# 1-cis-2-dimethyl-cis-4-ethylcyclopentane

**Inchi:** InChI=1S/C9H18/c1-4-9-5-7(2)8(3)6-9/h7-9H,4-6H2,1-3H3/t7-,8+,9+
**InchiKey:** QKXQNQVXTYSGKS-BRPSZJMVSA-N
**Formula:** C9H18
**SMILES:** CCC1CC(C)C(C)C1
**Mol. weight [g/mol]:** 126.24

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 46.03 | kJ/mol | Joback Method |
| hf | -209.29 | kJ/mol | Joback Method |
| hfus | 15.14 | kJ/mol | Joback Method |
| hvap | 35.27 | kJ/mol | Joback Method |
| log10ws | -2.76 | | Crippen Method |
| logp | 3.079 | | Crippen Method |
| mcvol | 126.810 | ml/mol | McGowan Method |
| pc | 2581.96 | kPa | Joback Method |
| rinpol | 875.70 | | NIST Webbook |
| rinpol | 880.50 | | NIST Webbook |
| tb | 411.26 | K | Joback Method |
| tc | 601.43 | K | Joback Method |
| tf | 193.61 | K | Joback Method |
| vc | 0.478 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 255.59 | J/mol×K | 411.26 | Joback Method |
| cpg | 273.61 | J/mol×K | 442.96 | Joback Method |
| cpg | 290.88 | J/mol×K | 474.65 | Joback Method |
| cpg | 307.41 | J/mol×K | 506.35 | Joback Method |
| cpg | 323.20 | J/mol×K | 538.04 | Joback Method |
| cpg | 338.29 | J/mol×K | 569.74 | Joback Method |
| cpg | 352.67 | J/mol×K | 601.43 | Joback Method |
| dvisc | 0.0013588 | Pa×s | 193.61 | Joback Method |

| | | | | |
|---|---|---|---|---|
| dvisc | 0.0008515 | Pa×s | 229.89 | Joback Method |
| dvisc | 0.0006061 | Pa×s | 266.16 | Joback Method |
| dvisc | 0.0004681 | Pa×s | 302.44 | Joback Method |
| dvisc | 0.0003821 | Pa×s | 338.71 | Joback Method |
| dvisc | 0.0003244 | Pa×s | 374.99 | Joback Method |
| dvisc | 0.0002834 | Pa×s | 411.26 | Joback Method |

# Sources

| | |
|---|---|
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=R164442&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 |

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