

## GHS Classification

**ID1217**

**CAS 66841-25-6**

### Physical Hazards

**alpha-cyano-3-phenoxybenzyl 2,2-dimethyl-3-(1,2,2,2-tetrabromoethyl)cyclopropanecarboxylate**

Date Classified: Feb. 20, 2007 (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	-	-	-	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	Classification not possible	-	-	-	Classification not possible due to lack of data, though the substance contains distorted rings (cyclopropan rings) as chemical groups with explosive or self-reactive properties present
9 Pyrophoric liquids	Not applicable	-	-	-	Solid (GHS definition)
10 Pyrophoric solids	Classification not possible	-	-	-	No data available
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 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	-	-	-	Organic compounds containing no -O-O- structure
16 Corrosive to metals	Classification not possible	-	-	-	Test methods applicable to solid substances are not available (Melting point: 138 to 148degC)

### 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 LD50s in male rats (70.6mg/kg) and female rats (88.1mg/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	-	-	-	Based on rat LD50 >5000mg/kg of male and female (Agricultural Chemical Registration Data) in the dermal administration test, 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)	Classification not possible	-	-	-	Male and female rat LC50 was >0.286mg/L in the inhalation exposure test (Agricultural Chemical Registration Data). And LC50 value was not calculated, it cannot be classified.
2 Skin corrosion / irritation	Category 3	-	Warning	Causes mild skin irritation	It was set as Category 3 based the publication (Agricultural Chemical Registration Data) of the skin irritation test using a rabbit, in which slight erythema of 5/6 animal were seen after 24 hours after, very slight erythema of 3/6 animal were seen after 72 hours, and all of them were disappeared six days after.
3 Serious eye damage / eye irritation	Category 2A	Exclamation mark	Warning	Causes serious eye irritation	By the eye irritation tests using a rabbit, conjunctival edemas and redness were seen in 2/6 animal, and blue haze was seen in 5/6 animal after 24 hours. And conjunctival edemas was seen in 1/6 animal, conjunctival redness was seen in 2/6 animals, and blue haze was seen in 4/6 animal after 48 hours (severity of the condition is reduced, respectively). And it disappeared altogether after 11 days (Agricultural Chemical Registration Data). Based on the this statement, it was set as Category 2A.
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 sensitivity test using a guinea pig, it carried out the outside of Category based on the statement (Agricultural Chemical Registration Data) with negativity.
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 in the somatic cell in vivo mutagenicity test (small core test using mouse bone marrow cells) (Agricultural Chemical Registration Data). So it is classified as the out of the Category.

6	Carcinogenicity	Not classified	-	-	-	It carried out the outside of category based on the statement (Agricultural Chemical Registration Data) that the increase in tumorigenic frequency relevant to dose is not admitted in any of studies using rats and mouse.
7	Toxic to reproduction	Not classified	-	-	-	In the two-generation reproduction examination of rat, two teratogenicity tests of rat, and the teratogenicity test of rabbit, based on the publication (Agricultural Chemical Registration Data) that the effects to reproduction and teratogenicity was not acknowledged and mischief were not acknowledged without the inhibition of weight gains were seen in fetal animals given in the dose in which general toxicity was acknowledged in parent animals. So it is considered 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 the symptoms such as face washing action, a spasm, ananastasia, and proneness conditions at the dose (more than 50mg/kg) within the range of guidance value in Category 1 were observed.
9	Specific target organs/systemic toxicity following repeated exposure	Category 2 (systemic toxicity)	Health hazard	Warning	May cause damage to organs (systemic toxicity) through prolonged or repeated exposure	In two 13-week subacute oral toxicity examinations to a rat, It is classified into Category 2 (systemic) based on description that symptoms as decreased food consumption, loss weight of various organs, change of a blood biochemical value, decreased activity level and respiratory distress were observed in guidance value within the limits (16-18 mg/kg) of Category 2 (Agricultural Chemical Registration 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=0.091microg/L of Crustacea (Daphnia magna) (Agricultural Chemical Registration Data, 2005).
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, not rapidly degrading (BIOWIN), though supposed less bioaccumulative (BCF=314(Agricultural Chemical Registration Data, 1985))).