

GHS Classification

ID48

CAS 1317-36-8

Physical Hazards

Lead monoxide; Litharge

Date Classified: Mar. 23, 2006

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 "solid" according to GHS definition |
| 3 Flammable aerosols | Not applicable | - | - | - | Not aerosol products |
| 4 Oxidizing gases | Not applicable | - | - | - | Classified as "solid" according to GHS definition |
| 5 Gases under pressure | Not applicable | - | - | - | Classified as "solid" according to GHS definition |
| 6 Flammable liquids | Not applicable | - | - | - | Classified as "solid" according to GHS definition |
| 7 Flammable solids | Not classified | - | - | - | Non-flammable (ICSC, 2002) |
| 8 Self-reactive substances and mixtures | Not applicable | - | - | - | Containing no chemical groups with explosive or self-reactive properties |
| 9 Pyrophoric liquids | Not applicable | - | - | - | Classified as "solid" according to GHS definition |
| 10 Pyrophoric solids | Not classified | - | - | - | Non-combustible (ICSC, 2002) |
| 11 Self-heating substances and mixtures | Not classified | - | - | - | Non-combustible (ICSC, 2002) |
| 12 Substances and mixtures, which in contact with water, emit flammable gases | Not classified | - | - | - | Stable to water; insoluble (ICSC, 2002) |
| 13 Oxidizing liquids | Not applicable | - | - | - | Classified as "solid" according to GHS definition |
| 14 Oxidizing solids | Classification not possible | - | - | - | Classification not possible due to the absence of data, though being inorganic compounds containing oxygen. |
| 15 Organic peroxides | Not applicable | - | - | - | Not organic compounds |
| 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) | Classification not possible | - | - | - | No data available |
| 1 Acute toxicity (dermal) | Classification not possible | - | - | - | No data available |
| 1 Acute toxicity (inhalation: gas) | Not applicable | - | - | - | Due to the fact that the substance is "solid" according to the GHS definition and inhalation of its gas is not expected. |
| 1 Acute toxicity (inhalation: dust, mist) | Classification not possible | - | - | - | No 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 (CERI Hazard Data 2001-9 (2002)) "mild irritation". Refer to other data on lead and its compounds (primarily inorganic lead) |
| 3 Serious eye damage / eye irritation | Classification not possible | - | - | - | No data available Refer to other data on lead and its compounds (primarily inorganic lead) |
| 4 Respiratory/skin sensitization | Respiratory sensitization: Classification not possible Skin sensitization: Classification not possible | - | - | - | Respiratory sensitization: No data available Refer to other data on lead and its compounds (primarily inorganic lead) Skin sensitization: No data available Refer to other data on lead and its compounds (primarily inorganic lead) |
| 5 Germ cell mutagenicity | Category 2 | Health hazard | Warning | Suspected of causing genetic defects | Based on many reports on the occupational exposure to lead compounds and the results of epidemiological studies: lead compounds induce chromosome aberration and micronucleated cells in human peripheral blood cells (SCE formation is also observed). Although no data are available on the evaluation of lead oxides per se, the results of epidemiological studies should be taken into account in view of their human germ cell mutagenicity. However, classification may not be possible, if based on the description in IARC 23 (1980): data on multi-generation mutagenicity tests, germ/somatic cell mutagenicity tests in vivo and germ/somatic cell genotoxicity tests in vivo are not available, and in vitro mutagenicity tests do not show strong positive results (in several indexes). |
| 6 Carcinogenicity | Category 2 | Health hazard | Warning | Suspected of causing cancer | Based on the classification by NTP (2005) (R: Lead and Lead Compounds), IARC (1987) (Group 2B: Lead and Inorganic Lead Compounds) and the Japan Society of Occupational Health (2B: Lead Compounds (Inorganic)). |
| 7 Toxic to reproduction | Category 1A | Health hazard | Danger | Suspected of damaging fertility or the unborn child | Based on the description in IARC 23 (1980): The results of epidemiological studies conducted at lead smelters suggest a significant increase in spontaneous abortion rates. (Workers in lead smelters may be exposed to lead fume, which is probably lead monoxide.) |
| 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 system, nervous system, kidneys) | Health hazard | Warning | May cause damage to organs through prolonged or repeated exposure (blood system, nervous system, kidneys) | Based on human evidence including "the substance induces eye/skin/respiratory irritation and induces chemical bronchitis, pneumonia and pulmonary edema through inhalation of vapor" (ICSC (J) (2002)). |
| 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 | - | - | - | Classification not possible due to lack of data |
| 11 Hazardous to the aquatic environment (chronic) | Category 4 | - | - | May cause long lasting harmful effects to aquatic life | Since although acute toxicity is not reported within the aqueous solubility concentrations, it was a metallic compound, and the underwater action was unknown, it was classified into Category 4. |