# 2-Methyl-2-ethyl-3-hydroxyhexyl propionate

**Other names:** 2-methyl-2-ethyl-3 hydroxyhexyl propanoate
**Inchi:** InChI=1S/C12H24O3/c1-5-8-10(13)12(4,7-3)9-15-11(14)6-2/h10,13H,5-9H2,1-4H3
**InchiKey:** QONBAQBZDACBTM-UHFFFAOYSA-N
**Formula:** C12H24O3
**SMILES:** CCCC(O)C(C)(CC)COC(=O)CC
**Mol. weight [g/mol]:** 216.32

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -320.18 | kJ/mol | Joback Method |
| hf | -702.07 | kJ/mol | Joback Method |
| hfus | 22.77 | kJ/mol | Joback Method |
| hvap | 66.46 | kJ/mol | Joback Method |
| log10ws | -2.84 | | Crippen Method |
| logp | 2.517 | | Crippen Method |
| mcvol | 193.250 | ml/mol | McGowan Method |
| pc | 2056.76 | kPa | Joback Method |
| rinpol | 1378.00 | | NIST Webbook |
| rinpol | 1370.00 | | NIST Webbook |
| ripol | 1859.00 | | NIST Webbook |
| tb | 638.76 | K | Joback Method |
| tc | 814.17 | K | Joback Method |
| tf | 345.40 | K | Joback Method |
| vc | 0.734 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 533.52 | J/mol×K | 638.76 | Joback Method |
| cpg | 547.80 | J/mol×K | 668.00 | Joback Method |
| cpg | 561.38 | J/mol×K | 697.23 | Joback Method |
| cpg | 574.29 | J/mol×K | 726.47 | Joback Method |
| cpg | 586.55 | J/mol×K | 755.70 | Joback Method |
| cpg | 598.18 | J/mol×K | 784.94 | Joback Method |

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|---|---|---|---|---|
| cpg | 609.21 | J/mol×K | 814.17 | Joback Method |
| dvisc | 0.0069125 | Pa×s | 345.40 | Joback Method |
| dvisc | 0.0017625 | Pa×s | 394.29 | Joback Method |
| dvisc | 0.0006075 | Pa×s | 443.19 | Joback Method |
| dvisc | 0.0002588 | Pa×s | 492.08 | Joback Method |
| dvisc | 0.0001286 | Pa×s | 540.97 | Joback Method |
| dvisc | 0.0000718 | Pa×s | 589.87 | Joback Method |
| dvisc | 0.0000438 | Pa×s | 638.76 | Joback Method |

# Sources

**Joback Method:** https://en.wikipedia.org/wiki/Joback_method
**McGowan Method:** http://link.springer.com/article/10.1007/BF02311772
**NIST Webbook:** http://webbook.nist.gov/cgi/cbook.cgi?ID=R331598&Units=SI
**Crippen Method:** http://pubs.acs.org/doi/abs/10.1021/ci990307l
**Crippen Method:** https://www.chemeo.com/doc/models/crippen_log10ws

# Legend

**cpg:** Ideal gas heat capacity
**dvisc:** Dynamic viscosity
**gf:** Standard Gibbs free energy of formation
**hf:** Enthalpy of formation at standard conditions
**hfus:** Enthalpy of fusion at standard conditions
**hvap:** Enthalpy of vaporization at standard conditions
**log10ws:** Log10 of Water solubility in mol/l
**logp:** Octanol/Water partition coefficient
**mcvol:** McGowan's characteristic volume
**pc:** Critical Pressure
**rinpol:** Non-polar retention indices
**ripol:** Polar retention indices
**tb:** Normal Boiling Point Temperature
**tc:** Critical Temperature
**tf:** Normal melting (fusion) point
**vc:** Critical Volume