1,1,5,6-Tetramethyl-1,2-dihydronaphthalene

Inchi: InChI=1S/C14H18/c1-10-7-8-13-12(11(10)2)6-5-9-14(13,3)4/h5-8H,9H2,1-4H3
InchiKey: WVVRPGLEZQJUSX-UHFFFAOYSA-N
Formula: C14H18
SMILES: Cc1ccc2c(c1C)C=CCC2(C)C
Mol. weight [g/mol]: 186.29
CAS: 220766-68-7

Physical Properties

Property code	Value	Unit	Source
gf	223.64	kJ/mol	Joback Method
hf	9.49	kJ/mol	Joback Method
hfus	15.85	kJ/mol	Joback Method
hvap	50.25	kJ/mol	Joback Method
log10ws	-4.45		Crippen Method
logp	3.998		Crippen Method
mcvol	169.200	ml/mol	McGowan Method
pc	2402.92	kPa	Joback Method
rinpol	1486.00		NIST Webbook
rinpol	1486.00		NIST Webbook
rinpol	1511.10		NIST Webbook
rinpol	1511.10		NIST Webbook
ripol	1963.00		NIST Webbook
tb	571.75	K	Joback Method
tc	801.68	K	Joback Method
tf	350.60	K	Joback Method
vc	0.644	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	409.62	J/mol×K	571.75	Joback Method
cpg	427.38	J/mol×K	610.07	Joback Method
cpg	444.00	J/mol×K	648.39	Joback Method
cpg	459.65	J/mol×K	686.72	Joback Method

cpg	474.48	J/mol×K	725.04	Joback Method
cpg	488.66	J/mol×K	763.36	Joback Method
cpg	502.35	J/mol×K	801.68	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=C220766687&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume