# Succinic acid, cyclohexylmethyl 3-phenoxybenzyl ester

**Inchi:** InChI=1S/C24H28O5/c25-23(27-17-19-8-3-1-4-9-19)14-15-24(26)28-18-20-10-7-13-22(1

**InchiKey:** YRLJIYCLNWDJBM-UHFFFAOYSA-N

**Formula:** C24H28O5

**SMILES:** O=C(CCC(=O)OCC1CCCCC1)OCc1cccc(Oc2ccccc2)c1

**Mol. weight [g/mol]:** 396.48

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -182.00 | kJ/mol | Joback Method |
| hf | -644.60 | kJ/mol | Joback Method |
| hfus | 44.21 | kJ/mol | Joback Method |
| hvap | 95.38 | kJ/mol | Joback Method |
| log10ws | -5.97 | | Crippen Method |
| logp | 5.426 | | Crippen Method |
| mcvol | 311.390 | ml/mol | McGowan Method |
| pc | 1485.00 | kPa | Joback Method |
| rinpol | 3075.00 | | NIST Webbook |
| rinpol | 3075.00 | | NIST Webbook |
| tb | 1001.41 | K | Joback Method |
| tc | 1241.70 | K | Joback Method |
| tf | 599.53 | K | Joback Method |
| vc | 1.163 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 1036.53 | J/mol×K | 1001.41 | Joback Method |
| cpg | 1083.13 | J/mol×K | 1201.65 | Joback Method |
| cpg | 1077.39 | J/mol×K | 1161.60 | Joback Method |
| cpg | 1069.91 | J/mol×K | 1121.55 | Joback Method |
| cpg | 1060.64 | J/mol×K | 1081.51 | Joback Method |
| cpg | 1049.53 | J/mol×K | 1041.46 | Joback Method |
| cpg | 1087.18 | J/mol×K | 1241.70 | Joback Method |
| dvisc | 0.0000242 | Pa×s | 1001.41 | Joback Method |

| | | | | |
|---|---|---|---|---|
| dvisc | 0.0000312 | Pa×s | 934.43 | Joback Method |
| dvisc | 0.0000419 | Pa×s | 867.45 | Joback Method |
| dvisc | 0.0000591 | Pa×s | 800.47 | Joback Method |
| dvisc | 0.0000888 | Pa×s | 733.49 | Joback Method |
| dvisc | 0.0001448 | Pa×s | 666.51 | Joback Method |
| dvisc | 0.0002634 | Pa×s | 599.53 | Joback Method |

# Sources

| | |
|---|---|
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U390373&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

| | |
|---|---|
| **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 |