

## GHS Classification

**ID917**

**Dimethylphthalate**

**CAS 131-11-3**

Date Classified: May 24, 2006 (Environmental Hazards: Mar. 31, 2006)

**Physical Hazards**

Reference Manual: GHS Classification Manual (Feb. 10, 2006)

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Explosives	Not applicable	-	-	-	There are no chemical groups associated with explosive properties present in the molecules.
2 Flammable gases	Not applicable	-	-	-	Liquid (GHS definition)
3 Flammable aerosols	Not applicable	-	-	-	Not aerosol products
4 Oxidizing gases	Not applicable	-	-	-	Liquid (GHS definition)
5 Gases under pressure	Not applicable	-	-	-	Liquid (GHS definition)
6 Flammable liquids	Not classified	-	-	-	Flash point: >93degC
7 Flammable solids	Not applicable	-	-	-	Liquid (GHS definition)
8 Self-reactive substances and mixtures	Not applicable	-	-	-	There are no chemical groups associated with explosive or self-reactive properties present in the molecule.
9 Pyrophoric liquids	Not classified	-	-	-	Flash point: 490degC (ICSC (J), 1995)
10 Pyrophoric solids	Not applicable	-	-	-	Liquid (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	-	-	-	The chemical structure of the substance does not contain 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 chlorine and fluorine) chemically bonded only to carbon and hydrogen (but not to other elements).
14 Oxidizing solids	Not applicable	-	-	-	Liquid (GHS definition)
15 Organic peroxides	Not applicable	-	-	-	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)	Not classified	-	-	-	Calculated based on the following values: Rat LD50 value: 2400mg/kg (CERI Hazard Data (1999)) 6900mg/kg (CERI Hazard Data (1999), ACGIH 7th (2001), PATTY 4th (1994)), 8200mg/kg (MOE Risk Assessment the 1st volume (2002)) and 8400mg/kg (NTP TR429 (1995)). Since the calculated values was 5158mg/kg, it was considered as out of category.
1 Acute toxicity (dermal)	Not classified	-	-	-	Based on rat LD50 value: >4800mg/kg (CERI Hazard Data, 1999) and rabbit LD50 value: >11900mg/kg (CERI Hazard Data, 1999, ACGIH 7th, 2001, PATTY 4th, 1994), >=10000mg/kg (NTP TR429, 1995) and 23800mg/kg (CERI Hazard Data, 1999), it was set as the outside of Category.
1 Acute toxicity (inhalation: gas)	Not applicable	-	-	-	Liquid (GHS definition)
1 Acute toxicity (inhalation: vapour)	Classification not possible	-	-	-	No data available
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	-	-	-	No data available
2 Skin corrosion / irritation	Not classified	-	-	-	From description that skin irritation was not admitted in the test which was carried out repetitive application in the skin of the rabbit (CERI Hazard Data (1999), ACGIH (7th, 2001), PATTY (4th, 1994)), and from description that skin irritation was not reported in the humans (CERI Hazard Data (1999), the 1st volume of MOE Risk Assessment Category (2002), and ACGIH (7th, 2001)), it was carried out the outside of Category.
3 Serious eye damage / eye irritation	Category 2B	-	Warning	Causes eye irritation	There is the descriptions that very mild - mild irritation was acknowledged by application to the eyes of the rabbits (CERI Hazard Data (1999), ACGIH (7th, 2001) and PATTY (4th, 1994)), we judged that ocular irritational property was mild. And we classified it as Category 2B.
4 Respiratory/skin sensitization	Respiratory sensitization: Classification not possible; Skin sensitization: Classification not possible	-	-	-	Respiratory organ: No data. Skin: CERI Hazard Data (1999), MOE Risk Assessment the 1st volume (2002), and ACGIH (7th, 2001) have description that it has no report of sensitizing property in human, however, we have no animal data with which we can clearly deny sensitizing property, therefore we presupposed that we could not classify it for the data is insufficient for determining it to be Out Of Category.
5 Germ cell mutagenicity	Not classified	-	-	-	There is a negative result (IRIS, 2005) by the dominant lethal test using a mouse, which is an in vivo multigeneration mutagenicity test using a germ cell, and there is a negative result (NTP DB, 2005) by the micronucleus test which used the rat and mouse erythrocyte, which are the in vivo mutagenicity tests using a somatic. So it carried out the outside of Category.

6	Carcinogenicity	Not classified	-	-	-	Since it was classified into D in EPA (1993 revision) (IRIS, 2005), it was considered as the outside of Category.
7	Toxic to reproduction	Not classified	-	-	-	It was considered as out of category based on the description that reproductive toxicity was not observed also at the dose in which general toxicity was observed in the dam animals in the mixed feed oral administration study using the pregnancy rat (CERI Hazard Data (1999), MOE Risk Assessment the 1st volume (2002), NTP TR429 (1995), and NTP DB (2005)), and the description that abnormalities were not seen in the fetus in dam toxicity dose at the mouse in the study which carried out mixed feed oral administration (NTP TR429 (1995)).
8	Specific target organs/systemic toxicity following single exposure	Category 3 (narcotic effects)	Exclamation mark	Warning	May cause respiratory irritation or may cause drowsiness and dizziness (narcotic effects)	From description in CERI Hazard Data (1999), MOE Risk Assessment the 1st volume (2002), ACGIH (7th, 2001), PATTY (4th, 1994), and NTP TR429 (1995) that the central nervous system depression is caused or may be caused in oral ingestion in humans, it was judged that anesthetic actions were indicated and was set as Category 3 (anesthetic actions).
9	Specific target organs/systemic toxicity following repeated exposure	Classification not possible	-	-	-	Classification not possible due to lack of data
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 3	-	-	Harmful to aquatic life	It was classified into Category 3 from 96-hour LC50=29000microg/L of fishes (Sheepshead minnow), and others (MOE Risk Assessment No.1, 2002).
11 Hazardous to the aquatic environment (chronic)	Not classified	-	-	-	Since rapidly degrading (BOD: 93% (existing chemical safety inspections data)), and less bio-accumulative (log Kow=1.6 (PHYSPROP Database, 2005)).