

1,1'-Bicyclohexyl, 2-ethyl-, trans-

Other names:	Bicyclohexyl, 2-ethyl-, trans-
Inchi:	InChI=1S/C14H26/c1-2-12-8-6-7-11-14(12)13-9-4-3-5-10-13/h12-14H,2-11H2,1H3/t12-,1
InchiKey:	UGQREFNYSITUMG-JSGCOSHPSA-N
Formula:	C14H26
SMILES:	CCC1CCCCC1C1CCCCC1
Mol. weight [g/mol]:	194.36
CAS:	50991-13-4

Physical Properties

Property code	Value	Unit	Source
chl	-8431.00	kJ/mol	NIST Webbook
gf	108.19	kJ/mol	Joback Method
hf	-243.99	kJ/mol	Joback Method
hfus	16.76	kJ/mol	Joback Method
hvap	47.31	kJ/mol	Joback Method
log10ws	-4.75		Crippen Method
logp	4.783		Crippen Method
mcvol	186.400	ml/mol	McGowan Method
pc	2094.58	kPa	Joback Method
tb	554.15	K	Joback Method
tc	777.71	K	Joback Method
tf	258.06	K	Joback Method
vc	0.684	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	490.28	J/molxK	554.15	Joback Method
cpg	610.19	J/molxK	740.45	Joback Method
cpg	589.27	J/molxK	703.19	Joback Method
cpg	566.87	J/molxK	665.93	Joback Method
cpg	542.93	J/molxK	628.67	Joback Method
cpg	517.42	J/molxK	591.41	Joback Method
cpg	629.67	J/molxK	777.71	Joback Method

dvisc	0.0002391	Paxs	554.15	Joback Method
dvisc	0.0003187	Paxs	504.80	Joback Method
dvisc	0.0004522	Paxs	455.45	Joback Method
dvisc	0.0006984	Paxs	406.10	Joback Method
dvisc	0.0012166	Paxs	356.76	Joback Method
dvisc	0.0025328	Paxs	307.41	Joback Method
dvisc	0.0069798	Paxs	258.06	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C50991134&Units=SI
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

Legend

chl:	Standard liquid 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

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