Naphthalene, 1,5-diisopropyl

Inchi: InChI=1S/C16H20/c1-11(2)13-7-5-10-16-14(12(3)4)8-6-9-15(13)16/h5-12H,1-4H3
InchiKey: GFZWCYSEPXDDRI-UHFFFAOYSA-N
Formula: C16H20
SMILES: CC(C)c1cccc2c(C(C)C)cccc12
Mol. weight [g/mol]: 212.33

Physical Properties

Property code	Value	Unit	Source
gf	278.76	kJ/mol	Joback Method
hf	20.53	kJ/mol	Joback Method
hfus	20.43	kJ/mol	Joback Method
hvap	55.67	kJ/mol	Joback Method
log10ws	-5.65		Crippen Method
logp	5.087		Crippen Method
mcvol	193.080	ml/mol	McGowan Method
pc	2081.22	kPa	Joback Method
rinpol	1715.00		NIST Webbook
ripol	2271.00		NIST Webbook
ripol	2235.00		NIST Webbook
ripol	2271.00		NIST Webbook
tb	620.22	K	Joback Method
tc	844.42	K	Joback Method
tf	324.24	K	Joback Method
vc	0.734	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	490.58	J/mol×K	620.22	Joback Method
cpg	508.84	J/mol×K	657.59	Joback Method
cpg	525.92	J/mol×K	694.95	Joback Method
cpg	541.89	J/mol×K	732.32	Joback Method
cpg	556.83	J/mol×K	769.68	Joback Method
cpg	570.80	J/mol×K	807.05	Joback Method

cpg	583.89	J/mol×K	844.42	Joback Method
dvisc	0.0020223	Pa×s	324.24	Joback Method
dvisc	0.0010863	Pa×s	373.57	Joback Method
dvisc	0.0006746	Pa×s	422.90	Joback Method
dvisc	0.0004627	Pa×s	472.23	Joback Method
dvisc	0.0003409	Pa×s	521.56	Joback Method
dvisc	0.0002647	Pa×s	570.89	Joback Method
dvisc	0.0002140	Pa×s	620.22	Joback Method

Sources

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=R569372&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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