

# 2,2-Dicyclohexylbutane

<b>Other names:</b>	Cyclohexane, 1,1'-(1-methylpropylidene)bis-
<b>Inchi:</b>	InChI=1S/C16H30/c1-3-16(2,14-10-6-4-7-11-14)15-12-8-5-9-13-15/h14-15H,3-13H2,1-2H
<b>InchiKey:</b>	AXABZNLJYTXFRF-UHFFFAOYSA-N
<b>Formula:</b>	C16H30
<b>SMILES:</b>	CCC(C)(C1CCCCC1)C1CCCCC1
<b>Mol. weight [g/mol]:</b>	222.41
<b>CAS:</b>	54890-02-7

## Physical Properties

Property code	Value	Unit	Source
chl	-10240.00	kJ/mol	NIST Webbook
gf	135.58	kJ/mol	Joback Method
hf	-273.68	kJ/mol	Joback Method
hfus	13.45	kJ/mol	Joback Method
hvap	50.77	kJ/mol	Joback Method
log10ws	-5.58		Crippen Method
logp	5.563		Crippen Method
mcvol	214.580	ml/mol	McGowan Method
pc	1849.92	kPa	Joback Method
tb	575.30 ± 0.60	K	NIST Webbook
tc	830.36	K	Joback Method
tf	288.53 ± 0.10	K	NIST Webbook
vc	0.786	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	603.44	J/mol×K	601.35	Joback Method
cpg	631.74	J/mol×K	639.52	Joback Method
cpg	658.11	J/mol×K	677.69	Joback Method
cpg	682.64	J/mol×K	715.85	Joback Method
cpg	705.42	J/mol×K	754.02	Joback Method
cpg	726.54	J/mol×K	792.19	Joback Method
cpg	746.10	J/mol×K	830.36	Joback Method

dvisc	0.0102795	Paxs	287.26	Joback Method
dvisc	0.0029824	Paxs	339.61	Joback Method
dvisc	0.0012042	Paxs	391.96	Joback Method
dvisc	0.0006021	Paxs	444.31	Joback Method
dvisc	0.0003484	Paxs	496.65	Joback Method
dvisc	0.0002238	Paxs	549.00	Joback Method
dvisc	0.0001552	Paxs	601.35	Joback Method

## Sources

<b>Crippen Method:</b>	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>
<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>
<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C54890027&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C54890027&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>

## Legend

<b>chl:</b>	Standard liquid enthalpy of combustion
<b>cpg:</b>	Ideal gas heat capacity
<b>dvisc:</b>	Dynamic viscosity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>hvap:</b>	Enthalpy of vaporization at standard conditions
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mcvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

Latest version available from:

<https://www.chemeo.com/cid/74-069-4/2-2-Dicyclohexylbutane.pdf>

Generated by Cheméo on 2024-10-10 08:58:12.896080144 +0000 UTC m=+3131555.533049392.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.