

GHS Classification

ID320

CAS 2655-14-3

Physical Hazards

3,5-Dimethylphenyl N-methylcarbamate; XMC

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 methods applicable to liquid substances are not available (melting point: 100.9-101.3degC (Agricultural Chemical Registration Data (1999)), 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 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: 100.9-101.3degC (Agricultural Chemical Registration Data (1999))).

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 542mg/kg (Agricultural Chemical Registration Data (2004)).
1 Acute toxicity (dermal)	Not classified	—	—	—	Based on the rat LD50 (dermal route) value of >=5,000mg/kg (Agricultural Chemical Registration Data (2004)).
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)	Classification not possible	—	—	—	Classification not possible since the acute toxicity value cannot be determined, though the available rat inhalation studies yielded the LC50 value of >=1.02mg/L (Agricultural Chemical Registration Data (2004)).
2 Skin corrosion / irritation	Not classified	—	—	—	Based on the report on rabbit skin irritation tests (Agricultural Chemical Registration Data): "Non-irritating."
3 Serious eye damage / eye irritation	Not classified	—	—	—	Based on the evidence of only slight irritation reactions (a mean Draize score of <=1), with effects resolving by Day 7, observed in rabbit eye irritation tests (Agricultural Chemical Registration Data (2004)).
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: Based on no evidence of sensitization observed in guinea pig skin sensitization tests using the Maximization method, reported in Agricultural Chemical Registration Data (2002).
5 Germ cell mutagenicity	Not classified	—	—	—	Based on negative data on in vitro reverse mutagenicity tests, in vitro DNA repair tests and in vivo mouse and rat micronucleus tests, and positive data on in vitro chromosome aberration tests (Agricultural Chemical Registration Data (2004)).
6 Carcinogenicity	Classification not possible	—	—	—	Classification not possible in the absence of existing classification, though no evidence of tumor formation was seen in rat 2-year carcinogenicity studies, whereas a slight increase in hepatocellular tumor incidence was observed in females in mouse carcinogenicity studies (Agricultural Chemical Registration Data (2004)).
7 Toxic to reproduction	Not classified	—	—	—	Based on no evidence of adverse effects on reproduction and offspring development in rat 3-generation reproduction studies and rat/rabbit teratogenicity studies, reported in Agricultural Chemical Registration Data (2004).
8 Specific target organs/systemic toxicity following single exposure	Category 1 (nervous system)	Health hazard	Danger	Causes damage to organs (nervous system)	In rat single dose toxicity studies, clinical signs and symptoms including reduced locomotor activity, gait disorder, tremors, salivation, reduced locomotor activity, blepharoptosis, and crouching position were found (Agricultural Chemical Registration Data (2004)). These effects were observed at dosing levels within the guidance value ranges for Category 1.
9 Specific target organs/systemic toxicity following repeated exposure	Classification not possible	—	—	—	Classification not possible due to the insufficiency of data. In the available rat and mouse 90-day subacute toxicity study, no definitive evidence of treatment-related toxicity was reported (Agricultural Chemical Registration Data (2004)).
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=0.0301mg/L of the crustacea (Daphnia magna) (Agricultural Chemical Registration Data,).
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 (BCF=2.5(Existing Chemical Safety Inspections Data,)), since there was no rapidly degrading (the decomposition by BOD: 1%(Existing Chemical Safety Inspections Data)), it was classified into Category 1.