

GHS Classification

ID1180

CAS 129558-76-5

Physical Hazards

N-[4-(p-Tolyloxy)benzyl]-1-methyl-3-ethyl-4-chloro-1H-pyrazole-5-carboxamide

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 classified	-	-	-	Not classified because of the oxygen balance calculated at -210.5, lower than -200 of the criteria, though containing nitrogen atoms adjacent to each other as chemical groups associated with explosive properties present.
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 nitrogen atoms adjacent to each other 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	-	-	-	The test suitable for the solid with a melting point of 140 degC or less has not been established. (87.8 - 88.2 degC melting points)
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 and chlorine (but not fluorine) and the oxygen and chlorine are chemically bonded only to carbon.
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: 87.8 to 88.2degC)

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	In the 3 tests with rats, we compared the LD50 values for male and female and selected the lower value of these groups. Then based on the calculated LD50 = 77.2mg/kg (Agricultural Chemical Registration Data), the substance was classified as Category 3.
1 Acute toxicity (dermal)	Not classified	-	-	-	It was set as the outside of Category based on the description (Agricultural Chemical Registration Data) that death is not observed in administration at 2000mg/kg (male) and 3000mg/kg (female) in rats.
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)	Category 4	Exclamation mark	Warning	Harmful if inhaled	The value of the lower one was adopted among LC50 values of a male and females. And it was set as category 4 based on LC50 = 1.50mg/L (Agricultural Chemical Registration Data).
2 Skin corrosion / irritation	Category 3	-	Warning	Causes mild skin irritation	It was set as category 3 based on the statement (Agricultural Chemical Registration Data) that erythema was seen until 48 hours after setting to the rabbit, but it is very slight, and it was disappeared 72 hours afterward.
3 Serious eye damage / eye irritation	Category 2A	Exclamation mark	Warning	Causes serious eye irritation	Although the irritant effect was observed in the iris after one hour, it disappeared after 24 hours. And although redness and edema were observed in the conjunctiva, it disappeared after 14 days. Based on these results (Agricultural Chemical Registration Data), it was classified into 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: based on the statement (Agricultural Chemical Registration Data) with negativity by the Maximization method of a guinea pig, it carried out the outside of Category.
5 Germ cell mutagenicity	Not classified	-	-	-	There is no multi generation epidemiology, multi generations mutagenicity tests, data from germ cell mutagenicity test, and there is the description that it is negative in the somatic cell in vivo mutagenicity test (in vivo small core test using the red blood cells of mouse) (Agricultural Chemical Registration Data). So it is classified as the out of the Category.
6 Carcinogenicity	Not classified	-	-	-	By the carcinogenicity test in rat and mouse, based on the description that carcinogenicity was not observed (Agricultural Chemical Registration Data), it was out of the Category.

7	Toxic to reproduction	Category 2	Health hazard	Warning	Suspected of damaging fertility or the unborn child	In the reproduction toxicity study using a rat, abnormal labor (hard labor, delay delivery), extension of the gestational age, and decline in a delivery rate and birthrate were found for the parental animals by the dose of general toxicity, and the influence of growth on a child animal, reduction of the number of delivery survival children, decrease of perinatal and the four-day probability of survival and delay of a righting reflective formation day were acknowledged. Although teratogenicity was not seen by the dose which indicates general toxicity to parental animals by the teratogenicity study using a rat, low values of fetal body weight and metacarpal bone ossification delayed were seen (Agricultural Chemical Registration Data). It was set as Category 2 based on the above information.
8	Specific target organs/systemic toxicity following single exposure	Category 1 (systemic toxicity)	Health hazard	Danger	Cause damage to organs (systemic toxicity)	It was considered as Category 1(systemic) based on the description (Agricultural Chemical Registration Data)that abdominal position, side-lying position, round back position, the fall of spontaneous movement, walk malfunction, irregular breath or dyspnea, diarrhea, and contamination of an abdomen part, loss of activity and hypothermia were observed in the rat and the mouse at dose within the range of guidance value in Category 1 (dosage near LD50 value).
9	Specific target organs/systemic toxicity following repeated exposure	Category 1 (liver, pancreas, reproductive organs); Category 2 (heart)	Health hazard	Danger	Causes damage to organs (liver, pancreas, reproductive organs) through prolonged or repeated exposure; May cause damage to organs (heart) through prolonged	In rats with administration (4.78mg/kg or 9.33mg/kg) within the guidance value limits of Category 1, there is a mention of effects such as decrease leucocyte numbers, elevation of glucose, suppressed of total protein and albumin; elevation of gamma GT and urea nitrogens; suppressed of triglycerides; hepatocellular hypertrophy; hypertrophy of pancreas acinar cells; hypersecretion of harderian glands; increase of mesenteric lymph nodes mast cells; hypertrophy of submandibular acinar cells; miniaturization of seminal vesicles and prostate glands; miniaturization of ovaries, uterus, and vaginae; atrophy of ovaries and uteri; low values of ovarian weight. Moreover, in mice with administration (15.9mg/kg or 46.2mg/kg) within the guidance value limits of Category 2, there is a mention of decrease weight gain, decreased food consumption, elevation of GOT, increase of heart relative weight, and increase of liver relative weight (Agricultural Chemical Registration Data). Based on the above information, it was classified into Category 1 (liver, pancreas, genitalia) and Category 2 (heart).
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)	Not classified	-	-	-	Since it was suggested from 72-hour ErC50>0.76 mg/L of algae (Green algae) (Agricultural Chemical Registration Data) that relevant toxicity is not indicated in the water solubility (0.087mg/L (an Agricultural Chemicals abstracts, 2004)) of this substance, it considered as the outside of Category.
11 Hazardous to the aquatic environment (chronic)	Category 4	-	-	May cause long lasting harmful effects to aquatic life	Classified into Category 4, since rapid degradability is unknown, bioaccumulative (log Kow=5.61 (Agrichemical Abstracts, 2004)), though water-insoluble and no acute toxicity is reported within the saturated aqueous solution.