

GHS Classification

ID474

CAS 85-68-7

Physical Hazards

n-Butyl benzyl phthalate

Date Classified: Aug. 22, 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 "liquid" according to GHS definition
3 Flammable aerosols	Not applicable	—	—	—	Not aerosol products
4 Oxidizing gases	Not applicable	—	—	—	Classified as "liquid" according to GHS definition
5 Gases under pressure	Not applicable	—	—	—	Classified as "liquid" according to GHS definition
6 Flammable liquids	Not classified	—	—	—	The flash point is 198degC (ICSC (2004))
7 Flammable solids	Not applicable	—	—	—	Classified as "liquid" according to GHS definition
8 Self-reactive substances and mixtures	Not applicable	—	—	—	Containing no chemical groups with explosive or self-reactive properties
9 Pyrophoric liquids	Not classified	—	—	—	Not pyrophoric when in contact with air at ordinary temperatures: the auto-ignition temperature is 425degC (ICSC, 2004)
10 Pyrophoric solids	Not applicable	—	—	—	Classified as "liquid" according to GHS definition
11 Self-heating substances and mixtures	Classification not possible	—	—	—	Test methods applicable to liquid substances are not available.
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	—	—	—	Organic compounds containing oxygen (but not fluorine and chlorine), with the oxygen bound to carbon and hydrogen (but not to other elements)
14 Oxidizing solids	Not applicable	—	—	—	Classified as "liquid" according to GHS definition
15 Organic peroxides	Not applicable	—	—	—	Organic compounds containing no "-O-O-" structure
16 Corrosive to metals	Classification not possible	—	—	—	No data available

Health Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Acute toxicity (oral)	Category 5	—	Warning	May be harmful if swallowed	Based on the LD50 value of 3,440mg/kg calculated from the testing data of rat LD50 (oral route) of 2,330mg/kg (CERI-NITE Hazard Assessment No.204 (2004)), 13,500mg/kg (CERI Hazard Data 97-7 (1998)) and 20,400mg/kg (CERI-NITE Hazard Assessment No.204 (2004)).
1 Acute toxicity (dermal)	Not classified	—	—	—	Based on the rat LD50 (dermal route) value of 6,700mg/kg (CERI-NITE Hazard Assessment No.204 (2004)).
1 Acute toxicity (inhalation: gas)	Not applicable	—	—	—	Due to the fact that the substance is "liquid" according to the GHS definition and inhalation of its gas is not expected.
1 Acute toxicity (inhalation: mist)	Classification not possible	—	—	—	No data available
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	—	—	—	No data available
2 Skin corrosion / irritation	Category 2	Exclamation mark	Warning	Causes skin irritation	Based on the description in the report on rabbit skin irritation tests (CERI-NITE Hazard Assessment No.204 (2004)): "moderate irritation" (though the results are not those of 4 hour application).
3 Serious eye damage / eye irritation	Category 2B	—	Warning	Causes eye irritation	Based on the description in the report on rabbit eye irritation tests (CERI Hazard Data 97-7 (1998) and CERI-NITE Hazard Assessment No.204 (2004)): "mild irritation."
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: Based on no evidence of skin sensitization in humans from epidemiological studies (CERI-NITE Hazard Assessment No.204 (2004)) and the positive results in rabbit skin sensitization tests.
5 Germ cell mutagenicity	Category 2	Health hazard	Warning	Suspected of causing genetic defects	Based on the absence of data on multi-generation mutagenicity tests, germ cell mutagenicity tests in vivo, germ cell genotoxicity tests in vivo, and positive data on somatic cell mutagenicity tests in vivo (chromosome aberration tests), described in CERI-NITE Hazard Assessment No.204 (2004), NTP DB (Access on April 2006), C/CAD 17 (1999) and CaPSAR (2000).
6 Carcinogenicity	Not classified	—	—	—	Due to the fact that the substance is classified as Group 3 by IARC (1999) and Category C by EPA (1993).
7 Toxic to reproduction	Category 1B	Health hazard	Danger	May damage fertility or the unborn child	Based on the evidence of decreased viability and reduced body weight in the offspring at doses producing no parental toxicity, described in MOE Risk Assessment vol. 3 (2004).
8 Specific target organs/systemic toxicity following single exposure	Category 3 (respiratory tract irritation)	Exclamation mark	Warning	(Respiratory tract irritation) May cause respiratory irritation	Based on the description in ICSC (1998): "irritating to the eye, skin and respiratory tract."
9 Specific target organs/systemic toxicity following repeated exposure	Classification not possible	—	—	—	Classification not possible because available data on human health effects are not reliable.

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 96 hours LC50=510microg/L of the fish (Cymatogaster Aggregata) (CICAD17, 1999).
11 Hazardous to the aquatic environment (chronic)	Category 1	Environment	Warning	Very toxic to aquatic life with long lasting effects	Although acute toxicity was Category 1 and there was rapidly degrading (the decomposition by BOD: 80.9%(Existing Chemical Safety Inspections Data)), since there was bio-accumulation (log Kow=4.73 (PHYSPROP Database (2005))), it was classified into Category 1.