DL-3,4-Di(1-cyclohexen-1-yl)-2,2,5,5-tetramethylhe

Inchi: InChI=1S/C22H38/c1-21(2,3)19(17-13-9-7-10-14-17)20(22(4,5)6)18-15-11-8-12-16-18/h1
InchiKey: XIRWMTOAKDZMDH-UHFFFAOYSA-N
Formula: C22H38
SMILES: CC(C)(C)C(C1=CCCCC1)C(C1=CCCCC1)C(C)(C)C
Mol. weight [g/mol]: 302.54
CAS: 69045-73-4

Physical Properties

Property code	Value	Unit	Source
gf	240.14	kJ/mol	Joback Method
hf	-260.00 ± 6.30	kJ/mol	NIST Webbook
hfus	14.06	kJ/mol	Joback Method
hvap	64.58	kJ/mol	Joback Method
log10ws	-7.56		Crippen Method
logp	7.312		Crippen Method
mcvol	290.520	ml/mol	McGowan Method
pc	1314.65	kPa	Joback Method
tb	752.14	K	Joback Method
tc	982.66	K	Joback Method
tf	362.34	K	Joback Method
vc	1.073	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	910.75	J/mol×K	752.14	Joback Method
cpg	1021.13	J/mol×K	944.24	Joback Method
cpg	1002.15	J/mol×K	905.82	Joback Method
cpg	981.76	J/mol×K	867.40	Joback Method
cpg	959.83	J/mol×K	828.98	Joback Method
cpg	936.21	J/mol×K	790.56	Joback Method
cpg	1038.86	J/mol×K	982.66	Joback Method
dvisc	0.0000345	Pa×s	752.14	Joback Method
dvisc	0.0000528	Pa×s	687.17	Joback Method

dvisc	0.0000884	Pa×s	622.21	Joback Method
dvisc	0.0001668	Pa×s	557.24	Joback Method
dvisc	0.0003721	Pa×s	492.27	Joback Method
dvisc	0.0010597	Pa×s	427.31	Joback Method
dvisc	0.0043924	Pa×s	362.34	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C69045734&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