# 9-Methylheptacosane

**Other names:** Heptacosane, 9-methyl
**Inchi:** InChI=1S/C28H58/c1-4-6-8-10-12-13-14-15-16-17-18-19-20-21-23-25-27-28(3)26-24-22-
**InchiKey:** RLCPPUWUVWSWRU-UHFFFAOYSA-N
**Formula:** C28H58
**SMILES:** CCCCCCCCCCCCCCCCCCC(C)CCCCCCCC
**Mol. weight [g/mol]:** 394.76

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 182.44 | kJ/mol | Joback Method |
| hf | -626.53 | kJ/mol | Joback Method |
| hfus | 64.75 | kJ/mol | Joback Method |
| hvap | 77.53 | kJ/mol | Joback Method |
| log10ws | -11.30 | | Crippen Method |
| logp | 11.025 | | Crippen Method |
| mcvol | 405.380 | ml/mol | McGowan Method |
| pc | 658.14 | kPa | Joback Method |
| rinpol | 2734.00 | | NIST Webbook |
| rinpol | 2732.00 | | NIST Webbook |
| rinpol | 2739.10 | | NIST Webbook |
| rinpol | 2739.10 | | NIST Webbook |
| rinpol | 2743.00 | | NIST Webbook |
| rinpol | 2735.00 | | NIST Webbook |
| rinpol | 2731.00 | | NIST Webbook |
| rinpol | 2732.00 | | NIST Webbook |
| tb | 839.60 | K | Joback Method |
| tc | 1029.02 | K | Joback Method |
| tf | 390.32 | K | Joback Method |
| vc | 1.597 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 1348.34 | J/mol×K | 839.60 | Joback Method |

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|---|---|---|---|---|
| cpg | 1373.75 | J/mol×K | 871.17 | Joback Method |
| cpg | 1397.85 | J/mol×K | 902.74 | Joback Method |
| cpg | 1420.68 | J/mol×K | 934.31 | Joback Method |
| cpg | 1442.31 | J/mol×K | 965.88 | Joback Method |
| cpg | 1462.81 | J/mol×K | 997.45 | Joback Method |
| cpg | 1482.23 | J/mol×K | 1029.02 | Joback Method |
| dvisc | 0.0017949 | Pa×s | 390.32 | Joback Method |
| dvisc | 0.0005242 | Pa×s | 465.20 | Joback Method |
| dvisc | 0.0002154 | Pa×s | 540.08 | Joback Method |
| dvisc | 0.0001099 | Pa×s | 614.96 | Joback Method |
| dvisc | 0.0000649 | Pa×s | 689.84 | Joback Method |
| dvisc | 0.0000425 | Pa×s | 764.72 | Joback Method |
| dvisc | 0.0000300 | Pa×s | 839.60 | 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=R272865&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