



# Thirumalai Chemicals Limited

Branch Code: 04 - Chemidye Manufacturing Co

## MATERIAL SAFETY DATA SHEET

Product Name: DIETHYL PHTHALATE

---

Revision Date: 18.01.2016

Page: 1 of 4

---

### 1. Manufacturer and Supplier Identification

Thirumalai Chemicals Limited,  
25 - B SIPCOT Industrial Complex,  
Ranipet, 632 403. Tamil Nadu, India.  
Phone : + 91 - 04172 - 244441 / 244442 / 244446  
Fax : + 91 - 04172 - 244308.  
E-mail : exports@thirumalaichemicals.com

---

### 2. Composition / Information on ingredient

Chemical Name : 1,2- Benzenedicarboxylic acid, diethyl ester  
Chemical Formula : C<sub>6</sub>H<sub>4</sub> (COOC<sub>2</sub>H<sub>5</sub>)<sub>2</sub>  
Molecular Weight : 222.24  
CAS No. : 84-66-2  
EEC (EINECS) No. : 201-550-6

---

### 3. Hazard Identification

Harmful if swallowed or inhaled, irritating to eyes, respiratory system and skin.  
Target organs : Central nervous system. May cause narcotic effects  
R-Phrases : R36/37/38  
Hazard Symbol : Xi - Irritant

---

### 4. First Aid Measures

General advice : Special treatment by a doctor may be required as soon as possible, in case of exposure to the substance or its vapor.

Eye contact : Rinse thoroughly with plenty of water for at least 15 minutes. Consult a physician.

Skin contact : Remove contaminated clothing. Wash the skin with soap and plenty of water.  
Get medical aid if irritation develops or persists.

Ingestion : Clean mouth with water. Drink plenty of water or milk. Do not induce vomiting. Call a physician immediately.

Inhalation : Move victim to fresh air at once. If breathing is difficult, give oxygen.

---

### 5. Fire Fighting Measures

Special hazards : Flash point: 161°C. Combustible material. Above the flash point, explosive vapor-air mixtures may be formed. Gives off irritating or toxic fumes.

Extinguishing agents : Water spray, dry chemical, alcohol foam or carbon dioxide.

Protective equipment : In case of fire, wear self-contained breathing apparatus and chemical protection suit.



## MATERIAL SAFETY DATA SHEET

Product Name: DIETHYL PHTHALATE

---

Revision Date: 18.01.2016

Page: 2 of 4

---

### 6. Accidental Release Measures

Personal precautions : Ensure adequate ventilation. Use personal protective equipment.  
Remove all sources of ignition.

Environmental precautions: Do not allow material to contaminate ground water system.

Methods for cleaning up : Contain and recover liquid when possible. Collect liquid in an appropriate container or absorb with and inert material. (e.g., vermiculite, dry sand earth) and place in a chemical waste container. Do not use combustible materials, such as sawdust. Do not flush to sewer. Dispose of in Compliance with local and national regulations.

---

### 7. Handling and Storage

Handling : Ensure adequate ventilation, especially in confined area. Avoid contact with eyes and skin. Wash thoroughly after handling.

Storage : Keep in tightly closed container. Store in cool, dry, ventilated area, away from sources of ignition. Protect against physical damage.

---

### 8. Exposure Controls / Personal Protection

Occupational exposure Limits (OELs)

ACGIH Threshold Limit Value (TLV) : 10 ppm, 5 mg/m<sup>3</sup> (TWA)

Engineering measures to reduce exposure

: Ensure adequate ventilation confined area. Local exhaust ventilation is generally preferred as it can control the emissions at its source.

Personal Protective Equipment

Respiratory : Self contained breathing apparatus

Eye : Closely fitted Safety goggles.

Hand : Impervious Gloves

Skin and body : Approved work boots, protective clothing

Hygiene measures : Wash hands before food and at the end of workday.

Other devices : Maintain eye wash facility in work area

---

### 9. Physical and Chemical Properties

Form : Liquid

Colour : Clear, Colorless

Odour : Odorless

Freezing/Melting point : -3° C

Boiling point : 298 - 299°C @ 760 mm Hg

Flash- point : 161° C

Auto-ignition temperature : 457°C

Volatiles by Volume : 100% @ 21° C

Vapour pressure : 14 mm @ 163°C

Vapour Density : 7.66 (Air = 1)

Viscosity : 12 CPS @ 20°C

Specific gravity : 1.23 @ 14C/4C

Water Solubility : 0.09% by vol. @ 25°C

---



## MATERIAL SAFETY DATA SHEET

Product Name: DIETHYL PHTHALATE

---

Revision Date: 18.01.2016

Page: 3 of 4

---

### 10. Stability and Reactivity

Stability : Stable at normal conditions

Incompatibilities with other materials : Strong acids such as nitric acid, strong oxidizing agents and permanganates. DEP will attack some forms of plastics, rubber and coatings.

Hazardous decomposition Products : Carbon monoxide, Carbon dioxide

Hazardous polymerization : Will not occur

---

### 11. Toxicological Information

Acute toxicity (lethal doses)  
(Literature value)

LD50/oral/ rat dose : 8600 mg/kg

LD50/oral/mouse : 6172 mg/kg

LD50/oral/rabbit : 1 gm/kg

Carcinogenicity : Not listed by ACGHI, IARC, NIOSH, NTP, OSHA

Effects of short-term exposure : The substance irritates the eyes and the skin

---

### 12. Ecological information

**Environmental fate** : When released into the soil, Diethyl Phthalate may evaporate and Biodegrade to a moderate extent. When released into water, it may biodegrade to a moderate extent but is not expected to evaporate significantly. This material has an experimentally determined bio-concentration factor (BCF) of less than 100. When released into the air, it is expected to be readily degraded by reaction with photo-chemically produced hydroxyl radicals. When released into the air, this material may be removed from the atmosphere to a moderate extent by wet deposition. When released into the air, it is expected to have a half-life of less than 1 day.

**Environmental toxicity** : This material may be hazardous to the environment and toxic to aquatic life. The LC50/96-hour values for fish are between 10 and 100mg/l. The LC 50/96-hour values for fish are over 100mg/l.

---

### 13. Disposal Consideration

Waste Number : U088

Disposal method : It is banned from land disposal according to RCRA. Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a approved waste facility. Processing, use or contamination of this product may change the waste management options.

Contaminated packaging : Dispose of container and unused contents in accordance with federal, State and local regulations

---



## MATERIAL SAFETY DATA SHEET

Product Name: DIETHYL PHTHALATE

Revision Date: 18.01.2016

Page: 4 of 4

### 14. Transport Information

Regulated as a hazardous material under IMO or IATA or ADR/RID

Proper shipping name : Other Regulated Substances, Liquid, n.o.s (DIETHYL PHTHALATE)

Imco Class : 9

UN : NA 3082

Packing group : III

EmS number : F-A S-F

Marine Pollutant (Yes /NO) : NO

### 15. Regulatory Information

The product is classified and labelled according to EEC directive on classification of hazardous preparations **90/492/EEC**

Hazard labels : Xi - Irritant  
R-phrases : R36/37/38 - Irritating to eyes, respiratory system and skin  
S-phrases : S26 - After contact with skin, wash, immediately with plenty of water  
S37/39 - Wear suitable gloves and eye / face protection.

**TSCA Classification** : Diethyl Phthalate is not covered under TSCA 8(a) - Preliminary assessment information Rule and TSCA 8 (d) - Health & Safety data reporting Rule.

*Ref : Preliminary Assessment Information and Health and Safety Data Reporting: Removal of chemicals, by Environmental Protection Agency, 40 CFR parts 712 and 716, [OPPTS-82041B: FRL-4779-7, effect from May 2, 1994.*

### 16. Other Information

The information provided in this Safety Data Sheet is given in good faith and is correct to the best of our knowledge and information at the date of publication. It is designed only as guidance for safe handling, storage, transportation, use and disposal. No warranty is expressed or implied.

Contact Person : D.Settu  
Company : Thirumalai Chemicals limited  
Branch Code: 04 - Chemidye Manufacturing company  
25 B Sipcot Industrial Complex  
Ranipet 632 403, Tamilnadu, India  
Phone number : + 91 - 04172 - 244441 / 244442 / 244446  
Fax number : + 91 - 04172 - 244308  
E-Mail : settu@thirumalaichemicals.com