# O,o'-biphenol, 4,4'-difluoro-

**Inchi:** InChI=1S/C12H8F2O2/c13-7-1-3-11(15)9(5-7)10-6-8(14)2-4-12(10)16/h1-6,15-16H
**InchiKey:** PGTVKPNXXXWFMX-UHFFFAOYSA-N
**Formula:** C12H8F2O2
**SMILES:** Oc1ccc(F)cc1-c1cc(F)ccc1O
**Mol. weight [g/mol]:** 222.19
**CAS:** 388-69-2

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -443.14 | kJ/mol | Joback Method |
| hf | -587.73 | kJ/mol | Joback Method |
| hfus | 31.87 | kJ/mol | Joback Method |
| hvap | 72.58 | kJ/mol | Joback Method |
| log10ws | -3.83 | | Crippen Method |
| logp | 3.043 | | Crippen Method |
| mcvol | 147.700 | ml/mol | McGowan Method |
| pc | 4271.86 | kPa | Joback Method |
| tb | 697.06 | K | Joback Method |
| tc | 942.09 | K | Joback Method |
| tf | 527.50 | K | Joback Method |
| vc | 0.460 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 386.51 | J/mol×K | 697.06 | Joback Method |
| cpg | 396.76 | J/mol×K | 737.90 | Joback Method |
| cpg | 406.36 | J/mol×K | 778.74 | Joback Method |
| cpg | 415.47 | J/mol×K | 819.57 | Joback Method |
| cpg | 424.28 | J/mol×K | 860.41 | Joback Method |
| cpg | 432.93 | J/mol×K | 901.25 | Joback Method |
| cpg | 441.60 | J/mol×K | 942.09 | Joback Method |

# Sources

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|---|---|
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=C388692&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 |

# Legend

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|---|---|
| **cpg:** | Ideal gas heat capacity |
| **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 |