# Benzene, 1,3-dimethoxy-2-methyl-4-nonyl

**Inchi:** InChI=1S/C18H30O2/c1-5-6-7-8-9-10-11-12-16-13-14-17(19-3)15(2)18(16)20-4/h13-14H
**InchiKey:** VSRXGWZSKZJHED-UHFFFAOYSA-N
**Formula:** C18H30O2
**SMILES:** CCCCCCCCCc1ccc(OC)c(C)c1OC
**Mol. weight [g/mol]:** 278.43

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -25.80 | kJ/mol | Joback Method |
| hf | -477.17 | kJ/mol | Joback Method |
| hfus | 37.63 | kJ/mol | Joback Method |
| hvap | 64.74 | kJ/mol | Joback Method |
| log10ws | -5.92 | | Crippen Method |
| logp | 5.305 | | Crippen Method |
| mcvol | 252.460 | ml/mol | McGowan Method |
| pc | 1377.86 | kPa | Joback Method |
| rinpol | 2012.00 | | NIST Webbook |
| rinpol | 2012.00 | | NIST Webbook |
| tb | 697.70 | K | Joback Method |
| tc | 884.64 | K | Joback Method |
| tf | 401.06 | K | Joback Method |
| vc | 0.972 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 715.23 | J/mol×K | 697.70 | Joback Method |
| cpg | 733.73 | J/mol×K | 728.86 | Joback Method |
| cpg | 751.32 | J/mol×K | 760.01 | Joback Method |
| cpg | 768.02 | J/mol×K | 791.17 | Joback Method |
| cpg | 783.82 | J/mol×K | 822.33 | Joback Method |
| cpg | 798.74 | J/mol×K | 853.48 | Joback Method |
| cpg | 812.79 | J/mol×K | 884.64 | Joback Method |
| dvisc | 0.0007031 | Pa×s | 401.06 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0003926 | Pa×s | 450.50 | Joback Method |
| dvisc | 0.0002460 | Pa×s | 499.94 | Joback Method |
| dvisc | 0.0001677 | Pa×s | 549.38 | Joback Method |
| dvisc | 0.0001218 | Pa×s | 598.82 | Joback Method |
| dvisc | 0.0000929 | Pa×s | 648.26 | Joback Method |
| dvisc | 0.0000736 | Pa×s | 697.70 | 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=R142873&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 |