# Bis-(4-tert-butylphenoxy) ethoxy methane

**Inchi:** InChI=1S/C23H32O3/c1-8-24-21(25-19-13-9-17(10-14-19)22(2,3)4)26-20-15-11-18(12-1
**InchiKey:** ALMHHUIHYYQXMJ-UHFFFAOYSA-N
**Formula:** C23H32O3
**SMILES:** CCOC(Oc1ccc(C(C)(C)C)cc1)Oc1ccc(C(C)(C)C)cc1
**Mol. weight [g/mol]:** 356.50
**CAS:** 116374-08-4

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 36.58 | kJ/mol | Joback Method |
| hf | -487.37 | kJ/mol | Joback Method |
| hfus | 27.84 | kJ/mol | Joback Method |
| hvap | 76.92 | kJ/mol | Joback Method |
| log10ws | -6.60 | | Crippen Method |
| logp | 6.059 | | Crippen Method |
| mcvol | 305.020 | ml/mol | McGowan Method |
| pc | 1276.42 | kPa | Joback Method |
| tb | 849.32 | K | Joback Method |
| tc | 1074.28 | K | Joback Method |
| tf | 483.38 | K | Joback Method |
| vc | 1.133 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 955.33 | J/mol×K | 849.32 | Joback Method |
| cpg | 974.01 | J/mol×K | 886.81 | Joback Method |
| cpg | 991.21 | J/mol×K | 924.31 | Joback Method |
| cpg | 1007.01 | J/mol×K | 961.80 | Joback Method |
| cpg | 1021.50 | J/mol×K | 999.29 | Joback Method |
| cpg | 1034.74 | J/mol×K | 1036.79 | Joback Method |
| cpg | 1046.82 | J/mol×K | 1074.28 | Joback Method |
| dvisc | 0.0003345 | Pa×s | 483.38 | Joback Method |
| dvisc | 0.0001548 | Pa×s | 544.37 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0000836 | Pa×s | 605.36 | Joback Method |
| dvisc | 0.0000506 | Pa×s | 666.35 | Joback Method |
| dvisc | 0.0000333 | Pa×s | 727.34 | Joback Method |
| dvisc | 0.0000234 | Pa×s | 788.33 | Joback Method |
| dvisc | 0.0000173 | Pa×s | 849.32 | 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=C116374084&Units=SI |

# 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 |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |