# Pentadecane, 6-methyl-

**Other names:** 6-Methylpentadecane
**Inchi:** InChI=1S/C16H34/c1-4-6-8-9-10-11-13-15-16(3)14-12-7-5-2/h16H,4-15H2,1-3H3
**InchiKey:** UMXMOZNTPRNNMS-UHFFFAOYSA-N
**Formula:** C16H34
**SMILES:** CCCCCCCCCC(C)CCCCC
**Mol. weight [g/mol]:** 226.44
**CAS:** 10105-38-1

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 81.40 | kJ/mol | Joback Method |
| hf | -378.85 | kJ/mol | Joback Method |
| hfus | 33.67 | kJ/mol | Joback Method |
| hvap | 50.82 | kJ/mol | Joback Method |
| log10ws | -6.28 | | Crippen Method |
| logp | 6.344 | | Crippen Method |
| mcvol | 236.300 | ml/mol | McGowan Method |
| pc | 1326.17 | kPa | Joback Method |
| rinpol | 1550.20 | | NIST Webbook |
| rinpol | 1544.00 | | NIST Webbook |
| rinpol | 1550.23 | | NIST Webbook |
| rinpol | 1542.00 | | NIST Webbook |
| rinpol | 1550.11 | | NIST Webbook |
| rinpol | 1549.33 | | NIST Webbook |
| rinpol | 1549.21 | | NIST Webbook |
| rinpol | 1549.11 | | NIST Webbook |
| rinpol | 1550.70 | | NIST Webbook |
| rinpol | 1542.00 | | NIST Webbook |
| rinpol | 1542.00 | | NIST Webbook |
| tb | 565.04 | K | Joback Method |
| tc | 726.28 | K | Joback Method |
| tf | 241.10 ± 2.00 | K | NIST Webbook |
| vc | 0.925 | m3/kmol | Joback Method |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 611.96 | J/mol×K | 565.04 | Joback Method |
| cpg | 631.47 | J/mol×K | 591.91 | Joback Method |
| cpg | 650.21 | J/mol×K | 618.79 | Joback Method |
| cpg | 668.20 | J/mol×K | 645.66 | Joback Method |
| cpg | 685.47 | J/mol×K | 672.53 | Joback Method |
| cpg | 702.03 | J/mol×K | 699.40 | Joback Method |
| cpg | 717.90 | J/mol×K | 726.28 | Joback Method |
| dvisc | 0.0077044 | Pa×s | 255.08 | Joback Method |
| dvisc | 0.0022640 | Pa×s | 306.74 | Joback Method |
| dvisc | 0.0009470 | Pa×s | 358.40 | Joback Method |
| dvisc | 0.0004934 | Pa×s | 410.06 | Joback Method |
| dvisc | 0.0002974 | Pa×s | 461.72 | Joback Method |
| dvisc | 0.0001985 | Pa×s | 513.38 | Joback Method |
| dvisc | 0.0001427 | Pa×s | 565.04 | Joback Method |

# 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=C10105381&Units=SI
**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
**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 |