

## GHS Classification

**ID817**

**Stearic acid, sodium salt**

**CAS 822-16-2**

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  | 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  | Classification not possible | -      | -           | -                | No data available   |
| 11 Self-heating substances and mixtures                                       | Classification not possible | -      | -           | -                | No data available   |
| 12 Substances and mixtures, which in contact with water, emit flammable gases | Not classified              | -      | -           | -                | Stable to water (the water solubility is obtained) (Merck (13th, 2001), HSDB (2005))  |
| 13 Oxidizing liquids  | Not applicable              | -      | -           | -                | Solid (GHS definition)  |
| 14 Oxidizing solids   | Not applicable              | -      | -           | -                | Organic compounds containing oxygen (but not chlorine and fluorine) and the oxygen is chemically bonded only to carbon (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)                   | Classification not possible   | -   | -   | -   | Classification not possible due to lack of data on LD50  |
| 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             | Not classified  | -   | -   | -   | Based on the statement that there is no irritation with the rabbit (ACGIH (2001)), it was carried out the outside of Category .  |
| 3 Serious eye damage / eye irritation     | Category 2A   | Exclamation mark                                    | Warning   | Causes serious eye irritation                       | Based on the statement that in the rabbit test, transient mild conjunctival hyperemia, and optical irregularities of the corneal epithelium were seen, and moderate irritation is indicated (HSDB (2005), it was set as Category 2A. |
| 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                  | 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   | Classification not possible | - | - | - | It cannot classify due to the lack of information. |
| 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                           | Since a potential that relevant toxicity was indicated in the water solubility (3.322mg/L (PHYSPROP Database, 2005)) of this substance could not be denied from 48-hour EC50=19mg/L of Crustacea (Daphnia magna) (MOE eco-toxicity tests of chemicals, 2000), it was classified into Category 2. |
| 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 supposed bio-accumulative (log Kow=4.13(PHYSPROP Database, 2005), though rapidly degrading (BOD: 83% (Existing Chemicals Safety Check Data)).  |