# cis-Anthracene, 1,2,3,4-tetrahydro-1,2-diol

**Inchi:** InChI=1S/C14H14O2/c15-13-6-5-11-7-9-3-1-2-4-10(9)8-12(11)14(13)16/h1-4,7-8,13-16H
**InchiKey:** OCFQOCVMVLZKPR-KGLIPLIRSA-N
**Formula:** C14H14O2
**SMILES:** OC1CCc2cc3ccccc3cc2C1O
**Mol. weight [g/mol]:** 214.26

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 34.10 | kJ/mol | Joback Method |
| hf | -185.79 | kJ/mol | Joback Method |
| hfus | 27.58 | kJ/mol | Joback Method |
| hvap | 85.13 | kJ/mol | Joback Method |
| log10ws | -3.87 | | Crippen Method |
| logp | 2.180 | | Crippen Method |
| mcvol | 165.780 | ml/mol | McGowan Method |
| pc | 3419.86 | kPa | Joback Method |
| rinpol | 2085.00 | | NIST Webbook |
| tb | 766.04 | K | Joback Method |
| tc | 978.17 | K | Joback Method |
| tf | 463.52 | K | Joback Method |
| vc | 0.620 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 486.66 | J/mol×K | 766.04 | Joback Method |
| cpg | 498.25 | J/mol×K | 801.40 | Joback Method |
| cpg | 509.10 | J/mol×K | 836.75 | Joback Method |
| cpg | 519.29 | J/mol×K | 872.11 | Joback Method |
| cpg | 528.89 | J/mol×K | 907.46 | Joback Method |
| cpg | 537.96 | J/mol×K | 942.82 | Joback Method |
| cpg | 546.59 | J/mol×K | 978.17 | Joback Method |
| dvisc | 0.0012923 | Pa×s | 463.52 | Joback Method |
| dvisc | 0.0005368 | Pa×s | 513.94 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0002609 | Pa×s | 564.36 | Joback Method |
| dvisc | 0.0001427 | Pa×s | 614.78 | Joback Method |
| dvisc | 0.0000855 | Pa×s | 665.20 | Joback Method |
| dvisc | 0.0000551 | Pa×s | 715.62 | Joback Method |
| dvisc | 0.0000376 | Pa×s | 766.04 | 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=R109301&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

| | |
|---|---|
| **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 |