# Succinic acid, di(2-hexyl) ester

**Other names:** di-(1-Ethylpentyl)succinate
**Inchi:** InChI=1S/C16H30O4/c1-5-7-9-13(3)19-15(17)11-12-16(18)20-14(4)10-8-6-2/h13-14H,5-1
**InchiKey:** WTYARLGCILCKHK-UHFFFAOYSA-N
**Formula:** C16H30O4
**SMILES:** CCCCC(C)OC(=O)CCC(=O)OC(C)CCCC
**Mol. weight [g/mol]:** 286.41

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -388.88 | kJ/mol | Joback Method |
| hf | -873.73 | kJ/mol | Joback Method |
| hfus | 35.72 | kJ/mol | Joback Method |
| hvap | 68.75 | kJ/mol | Joback Method |
| log10ws | -4.47 | | Crippen Method |
| logp | 4.010 | | Crippen Method |
| mcvol | 251.180 | ml/mol | McGowan Method |
| pc | 1428.30 | kPa | Joback Method |
| tb | 717.18 | K | Joback Method |
| tc | 897.32 | K | Joback Method |
| tf | 384.40 | K | Joback Method |
| vc | 0.968 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 734.56 | J/mol×K | 717.18 | Joback Method |
| cpg | 751.53 | J/mol×K | 747.20 | Joback Method |
| cpg | 767.64 | J/mol×K | 777.23 | Joback Method |
| cpg | 782.89 | J/mol×K | 807.25 | Joback Method |
| cpg | 797.29 | J/mol×K | 837.27 | Joback Method |
| cpg | 810.84 | J/mol×K | 867.29 | Joback Method |
| cpg | 823.57 | J/mol×K | 897.32 | Joback Method |
| dvisc | 0.0018907 | Pa×s | 384.40 | Joback Method |
| dvisc | 0.0007981 | Pa×s | 439.86 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0004087 | Pa×s | 495.33 | Joback Method |
| dvisc | 0.0002395 | Pa×s | 550.79 | Joback Method |
| dvisc | 0.0001547 | Pa×s | 606.25 | Joback Method |
| dvisc | 0.0001076 | Pa×s | 661.72 | Joback Method |
| dvisc | 0.0000791 | Pa×s | 717.18 | Joback Method |

# Sources

| | |
|---|---|
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U349569&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |
| **Joback Method:** | https://en.wikipedia.org/wiki/Joback_method |
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |

# Legend

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|---|---|
| **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 |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |