# 5-ethyl-5-methylnonane

**Inchi:** InChI=1S/C12H26/c1-5-8-10-12(4,7-3)11-9-6-2/h5-11H2,1-4H3
**InchiKey:** DZSBQMNPPIKBNF-UHFFFAOYSA-N
**Formula:** C12H26
**SMILES:** CCCCC(C)(CC)CCCC
**Mol. weight [g/mol]:** 170.33
**CAS:** 14531-16-9

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| af | 0.4710 | | Cheméo Relay (1.0) |
| gf | 53.00 | kJ/mol | Joback Method |
| hf | -290.04 | kJ/mol | Cheméo Relay (1.0) |
| hfus | 19.42 | kJ/mol | Joback Method |
| hvap | 54.57 | kJ/mol | Cheméo Relay (1.0) |
| log10ws | -6.04 | | Cheméo Relay (1.0) |
| logp | 4.783 | | Crippen Method |
| mcvol | 179.940 | ml/mol | McGowan Method |
| pc | 1809.23 | kPa | Joback Method |
| tb | 469.26 | K | Cheméo Relay (1.0) |
| tc | 635.91 | K | Cheméo Relay (1.0) |
| tf | 184.37 | K | Cheméo Relay (1.0) |
| vc | 0.647 | m3/kmol | Cheméo Relay (1.0) |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 408.96 | J/mol×K | 470.73 | Joback Method |
| cpg | 427.03 | J/mol×K | 499.11 | Joback Method |
| cpg | 444.30 | J/mol×K | 527.48 | Joback Method |
| cpg | 460.79 | J/mol×K | 555.86 | Joback Method |
| cpg | 476.54 | J/mol×K | 584.24 | Joback Method |
| cpg | 491.58 | J/mol×K | 612.61 | Joback Method |
| cpg | 505.93 | J/mol×K | 640.99 | Joback Method |
| dvisc | 0.0097058 | Pa×s | 227.42 | Joback Method |

| | | | | |
|---|---|---|---|---|
| dvisc | 0.0031716 | Pa×s | 267.97 | Joback Method |
| dvisc | 0.0013906 | Pa×s | 308.52 | Joback Method |
| dvisc | 0.0007385 | Pa×s | 349.08 | Joback Method |
| dvisc | 0.0004474 | Pa×s | 389.63 | Joback Method |
| dvisc | 0.0002979 | Pa×s | 430.18 | Joback Method |
| dvisc | 0.0002128 | Pa×s | 470.73 | Joback Method |

# Sources

**NIST Webbook:** http://webbook.nist.gov/cgi/cbook.cgi?ID=C14531169&Units=SI
**Joback Method:** https://en.wikipedia.org/wiki/Joback_method
**McGowan Method:** http://link.springer.com/article/10.1007/BF02311772
**Crippen Method:** http://pubs.acs.org/doi/abs/10.1021/ci990307l
**Crippen Method:** https://www.chemeo.com/doc/models/crippen_log10ws
**Cheméo Relay (1.0):**
**Cheméo Relay (1.0, beta):**

# Legend

**af:** Acentric Factor
**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
**tb:** Normal Boiling Point Temperature
**tc:** Critical Temperature
**tf:** Normal melting (fusion) point
**vc:** Critical Volume

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