

Phenol, 4-(1,1,3,3-tetramethylpentyl)

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

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------|----------------------|----------------|
| gf | 38.89 | kJ/mol | Joback Method |
| hf | -311.21 | kJ/mol | Joback Method |
| hfus | 19.60 | kJ/mol | Joback Method |
| hvap | 61.68 | kJ/mol | Joback Method |
| log10ws | -4.18 | | Crippen Method |
| logp | 4.496 | | Crippen Method |
| mvol | 204.320 | ml/mol | McGowan Method |
| pc | 2183.60 | kPa | Joback Method |
| rinpol | 1716.00 | | NIST Webbook |
| rinpol | 1716.00 | | NIST Webbook |
| tb | 643.44 | K | Joback Method |
| tc | 868.39 | K | Joback Method |
| tf | 401.79 | K | Joback Method |
| vc | 0.712 | m ³ /kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|-----------|---------|-----------------|---------------|
| cpg | 563.32 | J/molxK | 643.44 | Joback Method |
| cpg | 643.47 | J/molxK | 830.89 | Joback Method |
| cpg | 629.45 | J/molxK | 793.40 | Joback Method |
| cpg | 614.58 | J/molxK | 755.91 | Joback Method |
| cpg | 598.70 | J/molxK | 718.42 | Joback Method |
| cpg | 581.66 | J/molxK | 680.93 | Joback Method |
| cpg | 656.77 | J/molxK | 868.39 | Joback Method |
| dvisc | 0.0000151 | Paxs | 643.44 | Joback Method |

| | | | | |
|-------|-----------|------|--------|---------------|
| dvisc | 0.0000247 | Paxs | 603.17 | Joback Method |
| dvisc | 0.0000434 | Paxs | 562.89 | Joback Method |
| dvisc | 0.0000832 | Paxs | 522.62 | Joback Method |
| dvisc | 0.0001777 | Paxs | 482.34 | Joback Method |
| dvisc | 0.0004357 | Paxs | 442.07 | Joback Method |
| dvisc | 0.0012794 | Paxs | 401.79 | Joback Method |

Sources

| | |
|------------------------|---|
| Crippen Method: | http://pubs.acs.org/doi/abs/10.1021/ci9903071 |
| 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=R592055&Units=SI |

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 |

Latest version available from:

<https://www.chemeo.com/cid/70-157-0/Phenol-4-1-1-3-3-tetramethylpentyl.pdf>

Generated by Cheméo on 2024-04-25 09:24:06.179054687 +0000 UTC m=+16326295.099632016.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.