

Cyclohexane, 1,1'-(1,2-dimethyl-1,2-ethanediyl)bis-

Other names:	Butane, 2,3-dicyclohexyl-
Inchi:	InChI=1S/C16H30/c1-13(15-9-5-3-6-10-15)14(2)16-11-7-4-8-12-16/h13-16H,3-12H2,1-2H
InchiKey:	CKYRHDXTXMYCMX-UHFFFAOYSA-N
Formula:	C16H30
SMILES:	CC(C1CCCCC1)C(C)C1CCCCC1
Mol. weight [g/mol]:	222.41
CAS:	74663-71-1

Physical Properties

Property code	Value	Unit	Source
gf	127.86	kJ/mol	Joback Method
hf	-275.49	kJ/mol	Joback Method
hfus	13.82	kJ/mol	Joback Method
hvap	51.29	kJ/mol	Joback Method
log10ws	-5.34		Crippen Method
logp	5.419		Crippen Method
mcvol	214.580	ml/mol	McGowan Method
pc	1845.16	kPa	Joback Method
tb	574.00 ± 0.30	K	NIST Webbook
tc	828.65	K	Joback Method
tf	254.84	K	Joback Method
vc	0.785	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	601.77	J/mol×K	603.70	Joback Method
cpg	629.73	J/mol×K	641.19	Joback Method
cpg	655.91	J/mol×K	678.68	Joback Method
cpg	680.36	J/mol×K	716.17	Joback Method
cpg	703.15	J/mol×K	753.66	Joback Method
cpg	724.34	J/mol×K	791.16	Joback Method
cpg	743.99	J/mol×K	828.65	Joback Method
dvisc	0.0194990	Paxs	254.84	Joback Method

dvisc	0.0040939	Paxs	312.98	Joback Method
dvisc	0.0014017	Paxs	371.13	Joback Method
dvisc	0.0006416	Paxs	429.27	Joback Method
dvisc	0.0003539	Paxs	487.41	Joback Method
dvisc	0.0002216	Paxs	545.56	Joback Method
dvisc	0.0001518	Paxs	603.70	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C74663711&Units=SI

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

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