

## GHS Classification

**ID1376**

**Fenaminosulf**

**CAS 140-56-7**

Date Classified: Nov. 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 classified	-	-	-	Not classified because of no data on the explosibility, though the substance contains nitrogen atoms adjacent to each other as chemical groups associated with explosive properties present and has its oxygen balance calculated at -114.6, higher than -200 of the criteria.
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 classified	-	-	-	Although the grouping relevant to explosive (adjoining nitrogen atom) was included, the grouping relevant to autoreactive was not included and the data in which autoreactive is indicated was not found, either. So it was considered the outside of Category.
9 Pyrophoric liquids	Not applicable	-	-	-	Solid (GHS definition)
10 Pyrophoric solids	Not classified	-	-	-	Non-pyrophoric when in contact with air at a room temperature and used as agricultural chemicals.
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)
13 Oxidizing liquids	Not applicable	-	-	-	Solid (GHS definition)
14 Oxidizing solids	Classification not possible	-	-	-	No data available
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 value of 60mg/kg (HSDB, 2003; RTECS, 2003) in the oral administration test using female rats and rats, the substance was classified as Category 3.
1 Acute toxicity (dermal)	Classification not possible	-	-	-	There is only a report of rat LD50 value >100mg/kg (HSDB, 2003) of the dermal administration test, and it cannot be classified.
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	Classification not possible	-	-	-	No data available
3 Serious eye damage / eye irritation	Classification not possible	-	-	-	No data available
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	-	-	-	There is no in vivo data. And in in vitro mutagenicity test, there is an Ames positive (RTECS, 2003; NTP DB, 2006), MLA positives (NTP DB, 2006), a CHL cell chromosome aberration positive (HSDB, 2003; RTECS, 2003), CHO cell chromosome aberration negative (NTP DB, 2006). And although the response of Ames is strong, other positive reactions are not strong. Moreover, in the CHO chromosome aberration test of NTP was negative, it was not judged as 2 because of insufficient knowledge. And it cannot be classified according to a guideline.

6	Carcinogenicity	Not classified	-	-	-	Since it was classificationed into Group 3 (substance which cannot be classificationed into human carcinogenicity) in IARC (Supple.7, 1987), it carried out the outside of Category. In addition, carcinogenic was also negative in the two-year feed-mix administration tests for rats and mice of NTP TR101 (1978).
7	Toxic to reproduction	Classification not possible	-	-	-	Although fetal death and musculoskeletal effects in teratogenicity studies using female rats were reported (RTECS, 2003) it was judged to be unclassifiable due to insufficient data.
8	Specific target organs/systemic toxicity following single exposure	Category 1 (kidneys)	Health hazard	Danger	Cause damage to organs (kidneys)	Since in acute oral administration in rat, renal tubular damage (HSDB, 2003) was observed at the dose of guidance levels in Category 1, it was considered as Category 1 (renal).
9	Specific target organs/systemic toxicity following repeated exposure	Category 2 (kidneys)	Health hazard	Warning	May cause damage to organs (kidneys) through prolonged or repeated exposure	Since nephropathy is observed in feeding administration for 12 months in rat at 0.10% (= an equivalent for 1000 ppm and 50 mg/kg/day) (HSDB, 2003) and it is equivalent to the guidance value of Category 2, it was classified into Category 2 (kidney).
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	It was classified into Category 2 from 96-hour LC50=3.7mg/L of Crustacea (Amphipod), and others (HSDB, 2004).
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 not rapidly degrading (BIOWIN), though supposed ess bio-accumulative (log Kow=-1.66(PHYSPROP Database, 2005)).