GHS Classification

ID218 **acetamide**

CAS 60-35-5 Date Classified: Apr. 20, 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	Classification not possible	–	–	–	No data available
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	–	–	–	The test which is suitable for the solid with a melting point of 81 degC (140 degC or less) has not been established.
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 (but not chlorine and fluorine) and the oxygen is chemically bonded only to carbon (but not to other elements).
15	Organic peroxides	Not applicable	–	–	–	Containing no -0-0- 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)	Not classified	–	–	–	SPECIES: Rat ENDPOINT: LD50 VALUE: 130 g/kg REFERENCE SOURCE: IARC vol.7(1974)
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	Based on descriptions "it has comparatively no irritativeness to the skin or mucous membrane (HSDB (2003))" and "the skin and eye are stimulated as effect of short-term exposure (ICSC (1997))", it was judged to have slight irritativeness and classified as Category 3.
3	Serious eye damage / eye irritation	Category 2B	–	Warning	Causes eye irritation	Based on description of "there is no irritation to mucosa comparatively (HSDB (2003))", and description "the skin and an eye are stimulated as effect of short-term exposure (ICSC (1997))", it was judged as slight irritation and set as Category 2B.
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	Not classified	–	–	–	Although the result of one of the three micronucleus tests in mouse bone-marrow cells (in vivo mutagenicity tests in somatic cells) was "marginally positive", negative results were obtained from the 2 other subsequently reported tests using higher dose. So the substance was regarded as outside the categories.

6	Carcinogenicity	Category 2	Health hazard	Warning	Suspected of causing cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)	Based on the category 2B by IARC (1999) as latest evaluation document, it was set as Category 2. In addition, it is classified into 2B in Japan Society for Occupational Health, and is classified into 3 in EU, respectively. Moreover, in the rat carcinogenicity test, increases of incidence of liver tumors are observed (IARC 71 (1999)).
7	Toxic to reproduction	Classification not possible	–	–	–	The effect to reproductive function or reproductive potential in premating administration is unknown, and it cannot be classified since data is insufficient, .
8	Specific target organs/systemic toxicity following single exposure	Not classified	–	–	–	The highest tolerance doses after single time oral exposure is described to be 7.5g/kg and 8.0g/kg in the rat and the mouse, respectively (IARC vol.7 (1974)). Serious toxic influence dosage is at least more than the highest tolerated doses, and it exceeded the guidance value Category 2. So it was out of the Category.
9	Specific target organs/systemic toxicity following repeated exposure	Classification not possible	–	–	–	Classification not possible due to lack of data
10	Aspiration hazard	Classification not possible	–	–	–	Insufficient data available.

Environmental Hazards

Hazard class		Classification	symbol	signal word	hazard statement	Rational for the classification
11	Hazardous to the aquatic environment (acute)	Not classified	–	–	–	It carried out the outside of Category from 24-hour EC50>10g/L of the Crustacea (Daphnia magna), and others (AQUIRE, 2003).
11	Hazardous to the aquatic environment (chronic)	Not classified	–	–	–	Since not water-insoluble (aqueous solubility =2.25*106mg/L (PHYSPROP Database, 2005)) and acute toxicity is low.