

GHS Classification

ID380

CAS 15972-60-8

Physical Hazards

2-chloro-2',6'-diethyl-N-(methoxymethyl)acetanilide

Date Classified: Dec. 18, 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	—	—	—	Classification not possible due to lack of data, though classified as flammable according to ICSC (2006).
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	Not classified	—	—	—	Considered non-pyrophoric when in contact with air at ordinary temperatures, since the substance is stable to heat (up to 150degC) (Agricultural Chemical Registration Data)
11 Self-heating substances and mixtures	Not classified	—	—	—	Stable to heat (up to 150degC) (Agricultural Chemical Registration Data)
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	—	—	—	Classification not possible due to lack of data on the substances with melting points of <55degC (melting point: 40.5-41.5degC (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 1,150mg/kg (Agricultural Chemical Registration Data (1998)).
1 Acute toxicity (dermal)	Not classified	—	—	—	Based on the rabbit LD50 (dermal route) value of 13,300mg/kg (Agricultural Chemical Registration Data (1998)).
1 Acute toxicity (inhalation: gas)	Not applicable	—	—	—	Due to the fact that the substance is a solid according to the GHS criteria 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)	Classification not possible	—	—	—	Classification cannot be determined, though the available rat inhalation study reported the LC50 value of >1.040mg/L, together with the absence of mortality (Agricultural Chemical Registration Data (1998)).
2 Skin corrosion / irritation	Category 3	—	Warning	Causes mild skin irritation	Based on the evidence of mild irritation with a Draize score of 2.0, observed in rabbit skin irritation tests (Agricultural Chemical Registration Data (2000)).
3 Serious eye damage / eye irritation	Not classified	—	—	—	Based on test data from rabbit eye irritation studies (Agricultural Chemical Registration Data (1998)): "Non-irritating to the eye."
4 Respiratory/skin sensitization	Respiratory sensitization: Classification not possible Skin sensitization: Category 1	(Respiratory sensitization) — (Skin sensitization) Exclamation mark	(Respiratory sensitization) — (Skin sensitization) Warning	(Respiratory sensitization) — (Skin sensitization) May cause an allergic skin reaction	Respiratory sensitization: No data available Skin sensitization: Based on positive results in guinea pig skin sensitization tests employing the Buehler method (Agricultural Chemical Registration Data (1999)).
5 Germ cell mutagenicity	Not classified	—	—	—	Based on negative data in in vivo micronucleus tests on rat and mouse bone marrow cells and in vivo chromosome aberration tests on rat bone marrow cells, though in vitro chromosome aberration tests showed positive (Agricultural Chemical Registration Data (1998, 2002)).
6 Carcinogenicity	Classification not possible	—	—	—	Based on a judgment made by experts in the absence of existing classification, though the available data on carcinogenicity studies in rats and mice provide some evidence of non-genotoxic rat-specific tumor incidence.
7 Toxic to reproduction	Not classified	—	—	—	Based on no evidence of adverse effects on reproduction or offspring development observed in rat 3-generation reproduction studies and rat/rabbit teratogenicity studies (Agricultural Chemical Registration Data (1980, 1981, 1988)).

8	Specific target organs/systemic toxicity following single exposure	Classification not possible	—	—	—	No symptoms or signs referable to specific target organs were observed in the available animal studies (Agricultural Chemical Registration Data (1998)).
9	Specific target organs/systemic toxicity following repeated exposure	Category 2 (liver)	Health hazard	Warning	May cause damage to organs through prolonged or repeated exposure (liver)	Based on the evidence from animal studies including an increase in liver weights/liver-to-body weight ratio, fatty degeneration of the liver, and bile duct hyperplasia (Agricultural Chemical Registration Data (1998)). 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 72 hours EbC50=0.0115mg/L of the algae (Green Algae) (Agricultural Chemical Registration Data, 1989).
11 Hazardous to the aquatic environment (chronic)	Category 1	Environment	Warning	Very toxic to aquatic life with long lasting effects	Although acute toxicity is Category 1 and bio-accumulation is low (log Kow=3.52(PHYSROP Database, 2005)), since there was no rapidly degrading (BIOWIN), it was classified into Category 1.