# Naphthalene, 1-(phenylmethoxy)-

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|---|---|
| **Other names:** | Ether, benzyl 1-naphthyl |
| | Benzyl 1-naphthyl ether |
| | Benzyl «alpha»-naphthyl ether |
| **Inchi:** | InChI=1S/C17H14O/c1-2-7-14(8-3-1)13-18-17-12-6-10-15-9-4-5-11-16(15)17/h1-12H,13H |
| **InchiKey:** | JWSWULLEVAMIJK-UHFFFAOYSA-N |
| **Formula:** | C17H14O |
| **SMILES:** | c1ccc(COc2cccc3ccccc23)cc1 |
| **Mol. weight [g/mol]:** | 234.29 |
| **CAS:** | 607-58-9 |

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 309.10 | kJ/mol | Joback Method |
| hf | 126.23 | kJ/mol | Joback Method |
| hfus | 25.69 | kJ/mol | Joback Method |
| hvap | 62.70 | kJ/mol | Joback Method |
| log10ws | -5.51 | | Crippen Method |
| logp | 4.419 | | Crippen Method |
| mcvol | 189.280 | ml/mol | McGowan Method |
| pc | 2563.69 | kPa | Joback Method |
| tb | 688.10 | K | Joback Method |
| tc | 940.02 | K | Joback Method |
| tf | 401.64 | K | Joback Method |
| vc | 0.712 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 489.06 | J/mol×K | 688.10 | Joback Method |
| cpg | 505.62 | J/mol×K | 730.09 | Joback Method |
| cpg | 520.81 | J/mol×K | 772.07 | Joback Method |
| cpg | 534.73 | J/mol×K | 814.06 | Joback Method |
| cpg | 547.50 | J/mol×K | 856.04 | Joback Method |
| cpg | 559.22 | J/mol×K | 898.03 | Joback Method |

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|---|---|---|---|---|
| cpg | 570.01 | J/mol×K | 940.02 | Joback Method |
| dvisc | 0.0011754 | Pa×s | 401.64 | Joback Method |
| dvisc | 0.0007396 | Pa×s | 449.38 | Joback Method |
| dvisc | 0.0005087 | Pa×s | 497.13 | Joback Method |
| dvisc | 0.0003736 | Pa×s | 544.87 | Joback Method |
| dvisc | 0.0002884 | Pa×s | 592.61 | Joback Method |
| dvisc | 0.0002314 | Pa×s | 640.36 | Joback Method |
| dvisc | 0.0001914 | Pa×s | 688.10 | Joback Method |

# Sources

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|---|---|
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |
| **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=C607589&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |

# 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 |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |