

GHS Classification

ID1369

monensin

CAS 17090-79-8

Date Classified: Dec. 18, 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 (antibiotic of microorganism origin and non-pyrophoric structurally) |
| 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 metalloids(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 and hydrogen (but not to other elements). |
| 15 Organic peroxides | Not applicable | - | - | - | Organic compounds containing no -O-O- 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 3 | Skull and crossbones | Danger | Toxic if swallowed | Based on the LD50 = 100mg/kg in the oral administration tests with rats (HSDB, 2002; RTECS, 2005), the substance was classified as Category 3. [Note] Also refer to ID No.1370, monensin sodium (CAS No.22373-78-0) for the health hazards. |
| 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 3 | - | Warning | Causes mild skin irritation | From the description that it stimulates human and rabbit skin at mild (Mild) degree (HSDB, 2002; RTECS, 2005), it was set as category 3. |
| 3 Serious eye damage / eye irritation | Category 2A | Exclamation mark | Warning | Causes serious eye irritation | It is set as Category 2A from description that it stimulates to moderate to human and rabbit eye (HSDB, 2002; RTECS, 2005). |
| 4 Respiratory/skin 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 | Classification not possible | - | - | - | No data available |
| 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 | Category 2 (skeletal muscles, kidneys, heart) | Health hazard | Warning | May cause damage to organs (skeletal muscles, kidneys, heart) | Since there was description that it results in renal insufficiency or heart failure after fusion of striated muscles in humans (HSDB, 2002), it was considered as Category 2 (skeletal muscle, kidney, heart). |
| 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 |