# Phenol, 4-(1-butylpentyl)

**Inchi:** InChI=1S/C15H24O/c1-3-5-7-13(8-6-4-2)14-9-11-15(16)12-10-14/h9-13,16H,3-8H2,1-2H
**InchiKey:** GZXIDVHPJRISMS-UHFFFAOYSA-N
**Formula:** C15H24O
**SMILES:** CCCCC(CCCC)c1ccc(O)cc1
**Mol. weight [g/mol]:** 220.35

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 30.77 | kJ/mol | Joback Method |
| hf | -298.99 | kJ/mol | Joback Method |
| hfus | 30.91 | kJ/mol | Joback Method |
| hvap | 63.89 | kJ/mol | Joback Method |
| log10ws | -4.72 | | Crippen Method |
| logp | 4.856 | | Crippen Method |
| mcvol | 204.320 | ml/mol | McGowan Method |
| pc | 2123.64 | kPa | Joback Method |
| rinpol | 1781.00 | | NIST Webbook |
| tb | 649.46 | K | Joback Method |
| tc | 854.96 | K | Joback Method |
| tf | 381.95 | K | Joback Method |
| vc | 0.728 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 558.07 | J/mol×K | 649.46 | Joback Method |
| cpg | 575.21 | J/mol×K | 683.71 | Joback Method |
| cpg | 591.38 | J/mol×K | 717.96 | Joback Method |
| cpg | 606.65 | J/mol×K | 752.21 | Joback Method |
| cpg | 621.10 | J/mol×K | 786.46 | Joback Method |
| cpg | 634.82 | J/mol×K | 820.71 | Joback Method |
| cpg | 647.87 | J/mol×K | 854.96 | Joback Method |
| dvisc | 0.0018851 | Pa×s | 381.95 | Joback Method |
| dvisc | 0.0005800 | Pa×s | 426.53 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0002231 | Pa×s | 471.12 | Joback Method |
| dvisc | 0.0001012 | Pa×s | 515.71 | Joback Method |
| dvisc | 0.0000521 | Pa×s | 560.29 | Joback Method |
| dvisc | 0.0000295 | Pa×s | 604.88 | Joback Method |
| dvisc | 0.0000181 | Pa×s | 649.46 | 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=R592644&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

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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 |