Cyclohexane, 1,1'-[4-(3-cyclohexylpropyl)-1,7-heptanediyl]bis-

Other names: 1,7-Dicyclohexyl-4-(3-cyclohexylpropyl)heptane
Inchi: InChI=1S/C28H52/c1-4-13-25(14-5-1)19-10-22-28(23-11-20-26-15-6-2-7-16-26)24-12-21
InchiKey: IJBGDXMHVWEWQQ-UHFFFAOYSA-N
Formula: C28H52
SMILES: C1CCC(CCCC(CCCC2CCCCC2)CCCC2CCCCC2)CC1
Mol. weight [g/mol]: 388.71
CAS: 55334-73-1

Physical Properties

Property code	Value	Unit	Source
gf	255.79	kJ/mol	Joback Method
hf	-463.57	kJ/mol	Joback Method
hfus	40.26	kJ/mol	Joback Method
hvap	78.82	kJ/mol	Joback Method
log10ws	-10.26		Crippen Method
logp	9.854		Crippen Method
mcvol	372.800	ml/mol	McGowan Method
pc	927.81	kPa	Joback Method
tb	898.25	K	Joback Method
tc	1116.06	K	Joback Method
tf	412.46	K	Joback Method
vc	1.397	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1351.47	J/mol×K	898.25	Joback Method
cpg	1377.58	J/mol×K	934.55	Joback Method
cpg	1401.68	J/mol×K	970.85	Joback Method
cpg	1423.87	J/mol×K	1007.16	Joback Method
cpg	1444.24	J/mol×K	1043.46	Joback Method
cpg	1462.91	J/mol×K	1079.76	Joback Method
cpg	1479.97	J/mol×K	1116.06	Joback Method
dvisc	0.0026857	Pa×s	412.46	Joback Method

dvisc	0.0007062	Pa×s	493.42	Joback Method
dvisc	0.0002706	Pa×s	574.39	Joback Method
dvisc	0.0001315	Pa×s	655.36	Joback Method
dvisc	0.0000748	Pa×s	736.32	Joback Method
dvisc	0.0000476	Pa×s	817.29	Joback Method
dvisc	0.0000329	Pa×s	898.25	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C55334731&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

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