

GHS Classification

ID406

CAS 709-98-8

Physical Hazards

3',4'-dichloropropionanilide

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	Not classified	—	—	—	Non-flammable (ICSC (2004))
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	—	—	—	Non-flammable (ICSC (2004))
11 Self-heating substances and mixtures	Not classified	—	—	—	Non-flammable (ICSC (2004))
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: 91.0degC (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 840mg/kg (Agricultural Chemical Registration Data (1989)).
1 Acute toxicity (dermal)	Not classified	—	—	—	Based on the rat LD50 (dermal route) value of >5,000mg/kg (Agricultural Chemical Registration Data (1989)).
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 >1.24mg/L (Agricultural Chemical Registration Data (1989)).
2 Skin corrosion / irritation	Not classified	—	—	—	In the available rabbit skin irritation tests, the affected animals exhibited a Draize score of 0.2 at 1 hour after application, but all signs cleared up by 24 hours (Agricultural Chemical Registration Data (1989)).
3 Serious eye damage / eye irritation	Category 2A	Exclamation mark	Warning	Causes serious eye irritation	Based on the evidence of moderate irritation observed in rabbit eye irritation tests (Agricultural Chemical Registration Data (1989)).
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 method (Agricultural Chemical Registration Data (1989)).
5 Germ cell mutagenicity	Not classified	—	—	—	Based on negative data in in vitro reverse mutation tests and in vivo chromosome aberration tests on rat bone marrow cells (Agricultural Chemical Registration Data (1989)).
6 Carcinogenicity	Not classified	—	—	—	There was no evidence of treatment-related incidence of tumor formation observed in mouse carcinogenicity studies (Agricultural Chemical Registration Data (1989)).
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 (1989)).

8	Specific target organs/systemic toxicity following single exposure	Category 2 (systemic toxicity)	Health hazard	Warning	May cause damage to organs (systemic toxicity)	Based on the evidence from animal studies including "reduced locomotor activity," "abnormal gait," "prone position," "hypopnea," "lacrimation," "reddish tear," "exophthalmos" and "cyanosis" (Agricultural Chemical Registration Data (1989)). No target organs were identified from these findings. 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	—	—	—	Insufficient data available
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 48 hours LC50=6.7mg/L of the crustacea (Daphnia magna) (Agricultural Chemical Registration Data, 2005).
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=3.07(PHYSROP Database, 2005)), since there was no rapidly degrading (the decomposition by BOD: 21%(Existing Chemical Safety Inspections Data)), it was classified into Category 2.