1H-Indene, 5,5'-(1,10-decanediyl)bis[2,3-dihydro-

Other names: 1,10-Di-(5-indanyl)decane
1H-Indene, 5,5'-(1,10-decanediyl)bis*2,3-dihydro-
Inchi: InChI=1S/C28H38/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: JBKAJYLVPBVSBI-UHFFFAOYSA-N
Formula: C28H38
SMILES: c1cc2c(cc1CCCCCCCCCCc1ccc3c(c1)CCC3)CCC2
Mol. weight [g/mol]: 374.60
CAS: 55282-70-7

Physical Properties

Property code	Value	Unit	Source
gf	508.10	kJ/mol	Joback Method
hf	-7.79	kJ/mol	Joback Method
hfus	48.93	kJ/mol	Joback Method
hvap	85.57	kJ/mol	Joback Method
log10ws	-9.40		Crippen Method
logp	7.570		Crippen Method
mcvol	336.140	ml/mol	McGowan Method
pc	1127.59	kPa	Joback Method
tb	936.14	K	Joback Method
tc	1159.88	K	Joback Method
tf	552.60	K	Joback Method
vc	1.304	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1126.52	J/mol×K	936.14	Joback Method
cpg	1221.43	J/mol×K	1122.59	Joback Method
cpg	1203.47	J/mol×K	1085.30	Joback Method
cpg	1185.16	J/mol×K	1048.01	Joback Method
cpg	1166.35	J/mol×K	1010.72	Joback Method
cpg	1146.85	J/mol×K	973.43	Joback Method
cpg	1239.21	J/mol×K	1159.88	Joback Method

dvisc	0.0002325	Pa×s	936.14	Joback Method
dvisc	0.0002778	Pa×s	872.22	Joback Method
dvisc	0.0003413	Pa×s	808.29	Joback Method
dvisc	0.0004345	Pa×s	744.37	Joback Method
dvisc	0.0005788	Pa×s	680.45	Joback Method
dvisc	0.0008183	Pa×s	616.52	Joback Method
dvisc	0.0012534	Pa×s	552.60	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C55282707&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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