Naphthalene, 1,2,3,4,6,7-hexamethyl

Inchi: InChI=1S/C16H20/c1-9-7-15-13(5)11(3)12(4)14(6)16(15)8-10(9)2/h7-8H,1-6H3
InchiKey: BLWBJUXFWPSYLG-UHFFFAOYSA-N
Formula: C16H20
SMILES: Cc1cc2c(C)c(C)c(C)c(C)c2cc1C
Mol. weight [g/mol]: 212.33
CAS: 17384-76-8

Physical Properties

Property code	Value	Unit	Source
gf	245.12	kJ/mol	Joback Method
hf	-14.79	kJ/mol	Joback Method
hfus	25.92	kJ/mol	Joback Method
hvap	59.10	kJ/mol	Joback Method
log10ws	-6.13		Crippen Method
logp	4.690		Crippen Method
mcvol	193.080	ml/mol	McGowan Method
pc	1944.08	kPa	Joback Method
rinpol	1986.00		NIST Webbook
tb	641.02	K	Joback Method
tc	859.89	K	Joback Method
tf	404.32	K	Joback Method
vc	0.746	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	488.20	J/mol×K	641.02	Joback Method
cpg	562.65	J/mol×K	823.42	Joback Method
cpg	549.39	J/mol×K	786.94	Joback Method
cpg	535.35	J/mol×K	750.46	Joback Method
cpg	520.50	J/mol×K	713.98	Joback Method
cpg	504.79	J/mol×K	677.50	Joback Method
cpg	575.19	J/mol×K	859.89	Joback Method
dvisc	0.0002428	Pa×s	641.02	Joback Method

dvisc	0.0002758	Pa×s	601.57	Joback Method
dvisc	0.0003190	Pa×s	562.12	Joback Method
dvisc	0.0003770	Pa×s	522.67	Joback Method
dvisc	0.0004580	Pa×s	483.22	Joback Method
dvisc	0.0005759	Pa×s	443.77	Joback Method
dvisc	0.0007572	Pa×s	404.32	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C17384768&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