# 1,4-Hexadiene, 2,5-dimethyl-

**Inchi:** InChI=1S/C8H14/c1-7(2)5-6-8(3)4/h6H,1,5H2,2-4H3
**InchiKey:** JRFKHZNULLDOGQ-UHFFFAOYSA-N
**Formula:** C8H14
**SMILES:** C=C(C)CC=C(C)C
**Mol. weight [g/mol]:** 110.20
**CAS:** 927-97-9

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 167.44 | kJ/mol | Joback Method |
| hf | 14.62 | kJ/mol | Joback Method |
| hfus | 12.78 | kJ/mol | Joback Method |
| hvap | 32.85 | kJ/mol | Joback Method |
| log10ws | -2.88 | | Crippen Method |
| logp | 2.919 | | Crippen Method |
| mcvol | 114.980 | ml/mol | McGowan Method |
| pc | 2823.32 | kPa | Joback Method |
| tb | 389.70 ± 2.00 | K | NIST Webbook |
| tc | 565.66 | K | Joback Method |
| tf | 145.16 | K | Joback Method |
| vc | 0.447 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 203.45 | J/mol×K | 383.04 | Joback Method |
| cpg | 216.23 | J/mol×K | 413.48 | Joback Method |
| cpg | 228.39 | J/mol×K | 443.91 | Joback Method |
| cpg | 239.96 | J/mol×K | 474.35 | Joback Method |
| cpg | 250.96 | J/mol×K | 504.79 | Joback Method |
| cpg | 261.42 | J/mol×K | 535.22 | Joback Method |
| cpg | 271.37 | J/mol×K | 565.66 | Joback Method |

# Sources

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|---|---|
| **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=C927979&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |

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