

GHS Classification

ID489

CAS 73250-68-7

Physical Hazards

2-(2-benzothiazolyloxy)-N-methylacetanilide

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 method applicable to liquid substances are not available (melting point: 134.8degC (Merck (13th, 2001)), 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 oxygen (but not fluorine and chlorine), with 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: 134.8degC, Merck (13th, 2001)).

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 (RTECS (2006) and IUCLID (2000)).
1 Acute toxicity (dermal)	Not classified	—	—	—	Based on the rat LD50 (dermal route) value of > 5,000mg/kg (RTECS (2006) and IUCLID (2000)).
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	—	—	—	Insufficient data available
2 Skin corrosion / irritation	Classification not possible	—	—	—	No evidence of irritation was observed in a rabbit skin irritation test (though the results are not those of 4 hour application) (IUCLID (2000)). Although the substance could be "Not classified" based solely on the results of the above study, "Classification not possible" should be appropriate since the study is assigned a priority rating of 2 and no other data are available to provide additional or supporting evidence.
3 Serious eye damage / eye irritation	Classification not possible	—	—	—	No evidence of irritation was observed in a rabbit eye irritation test (IUCLID (2000)). Although the substance could be "Not classified" based solely on the results of the above study, "Classification not possible" should be appropriate since the study is assigned a priority rating of 2 and no other data are available to provide additional or supporting evidence.
4 Respiratory/skin sensitization	Respiratory sensitization: Classification not possible Skin sensitization: Classification not possible	(Respiratory sensitization) — (Skin sensitization) —	(Respiratory sensitization) — (Skin sensitization) —	(Respiratory sensitization) — (Skin sensitization) —	Respiratory sensitization: No data available Skin sensitization: No data available
5 Germ cell mutagenicity	Classification not possible	—	—	—	Classification not possible due to the insufficiency of data (details are not available on the protocols of in vivo studies).
6 Carcinogenicity	Classification not possible	—	—	—	Classification not possible based on a judgment made by experts in the absence of existing classification, though IUCLID (2000) presents some toxicity data.
7 Toxic to reproduction	Category 2	Health hazard	Warning	Suspected of damaging fertility or the unborn child	Based on the evidence of adverse effects on offspring development (fetal death and muscle skeletal anomalies), described in IUCLID (2000) and RTECS (2006) (though no data are available regarding parental toxicity).
8 Specific target organs/systemic toxicity following single exposure	Classification not possible	—	—	—	Classification not possible due to the insufficiency of data.
9 Specific target organs/systemic toxicity following repeated exposure	Category 2 (blood system, kidneys)	Health hazard	Warning	May cause damage to organs through prolonged or repeated exposure (blood system,	Based on the evidence from animal studies including "normocytic anemia" (RTECS (1996)), "kidney effects including renal failure and renal tubular necrosis" (RTECS (1996)). The effects on experimental animals were observed at dosing levels within the guidance value ranges for Category 2.

10	Aspiration hazard	Classification not possible	—	—	—	No data available
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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 ErC50=0.226mg/L of the algae (Green Algae) (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	Although acute toxicity is Category 1 and bio-accumulation is low (log Kow=3.23(PHYSROP Database, 2005)), since there was no rapidly degrading (BIOWIN), it was classified into Category 1.