

Common Name: **DIETHYL PHTHALATE**

Synonyms: DEP; Diethyl 1,2-Benzenecarboxylate; Ethyl Phthalate

CAS No: 84-66-2

 Molecular Formula: C<sub>12</sub>H<sub>14</sub>O<sub>4</sub>

RTK Substance No: 0707

Description: Odorless, colorless, oil liquid

**HAZARD DATA**

Hazard Rating	Firefighting	Reactivity
<b>1 - Health</b> <b>1 - Fire</b> <b>0 - Reactivity</b> DOT#: UN 3082 ERG Guide #: 171 Hazard Class: 9 (Environmentally Hazardous Substance)	<b>Diethyl Phthalate</b> may burn, but does not readily ignite. Use dry chemical, CO <sub>2</sub> , water spray or alcohol-resistant foam as extinguishing agents. <b>DO NOT</b> use water jet directly on <b>Diethyl Phthalate</b> . POISONOUS GASES ARE PRODUCED IN FIRE, including <i>Phthalic Anhydride</i> . Use water spray to keep fire-exposed containers cool.	<b>Diethyl Phthalate</b> is not compatible with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE) and STRONG ACIDS (such as HYDROCHLORIC, SULFURIC and NITRIC). <b>Diethyl Phthalate</b> may attack plastics.

**SPILL/LEAKS**
**Isolation Distance:**
**Spill:** 50 meters (150 feet)

**Fire:** 800 meters (1/2 mile)

 Absorb liquids in dry sand, earth, or a similar material and place into sealed containers for disposal. **DO NOT** wash into sewer.

**Diethyl Phthalate** may be hazardous to the environment, especially to fish.

**PHYSICAL PROPERTIES**

<b>Odor Threshold:</b>	Odorless
<b>Flash Point:</b>	322°F (161°C)
<b>LEL:</b>	0.7%
<b>UEL:</b>	Unknown
<b>Auto Ignition Temp:</b>	855°F (457°C)
<b>Vapor Density:</b>	7.7 (air = 1)
<b>Vapor Pressure:</b>	0.002 mm Hg at 68°F (20°C)
<b>Specific Gravity:</b>	1.2 (water = 1)
<b>Water Solubility:</b>	Very slightly soluble
<b>Boiling Point:</b>	568°F (298°C)
<b>Freezing Point:</b>	-41°F (-40.6°C)
<b>Molecular Weight:</b>	222.3

**EXPOSURE LIMITS**
**NIOSH:** 5 mg/m<sup>3</sup>, 10-hr TWA

**ACGIH:** 5 mg/m<sup>3</sup>, 8-hr TWA

The Protective Action Criteria values are:

 PAC-1 = 15 mg/m<sup>3</sup>    PAC-2 = 100 mg/m<sup>3</sup>  
 PAC-3 = 300 mg/m<sup>3</sup>
**PROTECTIVE EQUIPMENT**

<b>Gloves:</b>	Butyl, Nitrile, Neoprene and Viton (>8-hr breakthrough)
<b>Coveralls:</b>	Tychem® F, BR, CSM and TK (>8-hr breakthrough for <i>Esters, Carboxylic</i> )
<b>Respirator:</b>	>5 mg/m <sup>3</sup> - full facpiece APR with <i>P100 filters</i> Fire or >15 mg/ m <sup>3</sup> - SCBA

**HEALTH EFFECTS**

<b>Eyes:</b>	Irritation
<b>Skin:</b>	Irritation (skin absorbable)
<b>Inhalation:</b>	Nose and throat irritation with coughing and wheezing

**FIRST AID AND DECONTAMINATION**

<b>Remove</b>	the person from exposure.
<b>Flush</b>	eyes with large amounts of water for at least 15 minutes. Remove contact lenses.
<b>Remove</b>	contaminated clothing and wash contaminated skin with soap and water.
<b>Begin</b>	artificial respiration if breathing has stopped and CPR if necessary.
<b>Transfer</b>	promptly to a medical facility.