# Phenol, 4-(1-ethyl-1,3-dimethylpentyl)

**Inchi:** InChI=1S/C15H24O/c1-5-12(3)11-15(4,6-2)13-7-9-14(16)10-8-13/h7-10,12,16H,5-6,11H2
**InchiKey:** RYIHVIPUIXFRNI-UHFFFAOYSA-N
**Formula:** C15H24O
**SMILES:** CCC(C)CC(C)(CC)c1ccc(O)cc1
**Mol. weight [g/mol]:** 220.35

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 33.61 | kJ/mol | Joback Method |
| hf | -307.74 | kJ/mol | Joback Method |
| hfus | 23.49 | kJ/mol | Joback Method |
| hvap | 62.59 | kJ/mol | Joback Method |
| log10ws | -4.18 | | Crippen Method |
| logp | 4.496 | | Crippen Method |
| mcvol | 204.320 | ml/mol | McGowan Method |
| pc | 2161.32 | kPa | Joback Method |
| rinpol | 1734.00 | | NIST Webbook |
| rinpol | 1734.00 | | NIST Webbook |
| rinpol | 1734.00 | | NIST Webbook |
| tb | 646.23 | K | Joback Method |
| tc | 863.09 | K | Joback Method |
| tf | 384.37 | K | Joback Method |
| vc | 0.717 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 560.90 | J/mol×K | 646.23 | Joback Method |
| cpg | 578.81 | J/mol×K | 682.37 | Joback Method |
| cpg | 595.55 | J/mol×K | 718.52 | Joback Method |
| cpg | 611.26 | J/mol×K | 754.66 | Joback Method |
| cpg | 626.04 | J/mol×K | 790.81 | Joback Method |
| cpg | 640.01 | J/mol×K | 826.95 | Joback Method |
| cpg | 653.27 | J/mol×K | 863.09 | Joback Method |

| | | | | |
|---|---|---|---|---|
| dvisc | 0.0019247 | Pa×s | 384.37 | Joback Method |
| dvisc | 0.0005760 | Pa×s | 428.01 | Joback Method |
| dvisc | 0.0002155 | Pa×s | 471.66 | Joback Method |
| dvisc | 0.0000953 | Pa×s | 515.30 | Joback Method |
| dvisc | 0.0000478 | Pa×s | 558.94 | Joback Method |
| dvisc | 0.0000265 | Pa×s | 602.59 | Joback Method |
| dvisc | 0.0000159 | Pa×s | 646.23 | Joback Method |

# Sources

| | |
|---|---|
| **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=R592317&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 |
| **rinpol:** | Non-polar retention indices |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |