# Succinic acid, cyclohexylmethyl pent-4-en-1-yl ester

**Inchi:** InChI=1S/C16H26O4/c1-2-3-7-12-19-15(17)10-11-16(18)20-13-14-8-5-4-6-9-14/h2,14H,1

**InchiKey:** UKWHOUNJTUHYPT-UHFFFAOYSA-N

**Formula:** C16H26O4

**SMILES:** C=CCCCOC(=O)CCC(=O)OCC1CCCCC1

**Mol. weight [g/mol]:** 282.38

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -271.71 | kJ/mol | Joback Method |
| hf | -683.42 | kJ/mol | Joback Method |
| hfus | 33.32 | kJ/mol | Joback Method |
| hvap | 69.28 | kJ/mol | Joback Method |
| log10ws | -3.75 | | Crippen Method |
| logp | 3.399 | | Crippen Method |
| mcvol | 236.020 | ml/mol | McGowan Method |
| pc | 1714.61 | kPa | Joback Method |
| rinpol | 2035.00 | | NIST Webbook |
| rinpol | 2035.00 | | NIST Webbook |
| tb | 734.29 | K | Joback Method |
| tc | 933.21 | K | Joback Method |
| tf | 420.02 | K | Joback Method |
| vc | 0.893 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 703.87 | J/mol×K | 734.29 | Joback Method |
| cpg | 721.72 | J/mol×K | 767.44 | Joback Method |
| cpg | 738.46 | J/mol×K | 800.60 | Joback Method |
| cpg | 754.08 | J/mol×K | 833.75 | Joback Method |
| cpg | 768.62 | J/mol×K | 866.90 | Joback Method |
| cpg | 782.09 | J/mol×K | 900.06 | Joback Method |
| cpg | 794.50 | J/mol×K | 933.21 | Joback Method |
| dvisc | 0.0014672 | Pa×s | 420.02 | Joback Method |

| | | | | |
|---|---|---|---|---|
| dvisc | 0.0007361 | Pa×s | 472.40 | Joback Method |
| dvisc | 0.0004239 | Pa×s | 524.78 | Joback Method |
| dvisc | 0.0002698 | Pa×s | 577.15 | Joback Method |
| dvisc | 0.0001851 | Pa×s | 629.53 | Joback Method |
| dvisc | 0.0001346 | Pa×s | 681.91 | Joback Method |
| dvisc | 0.0001024 | Pa×s | 734.29 | Joback Method |

# Sources

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|---|---|
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U391069&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 |
| **rinpol:** | Non-polar retention indices |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |