

GHS Classification

ID675

2-(4-ethoxyphenyl)-2-methylpropyl 3-phenoxybenzyl ether

CAS 80844-07-1

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	-	-	-	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	-	-	-	Since it is indicated that it is stable at 150 degC (DSC) (Agricultural Chemical Registration Data), even if it contacts air at room temperature, it does not ignite spontaneously.
11 Self-heating substances and mixtures	Classification not possible	-	-	-	The melting points are 36.4 - 38.0 degC, and 140 degC or less, therefore, the test suitable for a liquid state substance 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 metalloids(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 -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)	Not classified	-	-	-	SPECIES: Rat ENDPOINT: LD50 VALUE: > 42880 mg/kg REFERENCE SOURCE: Agricultural Chemicals abstracts(1986)
1 Acute toxicity (dermal)	Not classified	-	-	-	Based on rat LD50>2140mg/kg (Agricultural-Chemicals abstracts (1986)) and the description that "having no death" at the same dose, it was set as the outside of Category.
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)	Not classified	-	-	-	Based on rat LC50 >5.9g/m3 = 5.9mg/L (4h) (Agricultural-Chemicals abstracts (1986)), it carried out the outside of Category.
2 Skin corrosion / irritation	Not classified	-	-	-	Based on description that it was judged to have no irritation as a result of skin primary irritation examination on rabbits (Agricultural-Chemicals abstracts (1986)), it was classified as out of Category.
3 Serious eye damage / eye irritation	Not classified	-	-	-	Based on description that there is no irritation to the ocular-mucous of rabbit membranes as a result of the eye primary irritation examination using a rabbit (Agricultural-Chemicals abstracts (1986)), it was set as the outside of Category.
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 Based on the negative result of Maximization test using guinea pigs (agricultural chemicals abstracts (1986)), the skin sensitization was put outside of the Category.
5 Germ cell mutagenicity	Not classified	-	-	-	Based on the negative result (JMPR 863 (1993)) in the somatic cell in vivo mutagenicity test (micronucleus examination which used the bone marrow cells of the mouse), we classified it as Out Of Category.

6	Carcinogenicity	Not classified	-	-	-	In the carcinogenicity test by the two-year oral administration using rats and mice, generating of the tumor relevant to a test substance is not acknowledged at all (Agricultural-Chemicals abstracts (1986)). Furthermore, as a result of the evaluation in the residual-agricultural-chemicals safety assessment committee, it had concluded that there is no carcinogenic fear to humans. So it carried out the outside of Category.
7	Toxic to reproduction	Not classified	-	-	-	It is not observed any effect of reproductive function and potential with dose causing general toxicity of parent animal in rat three-generation administration test (Agricultural-Chemicals abstracts (1985)). Moreover, it is not observed effect on administered maternal animal (F0) and on reproductive potential of F1 maternal animal in spite of occurring general toxicity to maternal animals in rat organogenetic period administration test (Agricultural-Chemicals abstracts (1985)) and it is judged that there is no teratogenic including the rabbit organogenetic period administration test (Agricultural-Chemicals abstracts (1985)). Since a clear evidence which suggests reproductive toxicity in each test was not admitted, it was considered as on the outside of Category.
8	Specific target organs/systemic toxicity following single exposure	Not classified	-	-	-	There are symptoms such as piloerection, fall of a locomotor activity, loose stool more than 42880mg/kg in oral administration in rat, and there are abnormalities of posture and respiratory movement, the statement of lethargia in the highest concentration = 5.9 g/m ³ in the inhalation exposure using rat. However, there is no example of death in which course, and it is reported by the end of the observation histopathological inspection that it was normal (Agricultural-Chemical abstracts (1986)). Therefore, acute toxicity was very weak, and the acknowledged effect was also in a dose range beyond a guidance value. So it is classified as the out of the Category.
9	Specific target organs/systemic toxicity following repeated exposure	Not classified	-	-	-	It is considered outside of Category according to that in the 13-week oral study using rats and mice with the dose exceeding the maximum of the guidance value range, serious toxic effect is not acknowledged (Agricultural Chemicals abstracts (1986)) and (JMPR 863 (1993)).
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=3.66microg/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 is Category 1, supposed not rapidly degrading (BIOWIN), and bioaccumulative (log Kow=7.05 (PHYSPROP Database, 2005)).