# Cyclohexanecarboxylic acid, 4-methoxy-, pentadecyl ester

**Inchi:** InChI=1S/C23H44O3/c1-3-4-5-6-7-8-9-10-11-12-13-14-15-20-26-23(24)21-16-18-22(25-2

**InchiKey:** OUQFWRFMFWNXKB-UHFFFAOYSA-N

**Formula:** C23H44O3

**SMILES:** CCCCCCCCCCCCCCCOC(=O)C1CCC(OC)CC1

**Mol. weight [g/mol]:** 368.59

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -179.40 | kJ/mol | Joback Method |
| hf | -861.09 | kJ/mol | Joback Method |
| hfus | 52.21 | kJ/mol | Joback Method |
| hvap | 78.48 | kJ/mol | Joback Method |
| log10ws | -7.16 | | Crippen Method |
| logp | 6.826 | | Crippen Method |
| mcvol | 337.380 | ml/mol | McGowan Method |
| pc | 961.48 | kPa | Joback Method |
| rinpol | 2673.00 | | NIST Webbook |
| rinpol | 2673.00 | | NIST Webbook |
| tb | 839.23 | K | Joback Method |
| tc | 1031.09 | K | Joback Method |
| tf | 446.50 | K | Joback Method |
| vc | 1.298 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 1129.34 | J/mol×K | 839.23 | Joback Method |
| cpg | 1150.87 | J/mol×K | 871.21 | Joback Method |
| cpg | 1171.00 | J/mol×K | 903.18 | Joback Method |
| cpg | 1189.76 | J/mol×K | 935.16 | Joback Method |
| cpg | 1207.17 | J/mol×K | 967.14 | Joback Method |
| cpg | 1223.25 | J/mol×K | 999.12 | Joback Method |
| cpg | 1238.03 | J/mol×K | 1031.09 | Joback Method |
| dvisc | 0.0009483 | Pa×s | 446.50 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0004201 | Pa×s | 511.95 | Joback Method |
| dvisc | 0.0002239 | Pa×s | 577.41 | Joback Method |
| dvisc | 0.0001356 | Pa×s | 642.87 | Joback Method |
| dvisc | 0.0000901 | Pa×s | 708.32 | Joback Method |
| dvisc | 0.0000642 | Pa×s | 773.77 | Joback Method |
| dvisc | 0.0000482 | Pa×s | 839.23 | Joback Method |

# Sources

**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=U406203&Units=SI
**Crippen Method:** http://pubs.acs.org/doi/abs/10.1021/ci990307l

# 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