

ETHYL HEXYL PHTHALATE

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CAUTIONARY RESPONSE INFORMATION

Common Synonyms

Oily liquid

Colorless to pale yellow

Slight to no odor

Wear goggles, gloves and approved respirator.
Shut off ignition sources and call fire department.
Notify local health and pollution control agencies.
Protect water intakes.

Fire

Combustible.
Toxic gases, such as carbon monoxide, may be produced in fire.
Overheating of containers can result in rupture.
Wear full protective clothing with self-contained breathing apparatus.
Extinguish fire with carbon dioxide, dry chemical, alcohol foam, or water spray.
Protect water intakes.
Cool fire-exposed containers with water spray.
Do not spray fire directly; solid stream could cause frothing.

Exposure

CALL FOR MEDICAL AID.

VAPOR

Move victim to fresh air.
If breathing is difficult, give oxygen.

LIQUID

Irritating to skin and eyes.
Remove contaminated clothing and shoes.
Wash affected areas with soap and water.
IF IN EYES, hold eyelids open and flush with plenty of water.

Water Pollution

Effect of low concentrations on aquatic life is unknown.
May be dangerous if it enters water intakes.
Notify local health and wildlife officials.
Notify operators of nearby water intakes.

1. CORRECTIVE RESPONSE ACTIONS

Stop discharge
Contain
Collection Systems: Skim; Pump
Clean shore line
Salvage waterfowl

2. CHEMICAL DESIGNATIONS

- 2.1 CG Compatibility Group: 34; Esters
- 2.2 Formula: $C_{12}H_{22}O_4$ (COOCH₂CH₂(C₆H₅)C₆H₅)₂
- 2.3 IMO/UN Designation: Currently not available
- 2.4 DOT ID No.: Not listed.
- 2.5 CAS Registry No.: 117-81-7
- 2.6 NAERG Guide No.: Not listed
- 2.7 Standard Industrial Trade Classification: 51385

3. HEALTH HAZARDS

- 3.1 **Personal Protective Equipment:** Safety goggles or full face shield; approved organic vapor respirator; chemically resistant gloves.
- 3.2 **Symptoms Following Exposure:** Inhalation can cause nausea and irritation of nose and throat. Contact of liquid with eyes or skin causes irritation. Ingestion can cause abdominal cramps, nausea and diarrhea.
- 3.3 **Treatment of Exposure:** Get medical attention. INHALATION: Remove to fresh air. EYES: Flush with water for at least 15 min. SKIN: Wash with soap and water.
- 3.4 **TLV-TWA:** 5 mg/m³
- 3.5 **TLV-STEL:** Not listed.
- 3.6 **TLV-Ceiling:** Not listed.
- 3.7 **Toxicity by Ingestion:** Grade 1; oral rat LD₅₀ = 30.6 g/kg
- 3.8 **Toxicity by Inhalation:** Currently not available.
- 3.9 **Chronic Toxicity:** Listed as a potential carcinogen based upon increased incidence of liver cancers in female rats and mice; and an increased incidence of liver cancers or neoplasms in male rats.
- 3.10 **Vapor (Gas) Irritant Characteristics:** Vapors cause a slight smarting of the eyes or respiratory system if present in high concentrations. The effect is temporary.
- 3.11 **Liquid or Solid Characteristics:** Minimum hazard. If spilled on clothing and allowed to remain, may cause smarting and reddening of the skin.
- 3.12 **Odor Threshold:** Currently not available
- 3.13 **IDLH Value:** 5,000 mg/m³
- 3.14 **OSHA PEL-TWA:** 5 mg/m³
- 3.15 **OSHA PEL-STEL:** Not listed.
- 3.16 **OSHA PEL-Ceiling:** Not listed.
- 3.17 **EPA AEGL:** Not listed

4. FIRE HAZARDS

- 4.1 **Flash Point:** 425°F O.C.
- 4.2 **Flammable Limits in Air:** LEL: 0.31% @ 493°F.; 0.28% @ 507°F.
- 4.3 **Fire Extinguishing Agents:** Carbon dioxide, dry chemical, alcohol foam, or water spray.
- 4.4 **Fire Extinguishing Agents Not to Be Used:** Water.
- 4.5 **Special Hazards of Combustion Products:** Irritating vapors and toxic gases, such as carbon dioxide and carbon monoxide, may be formed when involved in fire.
- 4.6 **Behavior in Fire:** Overheating of containers during fire can result in rupture.
- 4.7 **Auto Ignition Temperature:** Currently not available
- 4.8 **Electrical Hazards:** Not listed.
- 4.9 **Burning Rate:** Currently not available
- 4.10 **Adiabatic Flame Temperature:** Currently not available
- 4.11 **Stoichiometric Air to Fuel Ratio:** 149.9 (calc.)
- 4.12 **Flame Temperature:** Currently not available
- 4.13 **Combustion Molar Ratio (Reactant to Product):** 43.0 (calc.)
- 4.14 **Minimum Oxygen Concentration for Combustion (MOCC):** Not listed

5. CHEMICAL REACTIVITY

- 5.1 **Reactivity with Water:** No reaction.
- 5.2 **Reactivity with Common Materials:** Oxidizing materials can cause a vigorous reaction.
- 5.3 **Stability During Transport:** Stable.
- 5.4 **Neutralizing Agents for Acids and Caustics:** Not pertinent.
- 5.5 **Polymerization:** Will not polymerize.
- 5.6 **Inhibitor of Polymerization:** Not pertinent.

6. WATER POLLUTION

- 6.1 **Aquatic Toxicity:**
>550 mg/l/96 hr/sheepshead
minnow/LC₅₀
11 mg/l/48 hr/water flea/LC₅₀
- 6.2 **Waterfowl Toxicity:** Currently not available
- 6.3 **Biological Oxygen Demand (BOD):** Currently not available
- 6.4 **Food Chain Concentration Potential:** Currently not available
- 6.5 **GESAMP Hazard Profile:** Not listed

7. SHIPPING INFORMATION

- 7.1 **Grades of Purity:** 99%
- 7.2 **Storage Temperature:** Ambient.
- 7.3 **Inert Atmosphere:** No requirement.
- 7.4 **Venting:** Open.
- 7.5 **IMO Pollution Category:** C
- 7.6 **Ship Type:** 3
- 7.7 **Barge Hull Type:** Currently not available

8. HAZARD CLASSIFICATIONS

- 8.1 **49 CFR Category:** Not listed.
- 8.2 **49 CFR Class:** Not pertinent.
- 8.3 **49 CFR Package Group:** Not listed.
- 8.4 **Marine Pollutant:** No
- 8.5 **NFPA Hazard Classification:** Not listed
- 8.6 **EPA Reportable Quantity:** Not listed.
- 8.7 **EPA Pollution Category:** Not listed.
- 8.8 **RCRA Waste Number:** Not listed
- 8.9 **EPA FWPCA List:** Not listed

9. PHYSICAL & CHEMICAL PROPERTIES

- 9.1 **Physical State at 15° C and 1 atm:** Liquid
- 9.2 **Molecular Weight:** 390.56
- 9.3 **Boiling Point at 1 atm:** 724°F = 384°C = 657°K
- 9.4 **Freezing Point:** <58°F = <50°C = <323°K
- 9.5 **Critical Temperature:** Currently not available
- 9.6 **Critical Pressure:** Currently not available
- 9.7 **Specific Gravity:** 0.98 at 25°C
- 9.8 **Liquid Surface Tension:** Currently not available
- 9.9 **Liquid Water Interfacial Tension:** Currently not available
- 9.10 **Vapor (Gas) Specific Gravity:** 16
- 9.11 **Ratio of Specific Heats of Vapor (Gas):** Currently not available
- 9.12 **Latent Heat of Vaporization:** Currently not available
- 9.13 **Heat of Combustion:** Currently not available
- 9.14 **Heat of Decomposition:** Currently not available
- 9.15 **Heat of Solution:** Currently not available
- 9.16 **Heat of Polymerization:** Not pertinent.
- 9.17 **Heat of Fusion:** Currently not available
- 9.18 **Limiting Value:** Currently not available
- 9.19 **Reid Vapor Pressure:** Currently not available

NOTES

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9.20 SATURATED LIQUID DENSITY		9.21 LIQUID HEAT CAPACITY		9.22 LIQUID THERMAL CONDUCTIVITY		9.23 LIQUID VISCOSITY	
Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F	Temperature (degrees F)	British thermal unit inch per hour-square foot-F	Temperature (degrees F)	Centipoise
77	8.180		C U R R E N T L Y N O T A V A I L A B L E		C U R R E N T L Y N O T A V A I L A B L E		C U R R E N T L Y N O T A V A I L A B L E

9.24 SOLUBILITY IN WATER		9.25 SATURATED VAPOR PRESSURE		9.26 SATURATED VAPOR DENSITY		9.27 IDEAL GAS HEAT CAPACITY	
Temperature (degrees F)	Pounds per 100 pounds of water	Temperature (degrees F)	Pounds per square inch	Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F
	N E G L I G I B L E	68	0.026	68	0.00176		C U R R E N T L Y N O T A V A I L A B L E