# 12,16-Dimethyldotriacontane

**Inchi:** InChI=1S/C34H70/c1-5-7-9-11-13-15-16-17-18-19-21-23-25-27-30-34(4)32-28-31-33(3)2
**InchiKey:** HMWCVFBKAZPMIF-UHFFFAOYSA-N
**Formula:** C34H70
**SMILES:** CCCCCCCCCCCCCCCCC(C)CCCC(C)CCCCCCCCCC
**Mol. weight [g/mol]:** 478.92

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 230.52 | kJ/mol | Joback Method |
| hf | -755.65 | kJ/mol | Joback Method |
| hfus | 76.77 | kJ/mol | Joback Method |
| hvap | 90.50 | kJ/mol | Joback Method |
| log10ws | -13.57 | | Crippen Method |
| logp | 13.221 | | Crippen Method |
| mcvol | 489.920 | ml/mol | McGowan Method |
| pc | 501.37 | kPa | Joback Method |
| rinpol | 3257.00 | | NIST Webbook |
| rinpol | 3261.00 | | NIST Webbook |
| rinpol | 3261.00 | | NIST Webbook |
| rinpol | 3254.00 | | NIST Webbook |
| rinpol | 3246.00 | | NIST Webbook |
| tb | 976.44 | K | Joback Method |
| tc | 1223.09 | K | Joback Method |
| tf | 442.94 | K | Joback Method |
| vc | 1.927 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 1756.26 | J/mol×K | 976.44 | Joback Method |
| cpg | 1787.61 | J/mol×K | 1017.55 | Joback Method |
| cpg | 1816.81 | J/mol×K | 1058.66 | Joback Method |
| cpg | 1844.04 | J/mol×K | 1099.77 | Joback Method |
| cpg | 1869.45 | J/mol×K | 1140.87 | Joback Method |

| | | | | |
|---|---|---|---|---|
| cpg | 1893.20 | J/mol×K | 1181.98 | Joback Method |
| cpg | 1915.47 | J/mol×K | 1223.09 | Joback Method |
| dvisc | 0.0009072 | Pa×s | 442.94 | Joback Method |
| dvisc | 0.0002342 | Pa×s | 531.86 | Joback Method |
| dvisc | 0.0000891 | Pa×s | 620.77 | Joback Method |
| dvisc | 0.0000432 | Pa×s | 709.69 | Joback Method |
| dvisc | 0.0000246 | Pa×s | 798.61 | Joback Method |
| dvisc | 0.0000157 | Pa×s | 887.52 | Joback Method |
| dvisc | 0.0000109 | Pa×s | 976.44 | Joback Method |

# Sources

**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=R337318&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