

GHS Classification

ID315

CAS 96489-71-3

Physical Hazards

2-tert-Butyl-5-(4-tert-butylbenzylthio)-4-chloro-3(2H)-pyridazinone; Pyridaben

Date Classified: Nov. 20, 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	—	—	—	Containing no chemical groups with explosive properties
2 Flammable gases	Not applicable	—	—	—	Classified as "solid" according to GHS definition
3 Flammable aerosols	Not applicable	—	—	—	Not aerosol products
4 Oxidizing gases	Not applicable	—	—	—	Classified as "solid" according to GHS definition
5 Gases under pressure	Not applicable	—	—	—	Classified as "solid" according to GHS definition
6 Flammable liquids	Not applicable	—	—	—	Classified as "solid" according to GHS definition
7 Flammable solids	Classification not possible	—	—	—	No data available
8 Self-reactive substances and mixtures	Not applicable	—	—	—	Containing no chemical groups with explosive or self-reactive properties
9 Pyrophoric liquids	Not applicable	—	—	—	Classified as "solid" according to GHS definition
10 Pyrophoric solids	Classification not possible	—	—	—	No data available
11 Self-heating substances and mixtures	Classification not possible	—	—	—	Test methods applicable to liquid substances are not available (melting point: 109.4-110.6degC (Agricultural Chemical Registration Data), test temperature: 140degC).
12 Substances and mixtures, which in contact with water, emit flammable gases	Not applicable	—	—	—	Containing no metals or metalloids (B, Si, P, Ge, As, Se, Sn, Sb, Te, Bi, Po, At)
13 Oxidizing liquids	Not applicable	—	—	—	Classified as "solid" according to GHS definition
14 Oxidizing solids	Not applicable	—	—	—	Organic compounds containing chlorine and oxygen (but not fluorine), with the chlorine and oxygen bound to carbon and hydrogen (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 with melting point of >55degC are not available (melting point: 109.4-110.6degC (Agricultural Chemical Registration Data)).

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	Based on the rat LD50 (oral route) value of 570mg/kg (Agricultural Chemical Registration Data (1990)).
1 Acute toxicity (dermal)	Not classified	—	—	—	Based on the absence of mortality at the highest dose of 2,000mg/kg observed in the dermal studies with rats (Agricultural Chemical Registration Data (1986)).
1 Acute toxicity (inhalation: gas)	Not applicable	—	—	—	Due to the fact that the substance is a solid according to the GHS definition and inhalation of its gas is not expected.
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	—	—	—	No data available
1 Acute toxicity (inhalation: dust, mist)	Category 3	Skull and crossbones	Danger	Toxic if inhaled	Based on the rat LC50 (inhalation route) value of 0.62mg/L (Agricultural Chemical Registration Data (1987)).
2 Skin corrosion / irritation	Not classified	—	—	—	Based on the description in the report on rabbit skin irritation tests (Agricultural Chemical Registration Data (1986)): Non-irritating to the skin.
3 Serious eye damage / eye irritation	Not classified	—	—	—	Based on the evidence of slight irritation of the conjunctiva (a mean Draize score of <=1.5), with effects resolving within 3 days, observed in rabbit eye irritation tests (Agricultural Chemical Registration Data (1986)).
4 Respiratory/skin sensitization	Respiratory sensitization: Classification not possible Skin sensitization: Not classified	(Respiratory sensitization)— (Skin sensitization)—	(Respiratory sensitization)— (Skin sensitization)—	(Respiratory sensitization)— (Skin sensitization)—	Respiratory sensitization: No data available Skin sensitization: Based on no evidence of sensitization observed in guinea pig skin sensitization tests using the Maximization method, reported in Agricultural Chemical Registration Data (1987, 1990).
5 Germ cell mutagenicity	Not classified	—	—	—	Based on negative data on in vitro reverse mutation tests (Agricultural Chemical Registration Data (1986)), in vitro chromosome aberration tests (Agricultural Chemical Registration Data (1988)) and in vivo mutagenicity (micronucleus) tests on mouse bone marrow cells (Agricultural Chemical Registration Data (1988)).
6 Carcinogenicity	Not classified	—	—	—	There was no treatment-related evidence of tumor formation observed in 2-year (rats) and 18-month (mice) carcinogenicity studies, reported in Agricultural Chemical Registration Data (1990).
7 Toxic to reproduction	Not classified	—	—	—	Based on no evidence of adverse effects on reproduction and fetotoxicity observed in rat 2-generation reproduction studies (Agricultural Chemical Registration Data (1990)) and rat/rabbit teratogenicity studies (Agricultural Chemical Registration Data (1988)).
8 Specific target organs/systemic toxicity following single exposure	Category 2 (nervous system)	Health hazard	Warning	May cause damage to organs (nervous system)	In rat single dose toxicity studies, clinical signs and symptoms including hypoactivity, ataxia, stooping position, decreased grooming, prone position, coma and emaciation were reported (Agricultural Chemical Registration Data (1989)). These effects were observed at dosing levels within the guidance value ranges for Category 2.
9 Specific target organs/systemic toxicity following repeated exposure	Classification not possible	—	—	—	In rat 3-month repeated dose toxicity studies, reduced body weight gains and decreased food consumption/food efficiency were observed. However, classification is not possible since no other general symptoms or pathological findings were reported (Agricultural Chemical Registration Data (1988)).
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 hours LC50=0.00338mg/L of the fish (Carp) (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	Since acute toxicity was Category 1 and there was no rapidly degrading (BIOWIN), and since there was bio-accumulation (log Kow=6.37 (PHYSPROP Database, 2005)), it was classified into Category 1.