1H-Indene, 5,5'-(1,10-decanediyl)bis[octahydro-

Other names: 1,10-Di(5'-hexahydroindanyl)decane
1,10-Di-5-(hexahydroindanyl)decane
1H-Indene, 5,5'-(1,10-decanediyl)bis*octahydro-
Inchi: InChI=1S/C28H50/c1(3-5-7-11-23-17-19-25-13-9-15-27(25)21-23)2-4-6-8-12-24-18-20-2
InchiKey: SBMVKNOBLWIPAU-UHFFFAOYSA-N
Formula: C28H50
SMILES: C(CCCCCC1CCC2CCCC2C1)CCCCC1CCC2CCCC2C1
Mol. weight [g/mol]: 386.70
CAS: 55334-71-9

Physical Properties

Property code	Value	Unit	Source
gf	339.86	kJ/mol	Joback Method
hf	-407.69	kJ/mol	Joback Method
hfus	50.36	kJ/mol	Joback Method
hvap	77.99	kJ/mol	Joback Method
log10ws	-9.67		Crippen Method
logp	9.320		Crippen Method
mcvol	361.940	ml/mol	McGowan Method
pc	917.16	kPa	Joback Method
tb	883.28	K	Joback Method
tc	1094.87	K	Joback Method
tf	447.48	K	Joback Method
vc	1.381	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1325.73	J/mol×K	883.28	Joback Method
cpg	1352.06	J/mol×K	918.54	Joback Method
cpg	1376.75	J/mol×K	953.81	Joback Method
cpg	1399.93	J/mol×K	989.07	Joback Method
cpg	1421.72	J/mol×K	1024.34	Joback Method
cpg	1442.25	J/mol×K	1059.60	Joback Method

cpg	1461.66	J/mol×K	1094.87	Joback Method
dvisc	0.0037881	Pa×s	447.48	Joback Method
dvisc	0.0022506	Pa×s	520.11	Joback Method
dvisc	0.0015191	Pa×s	592.75	Joback Method
dvisc	0.0011172	Pa×s	665.38	Joback Method
dvisc	0.0008729	Pa×s	738.01	Joback Method
dvisc	0.0007129	Pa×s	810.65	Joback Method
dvisc	0.0006019	Pa×s	883.28	Joback Method

Sources

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=C55334719&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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