# 3,4:7,8-DIBENZO-2,5-DIOXABICYCLO[4,2,0]OCTA

**Other names:** 3,4:7,8-Dibenzo-2,5-dioxabicyclo[4.2.0]octa-3,7-diene
**Inchi:** InChI=1S/C14H10O2/c1-2-6-10-9(5-1)13-14(10)16-12-8-4-3-7-11(12)15-13/h1-8,13-14H
**InchiKey:** SSPWYTLOLFBHPK-UHFFFAOYSA-N
**Formula:** C14H10O2
**SMILES:** c1ccc2c(c1)OC1c3ccccc3C1O2
**Mol. weight [g/mol]:** 210.23

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| hf | -43.75 | kJ/mol | Cheméo Relay (1.0) |
| hfus | 35.75 | kJ/mol | Joback Method |
| ie | 7.60 ± 0.02 | eV | NIST Webbook |
| log10ws | -4.44 | | Cheméo Relay (1.0) |
| logp | 3.254 | | Crippen Method |
| mcvol | 150.620 | ml/mol | McGowan Method |
| tf | 448.06 | K | Cheméo Relay (1.0) |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 398.48 | J/mol×K | 641.88 | Joback Method |
| cpg | 469.93 | J/mol×K | 895.06 | Joback Method |
| cpg | 459.99 | J/mol×K | 852.86 | Joback Method |
| cpg | 449.51 | J/mol×K | 810.66 | Joback Method |
| cpg | 438.29 | J/mol×K | 768.47 | Joback Method |
| cpg | 426.17 | J/mol×K | 726.27 | Joback Method |
| cpg | 412.96 | J/mol×K | 684.08 | Joback Method |
| dvisc | 0.0022001 | Pa×s | 531.68 | Joback Method |
| dvisc | 0.0018194 | Pa×s | 641.88 | Joback Method |
| dvisc | 0.0019235 | Pa×s | 605.15 | Joback Method |
| dvisc | 0.0020483 | Pa×s | 568.41 | Joback Method |
| dvisc | 0.0029382 | Pa×s | 421.48 | Joback Method |
| dvisc | 0.0023884 | Pa×s | 494.95 | Joback Method |
| dvisc | 0.0026272 | Pa×s | 458.21 | Joback Method |

# Sources

| | |
|---|---|
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |
| **Cheméo Relay (1.0):** | |
| **Cheméo Relay (1.0, beta):** | |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=C42896184&Units=SI |
| **Joback Method:** | https://en.wikipedia.org/wiki/Joback_method |
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |

# Legend

| | |
|---|---|
| **cpg:** | Ideal gas heat capacity |
| **dvisc:** | Dynamic viscosity |
| **hf:** | Enthalpy of formation at standard conditions |
| **hfus:** | Enthalpy of fusion at standard conditions |
| **ie:** | Ionization energy |
| **log10ws:** | Log10 of Water solubility in mol/l |
| **logp:** | Octanol/Water partition coefficient |
| **mcvol:** | McGowan's characteristic volume |
| **tf:** | Normal melting (fusion) point |