

GHS Classification

ID398

CAS 23950-58-5

Physical Hazards

3,5-dichloro-N-(1,1-dimethyl-2-propynyl)benzamide

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	Classification not possible	—	—	—	Classification not possible due to lack of data on the kick-off temperature and decomposition energy, though being an acetylene compound containing a triple bond, with its oxygen budget calculated at -178.
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
8 Self-reactive substances and mixtures	Classification not possible	—	—	—	Classification not possible due to lack of data, though containing a triple bond and chemical groups with 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 229.1degC) (Agricultural Chemical Registration Data).
11 Self-heating substances and mixtures	Not classified	—	—	—	Stable to heat (up to 229.1degC) (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—" structure
16 Corrosive to metals	Classification not possible	—	—	—	Test methods applicable to solid substances with melting point of >55degC are not available (melting point: 156.2degC (Agricultural Chemical Registration Data)).

Health Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Acute toxicity (oral)	Not classified	—	—	—	Based on the rat LD50 (oral route) value of >5,000mg/kg (Agricultural Chemical Registration Data (1994)).
1 Acute toxicity (dermal)	Not classified	—	—	—	Based on the rat LD50 (dermal route) value of >3,160mg/kg, together with the absence of mortality (Agricultural Chemical Registration Data (1994)).
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 >2.1mg/L (Agricultural Chemical Registration Data (1994)).
2 Skin corrosion / irritation	Not classified	—	—	—	Based on the evidence of irritant effects with a Draize score of <=1, which were fully reversed within 72 hours, observed in rabbit skin irritation tests (Agricultural Chemical Registration Data (1994)).
3 Serious eye damage / eye irritation	Not classified	—	—	—	Based on the evidence of conjunctival effects with a Draize score of <=1, which cleared up within 4 days, observed in rabbit eye irritation tests (Agricultural Chemical Registration Data (1994)).
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 employing the Buehler and Maximization methods (Agricultural Chemical Registration Data (1993, 1998)).
5 Germ cell mutagenicity	Not classified	—	—	—	Based on negative data in in vitro studies (reverse mutation tests, chromosome aberration tests and UDS tests) and chromosome aberration tests on rat and mouse bone marrow cells in vivo (Agricultural Chemical Registration Data (1994)).
6 Carcinogenicity	Not classified	—	—	—	There was no evidence of treatment-related incidence of tumor formation observed in rat and mouse carcinogenicity studies (Agricultural Chemical Registration Data (1994)).
7 Toxic to reproduction	Not classified	—	—	—	Based on no evidence of adverse effects on parental reproduction and offspring development observed in rat 2-generation reproduction studies and rat/rabbit teratogenicity studies (Agricultural Chemical Registration Data (1994)).

8	Specific target organs/systemic toxicity following single exposure	Classification not possible	—	—	—	Insufficient data available.
9	Specific target organs/systemic toxicity following repeated exposure	Category 2 (liver, kidneys)	Health hazard	Warning	May cause damage to organs through prolonged or repeated exposure (liver, kidneys)	Based on the evidence from animal studies including hyperpigmentation/Glisson capsule abnormalities/cell abnormalities of the liver, degeneration of renal tubular epithelium/glomerular atrophy (Agricultural Chemical Registration Data (1994)). 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 2	—	—	Toxic to aquatic life	It was classified into Category 2 from 72 hours ErC50=3.4mg/L of the algae (Selenastrum) (MOE Eco-Toxicity Tests of Chemicals, 2003).
11 Hazardous to the aquatic environment (chronic)	Category 2	Environment	—	Toxic to aquatic life with long lasting effects	Although acute toxicity was Category 2 and the bio-accumulation potential was low (log Kow=3.43/PHYSPROP Database, 2005), since there was no rapidly degrading (BIOWIN), it was classified into Category 2.