# 2-Methyl-1-tetradecene

**Inchi:** InChI=1S/C15H30/c1-4-5-6-7-8-9-10-11-12-13-14-15(2)3/h2,4-14H2,1,3H3
**InchiKey:** WSNMNSLVXDWAFZ-UHFFFAOYSA-N
**Formula:** C15H30
**SMILES:** C=C(C)CCCCCCCCCCCC
**Mol. weight [g/mol]:** 210.40
**CAS:** 52254-38-3

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 154.71 | kJ/mol | Joback Method |
| hf | -237.29 | kJ/mol | Joback Method |
| hfus | 32.02 | kJ/mol | Joback Method |
| hvap | 48.39 | kJ/mol | Joback Method |
| log10ws | -5.95 | | Crippen Method |
| logp | 5.873 | | Crippen Method |
| mcvol | 217.910 | ml/mol | McGowan Method |
| pc | 1466.85 | kPa | Joback Method |
| rinpol | 1489.00 | | NIST Webbook |
| rinpol | 1445.00 | | NIST Webbook |
| rinpol | 1445.00 | | NIST Webbook |
| tb | 539.16 | K | Joback Method |
| tc | 703.04 | K | Joback Method |
| tf | 243.09 | K | Joback Method |
| vc | 0.858 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 537.72 | J/mol×K | 539.16 | Joback Method |
| cpg | 556.19 | J/mol×K | 566.47 | Joback Method |
| cpg | 573.91 | J/mol×K | 593.79 | Joback Method |
| cpg | 590.90 | J/mol×K | 621.10 | Joback Method |
| cpg | 607.19 | J/mol×K | 648.41 | Joback Method |
| cpg | 622.81 | J/mol×K | 675.73 | Joback Method |

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|---|---|---|---|---|
| cpg | 637.77 | J/mol×K | 703.04 | Joback Method |

# Correlations

| Information | Value |
|---|---|
| Property code | pvap |
| Equation | ln(Pvp) = A + B/(T + C) |
| Coeff. A | 1.52498e+01 |
| Coeff. B | -4.76522e+03 |
| Coeff. C | -8.48800e+01 |
| Temperature range (K), min. | 403.36 |
| Temperature range (K), max. | 564.36 |

# Sources

| | |
|---|---|
| **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=C52254383&Units=SI |
| **The Yaws Handbook of Vapor Pressure:** | https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |

# Legend

| | |
|---|---|
| **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 |
| **pvap:** | Vapor pressure |
| **rinpol:** | Non-polar retention indices |

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