

## GHS Classification

**ID961**

**Formamide**

**CAS 75-12-7**

Date Classified: Jun. 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	-	-	-	Liquid (GHS definition)
3 Flammable aerosols	Not applicable	-	-	-	Not aerosol products
4 Oxidizing gases	Not applicable	-	-	-	Liquid (GHS definition)
5 Gases under pressure	Not applicable	-	-	-	Liquid (GHS definition)
6 Flammable liquids	Not classified	-	-	-	Flash point: >93degC
7 Flammable solids	Not applicable	-	-	-	Liquid (GHS definition)
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 classified	-	-	-	Flash point: >500degC (Ullmanns (E), 5th, 1995, A12: p.1-3)
10 Pyrophoric solids	Not applicable	-	-	-	Liquid (GHS definition)
11 Self-heating substances and mixtures	Classification not possible	-	-	-	Test methods applicable to liquid 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	-	-	-	Organic compounds containing oxygen (but not chlorine and fluorine) chemically bonded only to carbon and hydrogen (but not to other elements).
14 Oxidizing solids	Not applicable	-	-	-	Liquid (GHS definition)
15 Organic peroxides	Not applicable	-	-	-	Containing no -O-O- structure
16 Corrosive to metals	Classification not possible	-	-	-	Although there is information that it corrodes copper etc. (HSDB (2005)), 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)	Not classified	-	-	-	Not classified because of SPECIES: Rat; ENDPOINT: LD50; VALUE: : approximately 6000mg/kg; REFERENCE SOURCE: ACGIH 7th, 2001)
1 Acute toxicity (dermal)	Not classified	-	-	-	Based on rabbit LD50 value: 6000mg/kg (ACGIH 7th, 2001), and outline fatal dose: 17000mg/kg (ACGIH 7th, 2001), it was set as the outside of Category.
1 Acute toxicity (inhalation: gas)	Not applicable	-	-	-	Liquid (GHS definition)
1 Acute toxicity (inhalation: vapour)	Classification not possible	-	-	-	No data available
1 Acute toxicity (inhalation: dust, mist)	Not classified	-	-	-	From description that a toxic phenomena was not acknowledged in 3900ppm of 6-hour exposure (4-hour equivalent 10.75mg/L) in the inhalation exposure test of the mist using the rat (ACGIH (7th, 2001)), it was set as the outside of Category.
2 Skin corrosion / irritation	Category 3	-	Warning	Causes mild skin irritation	It was set as Category 3 from description that slight transient skin irritations was admitted in the test using the guinea-pig (ACGIH (7th, 2001)).
3 Serious eye damage / eye irritation	Category 2B	-	Warning	Causes eye irritation	We classified it as Category 2B based on the description that the very slight transient stimulant action was acknowledged in the test applied to the eyes of the rabbits (ACGIH (7th, 2001)).
4 Respiratory/skin sensitization	Respiratory sensitization: Classification not possible; Skin sensitization: Classification not possible	-	-	-	Respiratory organ: No data. Skin: Although we found the description that skin sensitizing property was not acknowledged in the test using the guinea pigs in ACGIH (7th, 2001), we presupposed that we could not classify it since the test method is unknown and sufficient data to classify it as Out Of Category was not obtained.
5 Germ cell mutagenicity	Not classified	-	-	-	There was a negative result by the micronucleus test which used the mouse red corpuscles, which are the in vivo mutagenicity tests using a somatic (NTP DB, 2005). So it carried out the outside of Category.
6 Carcinogenicity	Classification not possible	-	-	-	No data available

7	Toxic to reproduction	Not classified	-	-	-	In the oral administration study using pregnancy rats and rabbits in the NTP DB (2005), there is a description that specific reproductive toxicity was not observed at the dose in which general toxicity is observed in parental animals. Therefore, it was out of the Category. Moreover, there is no descriptions on general toxicity of parent animals in the ACGIH (7th, 2001). However, there is a description that reproductive toxicity was not observed in the percutaneous administration examination using pregnant mice and rats. Specific reproductive toxicity was not also observed in the oral administration fertility study using the male and female mice in NTP DB (2005).
8	Specific target organs/systemic toxicity following single exposure	Classification not possible	-	-	-	There was a description in ACGIH (7th, 2001) referring to that toxic phenomena were not confirmed at high concentrations beyond the guidance value limits of Category 2 in mist inhalation exposure tests using rats, while there is no other data, and determined that it cannot be classified as out of Category because of lack of data.
9	Specific target organs/systemic toxicity following repeated exposure	Classification not possible	-	-	-	Although there was description that toxic effect was not observed with the dosage within the guidance value range for Category 2 in 90 day dermal administration test on rats (ACGIH (7th, 2001)), since there was no other data which clearly deny hazard with Priority 1, it was presupposed that data is insufficient and it cannot be classified as out of Category.
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)	Not classified	-	-	-	It carried out the outside of Category from 96-hour LC50>100 mg/L of fishes ( <i>Oryzias latipes</i> ) (MOE eco-toxicity tests of chemicals, 1998).
11 Hazardous to the aquatic environment (chronic)	Not classified	-	-	-	Since not water-insoluble (water solubility=1.00*106mg/L(PHYSROP Database, 2005)) and acute toxicity is low.