

GHS Classification

ID1220

CAS 39515-40-7

Physical Hazards

alpha-cyano-3-phenoxybenzyl 2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate

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	Not classified	-	-	-	Not classified because of its flash point: 130degC (PM, 13th, 2003)
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	-	-	-	Although there is no data of ignition points, the flash points is as high as 130 degC and the purpose is an insecticide. And even if it contacts the normal temperature air, it does not ignite spontaneously.
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 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 4	Exclamation mark	Warning	Harmful if swallowed	Category 4 based on SPECIES: Rat; ENDPOINT: LD50; VALUE: 318 mg/kg; REFERENCE SOURCE: RTECS(2003)
1 Acute toxicity (dermal)	Not classified	-	-	-	Considering rat dermal LD50 >5mg/kg (RTECS (2003)), 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)	Category 2	Skull and crossbones	Danger	Fatal if inhaled	Since mouse LC50 (3h) = 570mg/m3 (0.43mg/L as a 4h conversion value) (poisonous and deleterious substances handling guide (Jiji Press Co., 2001)), it was set as category 2.
2 Skin corrosion / irritation	Classification not possible	-	-	-	Data without. In addition, there is description that burning sensations is given to human skin by exposures of synthetic pyrethroids compounds (HSDB (2003)).
3 Serious eye damage / eye irritation	Classification not possible	-	-	-	Without Data. In addition, there is description that burning sensations is given to human skin by exposures of synthetic pyrethroids compounds (HSDB (2003)).
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)-	Respiratory sensitization: no data available. In addition, the statements of the induction description of the potential by pyrethroid compounds pneumallergie was seen (HSDB (2003)). Skin sensitization: no data available. In addition, the description about the possibility of the dermatitis indecement with pyrethroid based compound was seen (HSDB (2003)).
5 Germ cell mutagenicity	Classification not possible	-	-	-	No data available
6 Carcinogenicity	Classification not possible	-	-	-	No data available
7 Toxic to reproduction	Classification not possible	-	-	-	No data available
8 Specific target organs/systemic toxicity following single exposure	Classification not possible	-	-	-	No data In addition, synthetic pyrethroid compound is nerve poison which acts on axonal of peripheral and central nervous system by making a sodium channel into site of action (EHC (J) 98 (1990)).

9	Specific target organs/systemic toxicity following repeated exposure	Classification not possible	-	-	-	No Data. In addition, synthetic pyrethroid compound is a neurotoxin acting on axon of peripheral and central nervous system by making a sodium channel as a woking points (EHC (J) 98 (1990)).
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 96-hour LC50=0.34ppb of fishes (Rainbow trout) (AQUIRE, 2003).
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=6.62 (PHYSPROP Database, 2005)).