# Glutaric acid, 2-(4-chlorophenyl)ethyl pentadecyl ester

**Inchi:** InChI=1S/C28H45ClO4/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-23-32-27(30)16-15-17-28(31)
**InchiKey:** HJWVSNKYJYVAJE-UHFFFAOYSA-N
**Formula:** C28H45ClO4
**SMILES:** CCCCCCCCCCCCCCCOC(=O)CCCC(=O)OCCc1ccc(Cl)cc1
**Mol. weight [g/mol]:** 481.11

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -192.11 | kJ/mol | Joback Method |
| hf | -901.53 | kJ/mol | Joback Method |
| hfus | 71.70 | kJ/mol | Joback Method |
| hvap | 103.56 | kJ/mol | Joback Method |
| log10ws | -9.06 | | Crippen Method |
| logp | 8.230 | | Crippen Method |
| mcvol | 408.740 | ml/mol | McGowan Method |
| pc | 800.24 | kPa | Joback Method |
| rinpol | 3459.00 | | NIST Webbook |
| rinpol | 3459.00 | | NIST Webbook |
| tb | 1061.71 | K | Joback Method |
| tc | 1308.18 | K | Joback Method |
| tf | 618.50 | K | Joback Method |
| vc | 1.593 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 1394.96 | J/mol×K | 1061.71 | Joback Method |
| cpg | 1462.66 | J/mol×K | 1267.10 | Joback Method |
| cpg | 1452.50 | J/mol×K | 1226.02 | Joback Method |
| cpg | 1440.73 | J/mol×K | 1184.94 | Joback Method |
| cpg | 1427.27 | J/mol×K | 1143.87 | Joback Method |
| cpg | 1412.04 | J/mol×K | 1102.79 | Joback Method |
| cpg | 1471.32 | J/mol×K | 1308.18 | Joback Method |
| dvisc | 0.0000139 | Pa×s | 1061.71 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0000182 | Pa×s | 987.84 | Joback Method |
| dvisc | 0.0000250 | Pa×s | 913.97 | Joback Method |
| dvisc | 0.0000361 | Pa×s | 840.11 | Joback Method |
| dvisc | 0.0000561 | Pa×s | 766.24 | Joback Method |
| dvisc | 0.0000957 | Pa×s | 692.37 | Joback Method |
| dvisc | 0.0001855 | Pa×s | 618.50 | Joback Method |

# Sources

| | |
|---|---|
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U377311&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 |