# Succinic acid, cyclohexylmethyl 2-naphthylmethyl ester

**Inchi:** InChI=1S/C22H26O4/c23-21(25-15-17-6-2-1-3-7-17)12-13-22(24)26-16-18-10-11-19-8-4

**InchiKey:** MITSERAVLBMHHZ-UHFFFAOYSA-N

**Formula:** C22H26O4

**SMILES:** O=C(CCC(=O)OCC1CCCCC1)OCc1ccc2ccccc2c1

**Mol. weight [g/mol]:** 354.44

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -99.60 | kJ/mol | Joback Method |
| hf | -516.56 | kJ/mol | Joback Method |
| hfus | 40.82 | kJ/mol | Joback Method |
| hvap | 87.89 | kJ/mol | Joback Method |
| log10ws | -6.14 | | Crippen Method |
| logp | 4.787 | | Crippen Method |
| mcvol | 281.640 | ml/mol | McGowan Method |
| pc | 1636.45 | kPa | Joback Method |
| rinpol | 3036.00 | | NIST Webbook |
| rinpol | 3036.00 | | NIST Webbook |
| tb | 925.53 | K | Joback Method |
| tc | 1158.89 | K | Joback Method |
| tf | 561.04 | K | Joback Method |
| vc | 1.062 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 913.94 | J/mol×K | 925.53 | Joback Method |
| cpg | 929.30 | J/mol×K | 964.42 | Joback Method |
| cpg | 943.23 | J/mol×K | 1003.32 | Joback Method |
| cpg | 955.79 | J/mol×K | 1042.21 | Joback Method |
| cpg | 967.06 | J/mol×K | 1081.10 | Joback Method |
| cpg | 977.11 | J/mol×K | 1120.00 | Joback Method |
| cpg | 986.04 | J/mol×K | 1158.89 | Joback Method |
| dvisc | 0.0006764 | Pa×s | 561.04 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0004063 | Pa×s | 621.79 | Joback Method |
| dvisc | 0.0002672 | Pa×s | 682.54 | Joback Method |
| dvisc | 0.0001882 | Pa×s | 743.28 | Joback Method |
| dvisc | 0.0001398 | Pa×s | 804.03 | Joback Method |
| dvisc | 0.0001082 | Pa×s | 864.78 | Joback Method |
| dvisc | 0.0000867 | Pa×s | 925.53 | Joback Method |

# Sources

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|---|---|
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U390005&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 |

# 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 |