Molecular Formula: $C_{24}H_{24}O_5$
Molecular Weight: 392.451
Accurate Mass: 392.162375
Percentage Composition: C 73.45%; H 6.16%; O 20.38%
Biological Source: Reported prod. by a *Streptomyces* sp. (see note above)
Biological Use/Importance: Active against gram-positive and -negative bacteria, yeasts and fungi
Melting Point: Mp 320°
Solubility: Sol. H_2O, MeOH; poorly sol. $CHCl_3$, hexane
Other Data: Struct. not fully assigned

>>**Derivative:** Dioctyl ester
Synonym(s): Dioctyl phthalate

CAS Registry Number: 117-84-0
Molecular Formula: $C_{24}H_{38}O_4$
Molecular Weight: 390.562
Accurate Mass: 390.27701
Percentage Composition: C 73.81%; H 9.81%; O 16.39%
Biological Source: Reported as a nat. prod. from the brown alga *Sargassum wightii* and various plant spp.
Use/Importance: Plasticiser
Physical Description: Liq.
Melting Point: Mp –25°
Boiling Point: Bp_1 185°. $Bp_{0.1}$ 165°
Density: d_{20}^{20} 0.975
Refractive Index: n_D^{25} 1.4848
Other Data: Almost certainly a contaminant
Fluka: 80153
Supelco: R43-0690

>>**Derivative:** Diisooctyl ester
Synonym(s): Diisooctyl phthalate. DIOP

CAS Registry Number: 27554-26-3
Molecular Formula: $C_{24}H_{38}O_4$
Molecular Weight: 390.562
Accurate Mass: 390.27701
Percentage Composition: C 73.81%; H 9.81%; O 16.39%
Use/Importance: Plasticiser for PVC
Physical Description: Liq.
Melting Point: Mp –50°
Boiling Point: Bp 37°
Solubility: Insol. H_2O
Density: d_{20}^{20} 0.986
Other Data: Mixt. of isomers obtained from phthalic anhydride and the mixed octyl esters made by the oxo process. See also the bis(2-ethylhexyl) component below
Aldrich: 37665-5

>>**Derivative:** Dinonyl ester
Synonym(s): Dinonyl phthalate. DNP

CAS Registry Number: 84-76-4
Molecular Formula: $C_{26}H_{42}O_4$
Molecular Weight: 418.615
Accurate Mass: 418.30831
Percentage Composition: C 74.60%; H 10.11%; O 15.29%
Use/Importance: Plasticiser
Physical Description: Oil
Boiling Point: Bp_1 205-220°
Solubility: Insol. H_2O
Density: d^{25} 0.979
Refractive Index: n_D^{20} 1.4871
Hazard & Toxicity: Fl. p. 141°