Naphthalene, decahydro-, 2,2'-bis

Inchi: InChI=1S/C20H34/c1-3-7-17-13-19(11-9-15(17)5-1)20-12-10-16-6-2-4-8-18(16)14-20/h15
InchiKey: JZMIQSLLYUOJLU-UHFFFAOYSA-N
Formula: C20H34
SMILES: C1CCC2CC(C3CCC4CCCCC4C3)CCC2C1
Mol. weight [g/mol]: 274.48

Physical Properties

Property code	Value	Unit	Source
gf	248.30	kJ/mol	Joback Method
hf	-254.89	kJ/mol	Joback Method
hfus	25.44	kJ/mol	Joback Method
hvap	60.52	kJ/mol	Joback Method
log10ws	-6.32		Crippen Method
logp	6.199		Crippen Method
mcvol	249.220	ml/mol	McGowan Method
pc	1620.68	kPa	Joback Method
rinpol	2317.00		NIST Webbook
tb	708.78	K	Joback Method
tc	952.30	K	Joback Method
tf	350.28	K	Joback Method
vc	0.917	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	821.81	J/mol×K	708.78	Joback Method
cpg	852.99	J/mol×K	749.37	Joback Method
cpg	881.78	J/mol×K	789.95	Joback Method
cpg	908.31	J/mol×K	830.54	Joback Method
cpg	932.72	J/mol×K	871.13	Joback Method
cpg	955.14	J/mol×K	911.71	Joback Method
cpg	975.69	J/mol×K	952.30	Joback Method
dvisc	0.0044172	Pa×s	350.28	Joback Method
dvisc	0.0025276	Pa×s	410.03	Joback Method

dvisc	0.0016670	Pa×s	469.78	Joback Method
dvisc	0.0012077	Pa×s	529.53	Joback Method
dvisc	0.0009341	Pa×s	589.28	Joback Method
dvisc	0.0007574	Pa×s	649.03	Joback Method
dvisc	0.0006363	Pa×s	708.78	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R481&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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