# 2,2-Dimethyldocosane

**Inchi:** InChI=1S/C24H50/c1-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24(2,3)4/h5
**InchiKey:** QYIHXUIVNJZLLN-UHFFFAOYSA-N
**Formula:** C24H50
**SMILES:** CCCCCCCCCCCCCCCCCCCCCC(C)(C)C
**Mol. weight [g/mol]:** 338.65

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 154.04 | kJ/mol | Joback Method |
| hf | -547.44 | kJ/mol | Joback Method |
| hfus | 50.50 | kJ/mol | Joback Method |
| hvap | 67.72 | kJ/mol | Joback Method |
| log10ws | -9.63 | | Crippen Method |
| logp | 9.464 | | Crippen Method |
| mcvol | 349.020 | ml/mol | McGowan Method |
| pc | 814.93 | kPa | Joback Method |
| rinpol | 2317.00 | | NIST Webbook |
| tb | 745.29 | K | Joback Method |
| tc | 916.52 | K | Joback Method |
| tf | 362.66 | K | Joback Method |
| vc | 1.369 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 1088.46 | J/mol×K | 745.29 | Joback Method |
| cpg | 1111.31 | J/mol×K | 773.83 | Joback Method |
| cpg | 1133.11 | J/mol×K | 802.37 | Joback Method |
| cpg | 1153.90 | J/mol×K | 830.91 | Joback Method |
| cpg | 1173.73 | J/mol×K | 859.45 | Joback Method |
| cpg | 1192.65 | J/mol×K | 887.99 | Joback Method |
| cpg | 1210.70 | J/mol×K | 916.52 | Joback Method |
| dvisc | 0.0025379 | Pa×s | 362.66 | Joback Method |
| dvisc | 0.0007963 | Pa×s | 426.43 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0003378 | Pa×s | 490.20 | Joback Method |
| dvisc | 0.0001746 | Pa×s | 553.97 | Joback Method |
| dvisc | 0.0001034 | Pa×s | 617.75 | Joback Method |
| dvisc | 0.0000676 | Pa×s | 681.52 | Joback Method |
| dvisc | 0.0000475 | Pa×s | 745.29 | Joback Method |

# Sources

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|---|---|
| **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 |
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=R415022&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 |