

GHS Classification

ID319

CAS 2631-40-5

Physical Hazards

2-Isopropylphenyl N-methylcarbamate; Isoprocarb; MIPC

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: 92.2degC (Agricultural Chemical Registration Data), 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: 92.2degC (Agricultural Chemical Registration Data)).

Health Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Acute toxicity (oral)	Category 3	Skull and crossbones	Danger	Toxic if swallowed	Based on the rat LD50 (oral route) value of 178mg/kg (Agricultural Chemical Registration Data (1995)).
1 Acute toxicity (dermal)	Not classified	—	—	—	Based on the absence of mortality at the highest dose of 2,000mg/kg observed in the dermal studies with mice (Agricultural Chemical Registration Data (1995)).
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 there was no evidence of death observed at the highest dose of 2.1mg/L in rat inhalation studies (Agricultural Chemical Registration Data (1995)).
2 Skin corrosion / irritation	Not classified	—	—	—	Based on the description in the report on rabbit skin irritation tests (Agricultural Chemical Registration Data (1995)): "Non-irritating to the skin."
3 Serious eye damage / eye irritation	Category 2B	—	Warning	Causes eye irritation	Based on the description in the report on rabbit eye irritation tests (Agricultural Chemical Registration Data (1995)): "The treated animals exhibited irritation reactions of the cornea and conjunctiva, but the reactions resolved by Day 4."
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 the report on guinea pig Maximization tests (Agricultural Chemical Registration Data (1995)): "Skin sensitization: negative (sensitization rate: 0%)."
5 Germ cell mutagenicity	Classification not possible	—	—	—	Based on the absence of data on in vivo studies, though in vitro tests (reverse mutation tests, chromosome aberration tests and DNA repair tests) gave negative results (Agricultural Chemical Registration Data (1995)).
6 Carcinogenicity	Not classified	—	—	—	There was no treatment-related evidence of tumor formation observed in 2-year (rats) and 18-month (mice) carcinogenicity studies, reported in Agricultural Chemical Registration Data (1995).
7 Toxic to reproduction	Not classified	—	—	—	Based on no evidence of adverse effects on reproduction and fetuses observed in rat 3-generation reproduction studies and rat/rabbit teratogenicity studies, reported in Agricultural Chemical Registration Data (1995).
8 Specific target organs/systemic toxicity following single exposure	Category 1 (nervous system), Category 2 (respiratory organs)	Health hazard	Danger	Causes damage to organs (nervous system) May cause damage to organs (respiratory organs)	In rat single dose toxicity studies, clinical signs and symptoms including reduced locomotor activity, crouching position, lateral position, staggering gait, and tremors were seen at dosing levels within the guidance value ranges for Category 1. At dose levels for Category 2, diffuse white patches were also observed in the lung (Agricultural Chemical Registration Data (1995)).

9	Specific target organs/systemic toxicity following repeated exposure	Category 1 (blood system, liver), Category 2 (kidneys)	Health hazard	Danger	Causes damage to organs through prolonged or repeated exposure (blood system, liver) May cause damage to organs through prolonged or repeated exposure	Based on the evidence from animal studies including leukocytosis, anemia, changes in liver and kidney weights, small round cell infiltration of Glisson capsules, and renal interstitial cellular infiltration (Agricultural Chemical Registration Data (1995)). These effects were observed at dosing levels within the guidance value ranges for Category 1 (blood system and liver) and Category 2 (kidneys).
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=24microg/L of the crustacea (Daphnia magna) (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 (BCF=15(Existing Chemical Safety Inspections Data.)), since there was no rapidly degrading (the decomposition by BOD: 0%(Existing Chemical Safety Inspections Data)), it was classified into Category 1.