# Succinic acid, 4-chlorophenethyl decyl ester

**Inchi:** InChI=1S/C22H33ClO4/c1-2-3-4-5-6-7-8-9-17-26-21(24)14-15-22(25)27-18-16-19-10-12-
**InchiKey:** CSIQWBJSUBQGBK-UHFFFAOYSA-N
**Formula:** C22H33ClO4
**SMILES:** CCCCCCCCCCOC(=O)CCC(=O)OCCc1ccc(Cl)cc1
**Mol. weight [g/mol]:** 396.95

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -242.63 | kJ/mol | Joback Method |
| hf | -777.69 | kJ/mol | Joback Method |
| hfus | 56.16 | kJ/mol | Joback Method |
| hvap | 90.20 | kJ/mol | Joback Method |
| log10ws | -6.54 | | Crippen Method |
| logp | 5.890 | | Crippen Method |
| mcvol | 324.200 | ml/mol | McGowan Method |
| pc | 1142.12 | kPa | Joback Method |
| rinpol | 2851.00 | | NIST Webbook |
| rinpol | 2851.00 | | NIST Webbook |
| tb | 924.43 | K | Joback Method |
| tc | 1134.12 | K | Joback Method |
| tf | 550.88 | K | Joback Method |
| vc | 1.256 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 1024.36 | J/mol×K | 924.43 | Joback Method |
| cpg | 1039.76 | J/mol×K | 959.38 | Joback Method |
| cpg | 1053.89 | J/mol×K | 994.33 | Joback Method |
| cpg | 1066.80 | J/mol×K | 1029.27 | Joback Method |
| cpg | 1078.52 | J/mol×K | 1064.22 | Joback Method |
| cpg | 1089.07 | J/mol×K | 1099.17 | Joback Method |
| cpg | 1098.50 | J/mol×K | 1134.12 | Joback Method |
| dvisc | 0.0003880 | Pa×s | 550.88 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0002123 | Pa×s | 613.14 | Joback Method |
| dvisc | 0.0001298 | Pa×s | 675.40 | Joback Method |
| dvisc | 0.0000862 | Pa×s | 737.65 | Joback Method |
| dvisc | 0.0000611 | Pa×s | 799.91 | Joback Method |
| dvisc | 0.0000454 | Pa×s | 862.17 | Joback Method |
| dvisc | 0.0000352 | Pa×s | 924.43 | Joback Method |

# Sources

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|---|---|
| **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 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U381521&Units=SI |

# 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 |