Naphthalene, 1,1'-methylenebis[decahydro-

Other names:	Di(decahydro-1-naphthyl)methane
	Di(1'-decahydronaphthyl)methane
	Naphthalene, 1,1'-methylenebis*decahydro-
Inchi:	InChI=1S/C21H36/c1-3-13-20-16(7-1)9-5-11-18(20)15-19-12-6-10-17-8-2-4-14-21(17)19/
InchiKey:	XUXHXEMDOZHKDH-UHFFFAOYSA-N
Formula:	C21H36
SMILES:	C1CCC2C(C1)CCCC2CC1CCCC2CCCCC21
Mol. weight [g/mol]:	288.51
CAS:	55125-02-5

Physical Properties

Property code	Value	Unit	Source
gf	256.72	kJ/mol	Joback Method
hf	-275.53	kJ/mol	Joback Method
hfus	28.03	kJ/mol	Joback Method
hvap	62.75	kJ/mol	Joback Method
log10ws	-6.74		Crippen Method
logp	6.590		Crippen Method
mcvol	263.310	ml/mol	McGowan Method
pc	1502.31	kPa	Joback Method
tb	731.66	K	Joback Method
tc	970.23	K	Joback Method
tf	361.55	K	Joback Method
vc	0.974	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	883.83	J/mol×K	731.66	Joback Method
cpg	914.39	J/mol×K	771.42	Joback Method
cpg	942.64	J/mol×K	811.18	Joback Method
cpg	968.71	J/mol×K	850.95	Joback Method
cpg	992.74	J/mol×K	890.71	Joback Method
cpg	1014.83	J/mol×K	930.47	Joback Method

cpg	1035.14	J/mol×K	970.23	Joback Method
dvisc	0.0043814	Pa×s	361.55	Joback Method
dvisc	0.0024559	Pa×s	423.24	Joback Method
dvisc	0.0015950	Pa×s	484.92	Joback Method
dvisc	0.0011419	Pa×s	546.61	Joback Method
dvisc	0.0008748	Pa×s	608.29	Joback Method
dvisc	0.0007039	Pa×s	669.97	Joback Method
dvisc	0.0005875	Pa×s	731.66	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C55125025&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
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume