1,2,3-trimethyl-4-propylnaphthalene

Inchi: InChI=1S/C16H20/c1-5-8-14-12(3)11(2)13(4)15-9-6-7-10-16(14)15/h6-7,9-10H,5,8H2,1-4
InchiKey: ISBYEFZEJPTZHV-UHFFFAOYSA-N
Formula: C16H20
SMILES: CCCc1c(C)c(C)c(C)c2ccccc12
Mol. weight [g/mol]: 212.33

Physical Properties

Property code	Value	Unit	Source
gf	264.38	kJ/mol	Joback Method
hf	8.15	kJ/mol	Joback Method
hfus	26.70	kJ/mol	Joback Method
hvap	57.77	kJ/mol	Joback Method
log10ws	-5.92		Crippen Method
logp	4.718		Crippen Method
mcvol	193.080	ml/mol	McGowan Method
pc	1996.55	kPa	Joback Method
rinpol	284.74		NIST Webbook
tb	631.06	K	Joback Method
tc	848.12	K	Joback Method
tf	379.28	K	Joback Method
vc	0.746	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	489.10	J/mol×K	631.06	Joback Method
cpg	506.09	J/mol×K	667.24	Joback Method
cpg	522.11	J/mol×K	703.41	Joback Method
cpg	537.20	J/mol×K	739.59	Joback Method
cpg	551.42	J/mol×K	775.77	Joback Method
cpg	564.82	J/mol×K	811.94	Joback Method
cpg	577.45	J/mol×K	848.12	Joback Method
dvisc	0.0010076	Pa×s	379.28	Joback Method
dvisc	0.0007072	Pa×s	421.24	Joback Method

dvisc	0.0005292	Pa×s	463.21	Joback Method
dvisc	0.0004156	Pa×s	505.17	Joback Method
dvisc	0.0003387	Pa×s	547.13	Joback Method
dvisc	0.0002842	Pa×s	589.10	Joback Method
dvisc	0.0002441	Pa×s	631.06	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R198168&Units=SI

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