

## GHS Classification

**ID330**

**CAS 80060-09-9**

### Physical Hazards

**1-tert-Butyl-3-(2,6-diisopropyl-4-phenoxyphenyl)thiourea; Diafenthiuron**

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	—	—	—	No data available
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 oxygen (but not chlorine and fluorine), with the 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: 145.8degC (Agricultural Chemical Registration Data (2002))).

### 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 366mg/kg (Agricultural Chemical Registration Data (1995)).
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 (1995)).
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 2	Skull and crossbones	Danger	Fatal if inhaled	Based on the rat LC50 (inhalation route) value of 0.497mg/L (Agricultural Chemical Registration Data (1995)).
2 Skin corrosion / irritation	Not classified	—	—	—	Based on the evidence of only slight irritation reactions (a Draize score of <=1), which cleared up within 48 hours, observed in rabbit skin irritation tests (Agricultural Chemical Registration Data (1995)).
3 Serious eye damage / eye irritation	Category 2A	Exclamation mark	Warning	Causes serious eye irritation	Based on the evidence of irritation reactions which resolved by Day 14, observed in rabbit eye irritation tests (Agricultural Chemical Registration Data (1995)).
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: No skin sensitizing potential was found in guinea pig sensitization tests using the Maximization method, reported in Agricultural Chemical Registration Data (1995).
5 Germ cell mutagenicity	Not classified	—	—	—	Based on negative data on in vitro reverse mutagenicity tests and chromosome aberration tests, and in vivo micronucleus tests on hamster bone marrow cells (Agricultural Chemical Registration Data (1995)).
6 Carcinogenicity	Classification not possible	—	—	—	There was no evidence of tumor formation observed in 2-year carcinogenicity studies in rats, whereas an increase in hyperplastic lesions in the lung was seen in 18-month carcinogenicity studies in mice, reported in Agricultural Chemical Registration Data (1995). Classification is not possible in the absence of existing classification.
7 Toxic to reproduction	Not classified	—	—	—	Based on no evidence of adverse effects on reproduction and offspring development in rat 2-generation reproduction studies and rat/rabbit teratogenicity studies, reported in Agricultural Chemical Registration Data (1995).
8 Specific target organs/systemic toxicity following single exposure	Category 1 (respiratory organs)	Health hazard	Danger	Causes damage to organs (respiratory organs)	In rat and mouse single dose toxicity studies, clinical signs and symptoms including dyspnea, abnormal posture and nosebleed were noted (Agricultural Chemical Registration Data (1995)). These effects were observed at dosing levels within the guidance value ranges for Category 1.
9 Specific target organs/systemic toxicity following repeated exposure	Category 2 (kidneys)	Health hazard	Warning	May cause damage to organs through prolonged or repeated exposure (kidneys)	In rat subacute toxicity studies, clinical signs and symptoms including decreased total protein, increased urea, and nephrocalcinosis were found (Agricultural Chemical Registration Data (1995)). These effects were observed at dosing levels within the guidance value ranges for Category 2.
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 hours EC50=0.00015mg/L of the 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	Since acute toxicity was Category 1 and there was no rapidly degrading (BIOWIN), and since there was bio-accumulation (log Kow=6 (PHYSPROP Database, 2005)), it was classified into Category 1.