4,7-Methano-1H-indene, octahydro-5-(2-octyldecyl)-

Other names: 9-(5-exo-hexahydro-4,7-methanoindanylmethyl)heptadecane
Inchi: InChI=1S/C28H52/c1-3-5-7-9-11-13-16-23(17-14-12-10-8-6-4-2)20-24-21-25-22-28(24)27
InchiKey: ZXUJNRWUNKDQTG-UHFFFAOYSA-N
Formula: C28H52
SMILES: CCCCCCCCC(CCCCCCCC)CC1CC2CC1C1CCCC21
Mol. weight [g/mol]: 388.71
CAS: 55334-74-2

Physical Properties

Property code	Value	Unit	Source
gf	337.17	kJ/mol	Joback Method
hf	-454.97	kJ/mol	Joback Method
hfus	59.20	kJ/mol	Joback Method
hvap	76.83	kJ/mol	Joback Method
log10ws	-9.78		Crippen Method
logp	9.566		Crippen Method
mcvol	372.800	ml/mol	McGowan Method
pc	793.94	kPa	Joback Method
tb	854.75	K	Joback Method
tc	1048.87	K	Joback Method
tf	432.14	K	Joback Method
vc	1.458	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1314.51	J/mol×K	854.75	Joback Method
cpg	1429.31	J/mol×K	1016.52	Joback Method
cpg	1408.37	J/mol×K	984.17	Joback Method
cpg	1386.54	J/mol×K	951.81	Joback Method
cpg	1363.69	J/mol×K	919.46	Joback Method
cpg	1339.71	J/mol×K	887.10	Joback Method
cpg	1449.44	J/mol×K	1048.87	Joback Method
dvisc	0.0010504	Pa×s	854.75	Joback Method

dvisc	0.0011859	Pa×s	784.32	Joback Method
dvisc	0.0013714	Pa×s	713.88	Joback Method
dvisc	0.0016372	Pa×s	643.44	Joback Method
dvisc	0.0020415	Pa×s	573.01	Joback Method
dvisc	0.0027080	Pa×s	502.57	Joback Method
dvisc	0.0039387	Pa×s	432.14	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C55334742&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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