

GHS Classification

ID1003

Phosphoric acid

CAS 7664-38-2

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 | Not classified | - | - | - | Non-combustible (ICSC (J), 2000; etc.) |
| 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-combustible (ICSC (J), 2000; etc.) |
| 11 Self-heating substances and mixtures | Not classified | - | - | - | Non-combustible (ICSC (J), 2000; etc.) |
| 12 Substances and mixtures, which in contact with water, emit flammable gases | Not classified | - | - | - | UNRTDG Class: 8 |
| 13 Oxidizing liquids | Not applicable | - | - | - | Solid (GHS definition) |
| 14 Oxidizing solids | Not classified | - | - | - | UNRTDG Class: 8 |
| 15 Organic peroxides | Not applicable | - | - | - | Containing no -O-O- structure |
| 16 Corrosive to metals | Classification not possible | - | - | - | Although it is classified into the class 8 in UNRTDG, identification with skin corrosivity cannot be performed. Moreover, although there is information that it corrodes many metals (ICSC (J) (2000)), there is no data based on set test methods. |

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 | Category 4 based on SPECIES: Rat; ENDPOINT: LD50; VALUE: :1530mg/kg; REFERENCE SOURCE: RTECS (2006, IUCLID, 2000, HSDB, 2006), 1250mg/kg; REFERENCE SOURCE: RTECS (2006) |
| 1 Acute toxicity (dermal) | Category 5 | - | Warning | May be harmful in contact with skin | It was set as Category 5 based on rabbit LD50 value: 2740mg/kg (RTECS2006, IUCLID2000, HSDB2006). |
| 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 was data that rat LC50 (1 hour) value was >0.85mg/L (4-hour equivalent >0.21mg/L) (RTECS (2006)). But the category could not be specified only by this data. Therefore, it cannot be classified since data is insufficient. |
| 2 Skin corrosion / irritation | Category 1A-1C | Corrosion | Danger | Causes severe skin burns and eye damage | Although it was the effects of exposure for 24 hours, there are description that caustic was admitted in the test which applied 75-85% aqueous solutions to the rabbit skin (IUCLID (2000)), and pH of 0.1N aqueous solutions was strong acids of 1.5. So it was set as Category 1A-1C. |
| 3 Serious eye damage / eye irritation | Category 1 | Corrosion | Danger | Causes serious eye damage | Since it had skin corrosiveness, it was categorized as Category 1. |
| 4 Respiratory/skin sensitization | respiratory sensitization: Classification not possible; Skin sensitization: Classification not possible | - | - | - | No data available |
| 5 Germ cell mutagenicity | Classification not possible | - | - | - | No data available |
| 6 Carcinogenicity | Classification not possible | - | - | - | No data available |
| 7 Toxic to reproduction | Classification not possible | - | - | - | Classification not possible due to lack of data |

| | | | | | | |
|----|--|---|------------------|---------|---|--|
| 8 | Specific target organs/systemic toxicity following single exposure | Category 3 (respiratory tract irritation) | Exclamation mark | Warning | may cause respiratory irritation or may cause drowsiness and dizziness (respiratory tract irritation) | The substance was classified as Category 3 (airway irritant) because it is reported in ACGIH (7th, 2001) and Japan Society for Occupational Health Recommendations (1993) that the mist is an irritant to upper airways. |
| 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 |