



Material Safety Data Sheet

MSDS has been prepared in accordance with EC Directive 93/112/EEC

Section 1 Chemical Product and Company Identification

Name: Dimethylphthalate		
Synonyms: Dimethylphthalate	Product type: Liquid density certified reference material	Date revised: June 2002 Previous: 29 Nov 2001
Manufacturer: H & D Fitzgerald Ltd. Cefn Du, Tremeirchion, St Asaph, Clwyd, LL17 0US UK		
Prepared by: Denis Fitzgerald		
Chemical family: carboxylic acid methyl ester		
Poison schedule number: None allocated		
Chemical Formula: C ₁₀ H ₁₀ O ₄		

Section 2 Composition / Information on ingredients

Substance name	C.A.S. No.	EINECS No.	% weight	HSCN (Tariff#)
Dimethylphthalate	131-11-3	2050116	100%	29173490

Section 3 Hazards identification

Emergency overview Colourless slightly viscous liquid. (\approx 17 MPaS at 20°C) with slight smell of ester. Supplied sealed in a 10ml glass ampoule. Caution: None. Potential environmental effects: None in the quantity supplied in a 10 ml ampoule.
Potential health effects Eyes: Irritant. Skin: None. Ingestion: Causes gastrointestinal irritation with vomiting & diarrhoea. Reported to cause burning of lips, tongue, and mouth. Chronic: May cause foetal malformation. This material is not listed as carcinogenic.

Section 4 First Aid measures

Eyes: Wash eyes with water or normal saline. If symptoms develop, seek medical advice.
Skin: Wash with soap and water.
Ingestion: Wash out mouth with water. Do not swallow mouthwash. Transport to hospital.

Section 5 Fire fighting measures		
Extinguishing media: Use any extinguishing media appropriate for surrounding fire.		
Unsuitable media: None		
Lower explosive limit: 0.94% by volume	Upper explosive limit: Not determined	Flash point: 146°C
Flammability classification: 1 (slight fire hazard)	Flame propagation: Not determined	Ignition in air: Autoignition temperature 555°C
Combustion hazards: Combustible,		
Protective equipment: Use breathing apparatus if large amounts of dimethylphthalate are involved.		
Unusual fire hazards: Toxic gases (oxides of carbon) may be released in a fire involving dimethylphthalate.		
Static charge effects: Not applicable		

Section 6 Spillage measures
Spill cleanup: Mop up liquid and place in waste disposal container.
Environmental precautions: None needed for the quantity supplied in an ampoule.

Section 7 Handling and storage
Handling precautions: Avoid contact with eyes.
Storage precautions: Store ampoule in package until ready to use. Store in a cool place if possible (less than 25°C)

Section 8 Exposure controls and personal protection
Exposure guidelines: OSHA set exposure limit of 5 mg/m ³ air for 8 hr day exposure.
Personal protective equipment
Eye/Face protection: Safety glasses are recommended to minimise eye contact.
Hands: Wash hands with soap before eating or drinking.

Section 9 Physical and chemical properties		
Physical state: Liquid	Colour: Colourless	Odour: Slight ester smell
pH: Not determined	Freezing point: 2°C	Boiling point: 284°C
Miscibility with water: Almost immiscible with water	Density of liquid: ≈1191 kgm ⁻³ @ 20°C	
Vapour pressure: <0.01mbar @20°C	Molecular weight: 194.2	

Section 10 Stability and reactivity
Conditions to avoid: Stable.
Incompatible materials: Avoid contact with strong acids or oxidising agents.
Reactivity: None known.
Hazardous decomposition: Toxic gases may be released in a fire involving dimethylphthalate.
Hazardous polymerisation: Will not occur.

Section 11 Toxicological information

Acute effects		
Acute inhalation:	Causes coughing.	Sittig [1991]
Acute ingestion:	LD ₅₀ (rat): 6800 mg/kg.	NIOSH [1991]
Acute skin:	LD ₅₀ (rabbit): >20 ml/kg.	Clayton & Clayton [1982]
Eye irritation:	Causes considerable eye pain but no, or very slight, reversible damage	[Grant 1986]
Skin irritation:	Has been used as an insect repellent since 1945, no reported cases of irritation or sensitisation.	
Chronic effects	No signs or symptoms of chronic exposure have been reported in humans	
Chronic ingestion:	Not tested	
Chronic eye:	Not tested	
Chronic skin:	None	
Mutagenic effects:	Not observed	
Reproductive effects:	Large doses cause congenital malformation in rats.	
Sensitisation	None	

Section 12 Ecological information

Persistence / degradability:	Material may accumulate in the environment, and may be an oestrogen mimic.
Ecotoxicity:	No data available

Section 13 Disposal

For small quantities:	Absorb on paper or sand and follow company policy for disposal of small quantities of non-flammable organic compounds. Observe all national and local environmental regulations.
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Section 14 Transport information

UN Number	UN shipping name	UN class
Not applicable	Not regulated	Not applicable
RID /ADR	IMDG shipping name	ICAO / IATA:
Non hazardous for rail or road	Non hazardous for sea freight	Non hazardous for air freight

Section 15 Regulatory information

European classification:
Label symbols: none
R36/37/38 Irritating to eyes, respiratory system, and skin.
S26 In case of contact with eyes, rinse immediately with plenty of water, and seek medical advice.
S36/37 Wear suitable protective clothing and gloves.

Section 16 Other information

Reason for revision:	change to new format
Disclaimer:	H&D Fitzgerald Ltd. believes that the data given here is accurate. It is derived from published information about dimethylphthalate. No warranty, expressed or implied, is intended. The data is provided for your information and consideration when using dimethylphthalate as a certified reference material for the calibration of density meters. H&D Fitzgerald Ltd. assumes no legal responsibility for its use.