2-phenyl-adamantane

Inchi: InChI=1S/C16H20/c1-2-4-13(5-3-1)16-14-7-11-6-12(9-14)10-15(16)8-11/h1-5,11-12,14-1
InchiKey: MWQZYLIXDPNHFG-PMONVTPFSA-N
Formula: C16H20
SMILES: c1ccc(C2C3CC4CC(C3)CC2C4)cc1
Mol. weight [g/mol]: 212.33

Physical Properties

Property code	Value	Unit	Source
gf	350.98	kJ/mol	Joback Method
hf	34.52	kJ/mol	Joback Method
hfus	25.68	kJ/mol	Joback Method
hvap	52.78	kJ/mol	Joback Method
log10ws	-4.30		Crippen Method
logp	4.226		Crippen Method
mcvol	179.960	ml/mol	McGowan Method
pc	2324.78	kPa	Joback Method
rinpol	1796.00		NIST Webbook
tb	607.31	K	Joback Method
tc	847.22	K	Joback Method
tf	338.32	K	Joback Method
vc	0.684	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	508.71	J/mol×K	607.31	Joback Method
cpg	532.45	J/mol×K	647.30	Joback Method
cpg	554.36	J/mol×K	687.28	Joback Method
cpg	574.60	J/mol×K	727.27	Joback Method
cpg	593.33	J/mol×K	767.25	Joback Method
cpg	610.70	J/mol×K	807.24	Joback Method
cpg	626.88	J/mol×K	847.22	Joback Method
dvisc	0.0022093	Pa×s	338.32	Joback Method
dvisc	0.0021934	Pa×s	383.15	Joback Method

dvisc	0.0021809	Pa×s	427.98	Joback Method
dvisc	0.0021708	Pa×s	472.81	Joback Method
dvisc	0.0021625	Pa×s	517.65	Joback Method
dvisc	0.0021556	Pa×s	562.48	Joback Method
dvisc	0.0021497	Pa×s	607.31	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R202227&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume