

M S D S (Material Safety Data Sheet) Di Octyl Phthalate	PAGE 1/5
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1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

- Substance Di Octyl Phthalate (DOP)
- CAS NO 117-81-7
- RTECS NO T I 0350000
- Trade Names/Synonyms (DOP)
- Chemical Family Ester, Carboxylic, Aromatic

2. COMPOSITION/INFORMATION ON INGREDIENTS

- Component Di(2-Ethylhexyl) Phthalate
- CAS NO 117-81-7
- Percentage 100%

3. HAZARD IDENTIFICATION

- NFPA ratings (Scale 0-4) Health=0, Fire=1, Reactivity=0
- Emergency Overview A l m o s t odorless to pale yellow, Oily liquid.
- Potential Health Effects
 - 0Inhalation
 - Short Term Exposure May cause irritation. Additional effects may include nausea.
 - Long Term Exposure May cause numbness.
 - 0SkinContact
 - Short Term Exposure May cause irritation.
 - Long Term Exposure No information is available.
 - 0EyeContact
 - Short Term Exposure No information on significant adverse effects.
 - Long Term Exposure No information is available.
 - 0Ingestion
 - Short Term Exposure May cause nausea, diarrhea and stomach pain.

● Carcinogen Status

0 OSHA N

0 IARC N

4. FIRST AID MEASURES

● Inhalation

0 Remove from exposure area to fresh air immediately.

0 Perform artificial respiration if necessary.

0 Get medical attention immediately.

● Skin Contact

0 Remove contaminated clothing and shoes immediately.

0 Wash with soap or mild detergent and large amount of water until no evidence of chemical remains (at least 15-20 minutes).

0 Get medical attention immediately.

● Eye Contact

0 Wash eyes immediately with large amount of water, occasionally lifting upper and lower lids, until no evidence of chemical remains (at least 15-20 minutes).

0 Get medical attention immediately.

● Ingestion

0 If the person is conscious and not convulsing, induce emesis by giving syrup of ipecac followed by water.

0 If vomiting occurs, keep head below the hip stop event aspiration.

0 Get medical attention immediately.

5. FIRE FIGHTING MEASURES

● Fire and Explosion Hazards: Slightly fire hazard when exposed to heat or flame.

● Extinguishing Media: Dry chemical, carbon dioxide, water spray, or regular foam.

● Large Fires: Use water spray, fog or regular foam.

● Fire Fighting

0 Move container from fire area if it can be done without risk.

0 Do not scatter spilled material with high-pressure water streams.

0 Dike fire-control water for later disposal.

0 Use agents suitable for type of surrounding fire.

0 Avoid breathing hazardous vapors, keep up wind.

0 Water or foam may cause frothing.

● Flash Point 215C (419F) (CC)

● Lower Flammable Limits 0.3% @ 245C(474F)

- Upper Flammable Limits No data available.
- Autoignition 390 C (734F)
- Flammability Class (OSHA) IB

6. ACCIDENTAL RELEASE MEASURES

- Occupational Spill
 - 0Stop leak if you can do it without risk.
 - 0For small spills take up with sand or other absorbent material and place into clean, dry containers for later disposal.
 - 0Keep unnecessary people away, isolate hazard area and deny entry.

7. HANDLING & STORAGE

- Observe all federal, state and local regulations when storing this substance.
- Store away from incompatible substances.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Exposure Limits
 - 05g/OSHA TWA
 - 05g/ACGIHTWA
 - 05g/NIOSH recommended 10 hour TWA 10g/NIOSH recommended STEL
- Ventilation
 - 0Provide local exhaust ventilation to meet published exposure limits.
 - 0Ventilation equipment should be explosion-resistant if explosive concentration so fvapor, dust, or fume are present.
- Eye Protection
 - 0Employee must wear splash-resistant or dust-resistant safety goggles to prevent eye contact with this substance.
 - 0Provide an emergency eye wash fountain and quick drench shower in the immediate work area.
- Clothing
 - 0Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this substance.
- Gloves
 - 0Employee must wear appropriate protective gloves to prevent contact with this substance.

● Respirator

0The following respirators and maximum use concentrations are recommendations by the U.S Department of Health and Human Service, NIOSH Pocket Guide to Chemical Hazards.

- At any detectable concentration
Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode.
- Escape
Any air-purifying, full facepiece respirator with a high-efficiency particulate filter.
0For firefighting and other immediately dangerous to life or health conditions
- Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode.

9. PHYSICAL & CHEMICAL PROPERTIES

- Description Almost odorless, colorless to pale tellow, oily liquid.
- Molecular Weight 390.56
- Molecular Formula $C_{24}H_{38}O_4$
- Boiling Point 384C (723F)
- Freezing Point - 55C (-67F)
- Vapor Pressure 1 .32mmHg @ 200C
- Vapor Density (Air=1) 16
- Specific Gravity (water=1) 0.981
- Water Solubility 0.005% @ 20C
- pH No data available
- Volatility No data available.
- Odor Threshold No data available.
- Evaporation Rate No data available.
- Viscosity 84.1 cP @ 20C
- Solvent Solubility Soluble in hexane, mineral oil.

10. STABILITY & REACTIVITY

- Reactivity Stable at normal temperatures and pressure.
- Conditions to Avoid 0Avoid contact with strong oxidizers, excessive heat, sparks, or open flame.
- Incompatibilities
0Acids(strong) Incompatible.
0Bases(strong) Incompatible.
0Oxidizers(strong) Fire and explosion hazard.

- Hazardous Decomposition
 - 0Thermal decomposition products Oxides of carbon.
- Polymerization Hazardous polymerization has not been reported to occur under normal temperature and pressure.

11. TOXICOLOGICAL INFORMATION

- Irritation Data
 - 0500g/24hours skin-rabbit mild.
 - 0500g/eyes-rabbit mild.
 - 0500g/24hours eyes-rabbit mild.
- Toxicity Data
 - 0LD50 25g/gskin-rabbit,30g/goral-rat.
- Acute Toxicity Level Relatively non-toxic (Dermal absorption, ingestion)

12. ECOLOGICAL INFORMATION

No data available.

13. DISPOSAL CONSIDERATIONS

- Observe all federal, state and local regulations when disposing of this substance.
- Disposal must be in accordance with standards applicable to generators of hazardous waste, 40CFR262.
- EPA hazardous waste number U028.

14. TRANSPORT INFORMATION

No classification currently assigned.

15. REGULATORY INFORMATION

- Section 4 CERCLA section 103(40CFR302.4) Y
 - 0Di (2-Ethyhexyl) Phthalate 100LBSRQ
- SARA hazard categories, SARA sections 311/312(40CFR370.21)
 - 0Acute hazard N
 - 0Chronic hazard Y
 - 0Fire hazard N
 - 0Reactive hazard N
 - 0Sudden release N
- OSHA process safety (29CFR1910.119) N
- California proposition 65 Y

16. OTHER INFORMATION