | — | — | Test methods applicable to liquid substances are not available. |
| 12 Substances and mixtures, which in contact with water, emit flammable gases | Not applicable | — | — | — | Containing no metals or metalloids (B, Si, P, Ge, As, Se, Sn, Sb, Te, Bi, Po, At) |
| 13 Oxidizing liquids | Not applicable | — | — | — | Organic compounds containing no oxygen, fluorine or chlorine |
| 14 Oxidizing solids | Not applicable | — | — | — | Classified as "liquid" according to GHS definition |
| 15 Organic peroxides | Not applicable | — | — | — | Organic compounds 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 the rat LD50 (oral route) value of 380mg/kg representing the lower of the two testing data, 492mg/kg and 380mg/kg (PATTY (4th, 2000)). |
| 1 Acute toxicity (dermal) | Category 2 | Skull and crossbones | Danger | Fatal in contact with skin | Based on the rabbit LD50 (dermal route) value of 126mg/kg representing the lowest of the testing data, 630-1,000mg/kg and 126-200mg/kg (PATTY (4th, 2000)). |
| 1 Acute toxicity (inhalation: gas) | Not applicable | — | — | — | Due to the fact that the substance is "liquid" according to the GHS definition and inhalation of its gas is not expected. |
| 1 Acute toxicity (inhalation: dust, mist) | Classification not possible | — | — | — | Insufficient data available |
| 1 Acute toxicity (inhalation: dust, mist) | Classification not possible | — | — | — | No data available |
| 2 Skin corrosion / irritation | Category 3 | — | Warning | Causes mild skin irritation | Based on the description in the report on rabbit skin irritation tests (exposure duration unknown) (PATTY (4th, 2000)): "Slightly irritating." |
| 3 Serious eye damage / eye irritation | Category 2B | — | Warning | Causes eye irritation | Based on the description in the report on rabbit eye irritation tests (PATTY (4th, 2000)): "Slightly irritating." |
| 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) — | Respiratory sensitization: No data available Skin sensitization: No data available |
| 5 Germ cell mutagenicity | Classification not possible | — | — | — | Based on the absence of data on in vivo tests and no positive data on in vitro mutagenicity tests (several indices), described in NTP DB (Access on June 2006) and PATTY (4th, 2000). |
| 6 Carcinogenicity | Classification not possible | — | — | — | No data available |
| 7 Toxic to reproduction | Classification not possible | — | — | — | No data available |
| 8 Specific target organs/systemic toxicity following single exposure | Classification not possible | — | — | — | Insufficient 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 |
|--------------|----------------|--------|-------------|------------------|---------------------------------|
|--------------|----------------|--------|-------------|------------------|---------------------------------|

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|----|--|------------|---|---|---|---|
| 11 | Hazardous to the aquatic environment (acute) | Category 3 | - | - | Harmful to aquatic life | It was classified into Category 3 from 48 hours EC50=19mg/L of the crustacea (Daphnia magna) (MOE eco-toxicity tests of chemicals, 1997). |
| 11 | Hazardous to the aquatic environment (chronic) | Category 3 | - | - | Harmful to aquatic life with long lasting effects | Although acute toxicity was Category 3 and the potential was low (BCF=7.5(Existing Chemical Safety Inspections Data)), since there was no rapidly degrading (the decomposition by BOD: 0%(Existing Chemical Safety Inspections Data)), it was classified into Category 3. |