# 4-Isopropyldicyclohexylmethane

**Other names:** Cyclohexane, 1-(cyclohexylmethyl)-4-(1-methylethyl)-
Methane, cyclohexyl(4-isopropylcyclohexyl)-
**Inchi:** InChI=1S/C16H30/c1-13(2)16-10-8-15(9-11-16)12-14-6-4-3-5-7-14/h13-16H,3-12H2,1-2H
**InchiKey:** LHWJKUKEUOFSME-UHFFFAOYSA-N
**Formula:** C16H30
**SMILES:** CC(C)C1CCC(CC2CCCCC2)CC1
**Mol. weight [g/mol]:** 222.41
**CAS:** 54965-61-6

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| chs | -10180.00 | kJ/mol | NIST Webbook |
| chs | -10200.00 | kJ/mol | NIST Webbook |
| gf | 122.59 | kJ/mol | Joback Method |
| hf | -290.55 | kJ/mol | Joback Method |
| hfus | 18.41 | kJ/mol | Joback Method |
| hvap | 51.37 | kJ/mol | Joback Method |
| log10ws | -5.34 | | Crippen Method |
| logp | 5.419 | | Crippen Method |
| mcvol | 214.580 | ml/mol | McGowan Method |
| pc | 1781.84 | kPa | Joback Method |
| tb | 599.47 | K | Joback Method |
| tc | 819.72 | K | Joback Method |
| tf | 265.60 | K | Joback Method |
| vc | 0.790 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 601.79 | J/mol×K | 599.47 | Joback Method |
| cpg | 629.69 | J/mol×K | 636.18 | Joback Method |
| cpg | 655.89 | J/mol×K | 672.89 | Joback Method |
| cpg | 680.43 | J/mol×K | 709.60 | Joback Method |
| cpg | 703.37 | J/mol×K | 746.30 | Joback Method |

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|---|---|---|---|---|
| cpg | 724.75 | J/mol×K | 783.01 | Joback Method |
| cpg | 744.63 | J/mol×K | 819.72 | Joback Method |
| dvisc | 0.0091891 | Pa×s | 265.60 | Joback Method |
| dvisc | 0.0027396 | Pa×s | 321.25 | Joback Method |
| dvisc | 0.0011676 | Pa×s | 376.89 | Joback Method |
| dvisc | 0.0006197 | Pa×s | 432.53 | Joback Method |
| dvisc | 0.0003800 | Pa×s | 488.18 | Joback Method |
| dvisc | 0.0002576 | Pa×s | 543.83 | Joback Method |
| dvisc | 0.0001876 | Pa×s | 599.47 | Joback Method |

# Sources

**McGowan Method:** http://link.springer.com/article/10.1007/BF02311772
**NIST Webbook:** http://webbook.nist.gov/cgi/cbook.cgi?ID=C54965616&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

# Legend

**chs:** Standard solid enthalpy of combustion
**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