# GHS Classification

**ID1232** **cicloheximide**

**CAS 66-81-9** 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 | – | – | – | 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 | Not classified | – | – | – | Non-pyrophoric when in contact with air at a room temperature and used as agricultural chemicals. |
| 11 | Self-heating substances and mixtures | Classification not possible | – | – | – | Test methods applicable to solid (melting point <= 140degC) substances 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 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 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. Non-corrosive to metals (HSDB, 2002) |

**Health Hazards**

| | Hazard class | Classification | symbol | signal word | hazard statement | Rational for the classification |
|---|---|---|---|---|---|---|
| 1 | Acute toxicity (oral) | Category 1 | Skull and crossbones | Danger | Fatal if swallowed | Based on the rat oral LD50 values : 2mg/kg (RTECS(2004), HSDB (2002)) and 3.7mg/kg (SITTIG (4th, 2002)), we adopted the value indicating the higher toxicity (LD50 = 2mg/kg), and classify the substance as Category 1. |
| 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 | Since there is a stimulate of "Moderate (moderately)" in Standard Draize Test in a rabbit (RTECS (2004)), and there was description that the human skin is stimulated (ICSC (J), (1997), HSDB (2002), SITTIG (4th, 2002), HSFS (1999)), it was set as category 2. |
| 3 | Serious eye damage / eye irritation | Category 2A-2B | Exclamation mark | Warning | Causes serious eye irritation | Since there was description that the human eye is stimulated (ICSC (J), (1997), SITTIG (4th, 2002), and HSFS (1999)), it was set as Category 2A-2B. In addition, the detailed categorization from this data is difficult. |
| 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) | It was positive (RTECS (2004)) by the mouse bone marrow small core test, and it is classified into Category 2. In addition, negative result is reported by the Ames test of the in vitro genotoxicity study and the positivity is reported by the mouse lymphoma test (RTECS (2004)). |

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| 6 | Carcinogenicity | Classification not possible | – | – | – | No data available |
| 7 | Toxic to reproduction | Category 1B | Health hazard | Danger | May damage fertility or the undorn child | Since embryo absorptions, fetus lethal, and skeletal abnormalities such as polymelia, were seen in pregnant rats/mouse (Catalogue of Teratogenic agent (2004) and RTECS (2004)), and EU risk phrases are "R61 and a category 2", and developmental was indicated in California EPA Prop 65 (2006), it was set as Category1B. |
| 8 | Specific target organs/systemic toxicity following single exposure | Classification not possible | – | – | – | Althouh there is a report that symptoms, such as saliva oversecretion and excitement of the temporary central nerves accompanied by diarrhea and a tremor, were observed in oral administration experiment against rats, monkey and dogs (HSDB (2002)), it cannot be classified due to insufficient data such as unknown dose . |
| 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) | Category 2 | – | – | Toxic to aquatic life | It was classified into Category 2 from 96-hour LC50=1400microg/L of fishes (Rainbow trout) (AQUIRE, 2003). |
| 11 | Hazardous to the aquatic environment (chronic) | Category 2 | Environment | – | Toxic to aquatic life with long lasting effects | Classified into Category 2, since acute toxicity was Category 2 and not rapidly degrading (BOD: 1% (existing chemical safety inspections data)), though less bio-accumulative (BCF<2.8 (existing chemical safety inspections data)). |