Indane, 1-methyl-3-phenyl-

Other names: 1H-Indene, 2,3-dihydro-1-methyl-3-phenyl-
1-methyl-3-phenylindan
Inchi: InChI=1S/C16H16/c1-12-11-16(13-7-3-2-4-8-13)15-10-6-5-9-14(12)15/h2-10,12,16H,11H
InchiKey: JHIDJKSBZPNVKZ-UHFFFAOYSA-N
Formula: C16H16
SMILES: CC1CC(c2ccccc2)c2ccccc21
Mol. weight [g/mol]: 208.30
CAS: 6416-39-3

Physical Properties

Property code	Value	Unit	Source
gf	352.07	kJ/mol	Joback Method
hf	140.48	kJ/mol	Joback Method
hfus	24.10	kJ/mol	Joback Method
hvap	56.03	kJ/mol	Joback Method
log10ws	-4.62		Crippen Method
logp	4.326		Crippen Method
mcvol	177.920	ml/mol	McGowan Method
pc	2475.19	kPa	Joback Method
rinpol	1675.00		NIST Webbook
rinpol	1660.00		NIST Webbook
tb	625.89	K	Joback Method
tc	873.99	K	Joback Method
tf	349.14	K	Joback Method
vc	0.671	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	459.51	J/mol×K	625.89	Joback Method
cpg	479.19	J/mol×K	667.24	Joback Method
cpg	497.31	J/mol×K	708.59	Joback Method
cpg	514.00	J/mol×K	749.94	Joback Method
cpg	529.38	J/mol×K	791.29	Joback Method

cpg	543.55	J/mol×K	832.64	Joback Method
cpg	556.64	J/mol×K	873.99	Joback Method
dvisc	0.0016648	Pa×s	349.14	Joback Method
dvisc	0.0011646	Pa×s	395.26	Joback Method
dvisc	0.0008779	Pa×s	441.39	Joback Method
dvisc	0.0006981	Pa×s	487.51	Joback Method
dvisc	0.0005776	Pa×s	533.64	Joback Method
dvisc	0.0004925	Pa×s	579.76	Joback Method
dvisc	0.0004299	Pa×s	625.89	Joback Method

Sources

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
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C6416393&Units=SI

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
rinpol: Non-polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume