1H-Indene, 2-decyloctahydro-

Other names:	Bicyclo[4.3.0]nonane, 8-decyl- 8-decylbicyclo[4.3.0]nonane
Inchi:	InChI=1S/C19H36/c1-2-3-4-5-6-7-8-9-12-17-15-18-13-10-11-14-19(18)16-17/h17-19H,2-
InchiKey:	AFLBFEWFPKHXHU-UHFFFAOYSA-N
Formula:	C19H36
SMILES:	CCCCCCCCCCC1CC2CCCCC2C1
Mol. weight [g/mol]:	264.49
CAS:	55044-34-3

Physical Properties

Property code	Value	Unit	Source
gf	186.59	kJ/mol	Joback Method
hf	-328.71	kJ/mol	Joback Method
hfus	36.01	kJ/mol	Joback Method
hvap	57.92	kJ/mol	Joback Method
log10ws	-6.84		Crippen Method
logp	6.734		Crippen Method
mcvol	256.850	ml/mol	McGowan Method
pc	1331.98	kPa	Joback Method
tb	655.74	K	Joback Method
tc	844.89	K	Joback Method
tf	324.97	K	Joback Method
vc	0.989	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	766.91	J/mol×K	655.74	Joback Method
cpg	791.15	J/mol×K	687.27	Joback Method
cpg	814.11	J/mol×K	718.79	Joback Method
cpg	835.84	J/mol×K	750.32	Joback Method
cpg	856.40	J/mol×K	781.84	Joback Method
cpg	875.84	J/mol×K	813.37	Joback Method
cpg	894.21	J/mol×K	844.89	Joback Method

dvisc	0.0034280	Pa×s	324.97	Joback Method
dvisc	0.0017865	Pa×s	380.10	Joback Method
dvisc	0.0010982	Pa×s	435.23	Joback Method
dvisc	0.0007531	Pa×s	490.36	Joback Method
dvisc	0.0005574	Pa×s	545.48	Joback Method
dvisc	0.0004360	Pa×s	600.61	Joback Method
dvisc	0.0003554	Pa×s	655.74	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=C55044343&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

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