1H-Indene, 5-decyloctahydro-

Other names: Bicyclo[4.3.0]nonane, 3-decyl-
5-n-Decylhexahydroindan
3-decylbicyclo[4.3.0]nonane
Inchi: InChI=1S/C19H36/c1-2-3-4-5-6-7-8-9-11-17-14-15-18-12-10-13-19(18)16-17/h17-19H,2-
InchiKey: KQVBGIINSUKIBB-UHFFFAOYSA-N
Formula: C19H36
SMILES: CCCCCCCCCCC1CCC2CCCC2C1
Mol. weight [g/mol]: 264.49
CAS: 55044-35-4

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

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C55044354&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