# 13-Methylpentatriacontane

**Inchi:** InChI=1S/C36H74/c1-4-6-8-10-12-14-16-17-18-19-20-21-22-23-24-25-27-29-31-33-35-36
**InchiKey:** IXXACAXSWIYIOR-UHFFFAOYSA-N
**Formula:** C36H74
**SMILES:** CCCCCCCCCCCCCCCCCCCCCCCC(C)CCCCCCCCCCCC
**Mol. weight [g/mol]:** 506.97

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 249.80 | kJ/mol | Joback Method |
| hf | -791.65 | kJ/mol | Joback Method |
| hfus | 85.47 | kJ/mol | Joback Method |
| hvap | 95.34 | kJ/mol | Joback Method |
| log10ws | -14.65 | | Crippen Method |
| logp | 14.146 | | Crippen Method |
| mcvol | 518.100 | ml/mol | McGowan Method |
| pc | 459.31 | kPa | Joback Method |
| rinpol | 3533.00 | | NIST Webbook |
| rinpol | 3535.00 | | NIST Webbook |
| rinpol | 3526.00 | | NIST Webbook |
| rinpol | 3527.00 | | NIST Webbook |
| rinpol | 3530.00 | | NIST Webbook |
| rinpol | 3526.00 | | NIST Webbook |
| rinpol | 3524.00 | | NIST Webbook |
| rinpol | 3535.00 | | NIST Webbook |
| rinpol | 3529.00 | | NIST Webbook |
| rinpol | 3530.00 | | NIST Webbook |
| rinpol | 3535.00 | | NIST Webbook |
| rinpol | 3526.00 | | NIST Webbook |
| rinpol | 3523.00 | | NIST Webbook |
| rinpol | 3530.00 | | NIST Webbook |
| rinpol | 3533.00 | | NIST Webbook |
| tb | 1022.64 | K | Joback Method |
| tc | 1304.31 | K | Joback Method |
| tf | 480.48 | K | Joback Method |
| vc | 2.046 | m3/kmol | Joback Method |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 1895.00 | J/mol×K | 1022.64 | Joback Method |
| cpg | 2045.68 | J/mol×K | 1257.37 | Joback Method |
| cpg | 2019.81 | J/mol×K | 1210.42 | Joback Method |
| cpg | 1992.06 | J/mol×K | 1163.48 | Joback Method |
| cpg | 1962.18 | J/mol×K | 1116.53 | Joback Method |
| cpg | 1929.92 | J/mol×K | 1069.59 | Joback Method |
| cpg | 2069.95 | J/mol×K | 1304.31 | Joback Method |
| dvisc | 0.0000087 | Pa×s | 1022.64 | Joback Method |
| dvisc | 0.0000123 | Pa×s | 932.28 | Joback Method |
| dvisc | 0.0000190 | Pa×s | 841.92 | Joback Method |
| dvisc | 0.0000324 | Pa×s | 751.56 | Joback Method |
| dvisc | 0.0000639 | Pa×s | 661.20 | Joback Method |
| dvisc | 0.0001564 | Pa×s | 570.84 | Joback Method |
| dvisc | 0.0005358 | Pa×s | 480.48 | Joback Method |

# Sources

**NIST Webbook:** http://webbook.nist.gov/cgi/cbook.cgi?ID=R261568&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
**McGowan Method:** http://link.springer.com/article/10.1007/BF02311772

# 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 |