# 4,4'-Dimethoxystilbene

**Inchi:** InChI=1S/C16H16O2/c1-17-15-9-5-13(6-10-15)3-4-14-7-11-16(18-2)12-8-14/h3-12H,1-2H
**InchiKey:** CAWFCZIEFIQKRV-ONEGZZNKSA-N
**Formula:** C16H16O2
**SMILES:** COc1ccc(C=Cc2ccc(OC)cc2)cc1
**Mol. weight [g/mol]:** 240.30
**CAS:** 15638-14-9

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 159.62 | kJ/mol | Joback Method |
| hf | -70.67 | kJ/mol | Joback Method |
| hfus | 27.08 | kJ/mol | Joback Method |
| hvap | 61.86 | kJ/mol | Joback Method |
| log10ws | -4.32 | | Crippen Method |
| logp | 3.874 | | Crippen Method |
| mcvol | 196.220 | ml/mol | McGowan Method |
| pc | 2258.96 | kPa | Joback Method |
| rinpol | 2301.40 | | NIST Webbook |
| tb | 677.80 | K | Joback Method |
| tc | 912.53 | K | Joback Method |
| tf | 387.34 | K | Joback Method |
| vc | 0.732 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 503.36 | J/mol×K | 677.80 | Joback Method |
| cpg | 519.99 | J/mol×K | 716.92 | Joback Method |
| cpg | 535.45 | J/mol×K | 756.04 | Joback Method |
| cpg | 549.79 | J/mol×K | 795.17 | Joback Method |
| cpg | 563.03 | J/mol×K | 834.29 | Joback Method |
| cpg | 575.23 | J/mol×K | 873.41 | Joback Method |
| cpg | 586.43 | J/mol×K | 912.53 | Joback Method |
| dvisc | 0.0007361 | Pa×s | 387.34 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0004145 | Pa×s | 435.75 | Joback Method |
| dvisc | 0.0002619 | Pa×s | 484.16 | Joback Method |
| dvisc | 0.0001798 | Pa×s | 532.57 | Joback Method |
| dvisc | 0.0001315 | Pa×s | 580.98 | Joback Method |
| dvisc | 0.0001009 | Pa×s | 629.39 | Joback Method |
| dvisc | 0.0000804 | Pa×s | 677.80 | Joback Method |

# Sources

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|---|---|
| **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=C15638149&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |

# Legend

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