Naphthalene, 2-methyl-1-propyl-

Inchi: InChI=1S/C14H16/c1-3-6-13-11(2)9-10-12-7-4-5-8-14(12)13/h4-5,7-10H,3,6H2,1-2H3
InchiKey: BTYYGWOCMUPYPQ-UHFFFAOYSA-N
Formula: C14H16
SMILES: CCCc1c(C)ccc2ccccc12
Mol. weight [g/mol]: 184.28
CAS: 54774-89-9

Physical Properties

Property code	Value	Unit	Source
gf	266.80	kJ/mol	Joback Method
hf	72.37	kJ/mol	Joback Method
hfus	22.30	kJ/mol	Joback Method
hvap	52.00	kJ/mol	Joback Method
log10ws	-4.97		Crippen Method
logp	4.101		Crippen Method
mcvol	164.900	ml/mol	McGowan Method
pc	2460.47	kPa	Joback Method
tb	575.34	K	Joback Method
tc	798.37	K	Joback Method
tf	331.70	K	Joback Method
vc	0.633	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	389.82	J/mol×K	575.34	Joback Method
cpg	461.76	J/mol×K	761.20	Joback Method
cpg	449.22	J/mol×K	724.03	Joback Method
cpg	435.82	J/mol×K	686.85	Joback Method
cpg	421.50	J/mol×K	649.68	Joback Method
cpg	406.19	J/mol×K	612.51	Joback Method
cpg	473.50	J/mol×K	798.37	Joback Method
dvisc	0.0002769	Pa×s	575.34	Joback Method
dvisc	0.0003270	Pa×s	534.73	Joback Method

dvisc	0.0003970	Pa×s	494.13	Joback Method
dvisc	0.0004990	Pa×s	453.52	Joback Method
dvisc	0.0006561	Pa×s	412.91	Joback Method
dvisc	0.0009157	Pa×s	372.31	Joback Method
dvisc	0.0013867	Pa×s	331.70	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=C54774899&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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