

## GHS Classification

**ID1247**

**CAS 82560-54-1**

### Physical Hazards

**ethyl N-[2,3-dihydro-2,2-dimethylbenzofuran-7-yloxycarbonyl(methyl)aminothio]-N-isopropyl-beta-alaninate**

Date Classified: Oct. 23, 2006 (Environmental Hazards: Mar. 31, 2006)

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	Classification not possible	-	-	-	No data available
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	Classification not possible	-	-	-	No data available
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 (but not to other elements).
14 Oxidizing solids	Not applicable	-	-	-	Liquid (GHS definition)
15 Organic peroxides	Not applicable	-	-	-	Organic compounds containing no -O-O- structure
16 Corrosive to metals	Classification not possible	-	-	-	No data 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	We compared the rat LD50s in male (110mg/kg) and female (105mg/kg) in the oral administration test (Agricultural Chemical Registration Data). Based on the lower of these two values, the substance was classified as Category 3.
1 Acute toxicity (dermal)	Not classified	-	-	-	It was set as the outside of Category. Based on rat LD50 >2000mg/kg in the dermal toxicity tests, and the description that there is no death (Agricultural Chemical Registration Data).
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)	Category 2	Skull and crossbones	Danger	Fatal if inhaled	It was set as Category 2 based on rat LC50 = 0.15mg/L (Agricultural Chemical Registration Data) in the inhalation exposure test (dust and mists).
2 Skin corrosion / irritation	Not classified	-	-	-	In the skin irritation test of rabbits, it carried out the outside of Category based on the statement that skin irritation is not admitted (Agricultural Chemical Registration Data).
3 Serious eye damage / eye irritation	Category 2B	-	Warning	Causes eye irritation	In the eye irritation tests using a rabbit, mild redness of a conjunctiva and mild to moderate swelling were observed. And it disappeared within 24 to 48 hours after applying eyedrop (Agricultural Chemical Registration Data). So it was set as Category 2B.
4 Respiratory/skin sensitization	Respiratory sensitization: Classification not possible; Skin sensitization: Not possible	(Respiratory sensitization)-; (Skin sensitization)-	(Respiratory sensitization)-; (Skin sensitization)-	(Respiratory sensitization)-; (Skin sensitization)-	Respiratory sensitization: no data available. Skin sensitization: in the skin sensitization test by guinea pig, it carried out the outside of Category based on the statement (Agricultural Chemical Registration Data) that sensitizing was not admitted.
5 Germ cell mutagenicity	Not classified	-	-	-	There is no result of human multi generation epidemiology, multi generation mutagenicity test, and germ cell in vivo mutagenicity test. And there is the description that it is negative result in all of the somatic cell in vivo mutagenicity test (chromosome aberration test using rat bone marrow cells and the small core test using mouse PCE stem cell) (Agricultural Chemical Registration Data). So it is classified as the out of the Category.
6 Carcinogenicity	Not classified	-	-	-	In the carcinogenicity tests using a mouse, it carried out the outside of Category based on the statement (Agricultural Chemical Registration Data) that tumor production and increased by medication were not seen.

7	Toxic to reproduction	Not classified	-	-	-	Based on the statement that although the toxicity by secondary effect was seen to the fetal animals in the two-generation reproduction test and teratogenicity test using a rat in the dose as which the general toxicity on parental animals was seen, the mischief on parental animals' sexual function or reproductive potential was not seen, and the mischief on generating of the fetal animals and teratogenicity were not acknowledged (Agricultural Chemical Registration Data). So it was set as the outside of Category.
8	Specific target organs/systemic toxicity following single exposure	Category 1 (nervous system)	Health hazard	Danger	Cause damage to organs (nervous system)	It was considered as Category 1 (nerve systems) based on the description (Agricultural Chemical Registration Data ) that in mice and rats at the dose within the range of guidance value in Category 1 (more than 64mg/kg), entire body shivering, salivation, proneness position accompanied by dacryorrhea and a clonic convulsion, respiration depressed, protrusion of eyeballs, corneal reflex fall, and bloody tears were observed.
9	Specific target organs/systemic toxicity following repeated exposure	Classification not possible	-	-	-	Since in mouse test, NOAEL=47.1-62.7 mg/kg is in the guidance value range of Category 2 (10-100 mg/kg), and although there is a description that toxic symptoms, such as decreased weight gain and accompanied decrease of organ weight, tranquility, piloerection and eyelid ptosis are observed in 162-222 mg/kg outside the range (Agricultural Chemical Registration Data), it cannot be classified only according to these data.
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 1	Environment	Warning	Very toxic to aquatic life	It was classified into Category 1 from 48-hour EC50=0.0099 mg/L of Crustacea (Daphnia magna) (Agricultural Chemical Registration Data, 2004).
11 Hazardous to the aquatic environment (chronic)	Category 1	Environment	Warning	Very toxic to aquatic life with long lasting effects	Classified into Category 1, since acute toxicity was Category 1, and supposed not rapidly degrading (BIOWIN), though supposed less bioaccumulative (BCF=90 (Agricultural Chemical Registration Data, 1989)).