1H-Indene, 1-hexadecyl-2,3-dihydro-

Other names: 1-n-Hexadecylindan
1-n-Hexadecyl-(2,3-dihydroindene)
2,3-Dihydro-1-hexadecyl-1H-indene
1-(1-Indanyl)hexadecane
1-Hexadecyl-2,3-dihydro-1H-indene
Inchi: InChI=1S/C25H42/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-18-23-21-22-24-19-16-17-20-25
InchiKey: QMGOXEWNQKNUQO-UHFFFAOYSA-N
Formula: C25H42
SMILES: CCCCCCCCCCCCCCCCC1CCc2ccccc21
Mol. weight [g/mol]: 342.60
CAS: 55334-29-7

Physical Properties

Property code	Value	Unit	Source
gf	323.15	kJ/mol	Joback Method
hf	-261.47	kJ/mol	Joback Method
hfus	52.29	kJ/mol	Joback Method
hvap	74.09	kJ/mol	Joback Method
log10ws	-9.21		Crippen Method
logp	8.588		Crippen Method
mcvol	328.490	ml/mol	McGowan Method
pc	993.88	kPa	Joback Method
tb	809.80	K	Joback Method
tc	1001.64	K	Joback Method
tf	428.39	K	Joback Method
vc	1.284	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1054.75	J/mol×K	809.80	Joback Method
cpg	1076.18	J/mol×K	841.77	Joback Method
cpg	1096.49	J/mol×K	873.75	Joback Method
cpg	1115.77	J/mol×K	905.72	Joback Method

cpg	1134.08	J/mol×K	937.70	Joback Method
cpg	1151.50	J/mol×K	969.67	Joback Method
cpg	1168.11	J/mol×K	1001.64	Joback Method
dvisc	0.0016213	Pa×s	428.39	Joback Method
dvisc	0.0008526	Pa×s	491.96	Joback Method
dvisc	0.0005194	Pa×s	555.53	Joback Method
dvisc	0.0003503	Pa×s	619.10	Joback Method
dvisc	0.0002543	Pa×s	682.66	Joback Method
dvisc	0.0001949	Pa×s	746.23	Joback Method
dvisc	0.0001558	Pa×s	809.80	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=C55334297&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