Naphthalene, 1,2,3,4-tetrahydro-2,2,5,7-tetramethyl-

Inchi: InChI=1S/C14H20/c1-10-7-11(2)13-5-6-14(3,4)9-12(13)8-10/h7-8H,5-6,9H2,1-4H3
InchiKey: LPZOMHQRIWIZSX-UHFFFAOYSA-N
Formula: C14H20
SMILES: Cc1cc(C)c2c(c1)CC(C)(C)CC2
Mol. weight [g/mol]: 188.31
CAS: 23342-25-8

Physical Properties

Property code	Value	Unit	Source
gf	193.68	kJ/mol	Joback Method
hf	-48.29	kJ/mol	Joback Method
hfus	14.63	kJ/mol	Joback Method
hvap	49.95	kJ/mol	Joback Method
log10ws	-4.52		Crippen Method
logp	3.818		Crippen Method
mcvol	173.500	ml/mol	McGowan Method
pc	2320.31	kPa	Joback Method
rinpol	1445.00		NIST Webbook
rinpol	1445.00		NIST Webbook
tb	572.59	K	Joback Method
tc	800.28	K	Joback Method
tf	349.84	K	Joback Method
vc	0.658	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	429.35	J/mol×K	572.59	Joback Method
cpg	448.30	J/mol×K	610.54	Joback Method
cpg	466.08	J/mol×K	648.49	Joback Method
cpg	482.85	J/mol×K	686.43	Joback Method
cpg	498.75	J/mol×K	724.38	Joback Method
cpg	513.95	J/mol×K	762.33	Joback Method
cpg	528.59	J/mol×K	800.28	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=C23342258&Units=SI

Legend

cpg:	Ideal gas heat capacity
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