# 2,4-diphenyl-1-pentene

**Inchi:** InChI=1S/C17H18/c1-14(16-9-5-3-6-10-16)13-15(2)17-11-7-4-8-12-17/h3-12,15H,1,13H2
**InchiKey:** DZQKKQAJKNIGGW-UHFFFAOYSA-N
**Formula:** C17H18
**SMILES:** C=C(CC(C)c1ccccc1)c1ccccc1
**Mol. weight [g/mol]:** 222.32

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 393.93 | kJ/mol | Joback Method |
| hf | 189.21 | kJ/mol | Joback Method |
| hfus | 21.76 | kJ/mol | Joback Method |
| hvap | 57.01 | kJ/mol | Joback Method |
| log10ws | -5.13 | | Crippen Method |
| logp | 4.894 | | Crippen Method |
| mcvol | 198.570 | ml/mol | McGowan Method |
| pc | 2197.95 | kPa | Joback Method |
| rinpol | 1805.60 | | NIST Webbook |
| rinpol | 1805.60 | | NIST Webbook |
| tb | 637.84 | K | Joback Method |
| tc | 877.23 | K | Joback Method |
| tf | 303.47 | K | Joback Method |
| vc | 0.748 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 502.27 | J/mol×K | 637.84 | Joback Method |
| cpg | 521.45 | J/mol×K | 677.74 | Joback Method |
| cpg | 539.16 | J/mol×K | 717.64 | Joback Method |
| cpg | 555.50 | J/mol×K | 757.54 | Joback Method |
| cpg | 570.57 | J/mol×K | 797.43 | Joback Method |
| cpg | 584.46 | J/mol×K | 837.33 | Joback Method |
| cpg | 597.29 | J/mol×K | 877.23 | Joback Method |

# Sources

| | |
|---|---|
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=R316084&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 |
| **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 |