Naphthalene, 1,2,3,4,6-pentamethyl

Inchi: InChI=1S/C15H18/c1-9-6-7-14-12(4)10(2)11(3)13(5)15(14)8-9/h6-8H,1-5H3
InchiKey: ZQPCPWIIDOOAMV-UHFFFAOYSA-N
Formula: C15H18
SMILES: Cc1ccc2c(C)c(C)c(C)c(C)c2c1
Mol. weight [g/mol]: 198.30

Physical Properties

Property code	Value	Unit	Source
gf	246.33	kJ/mol	Joback Method
hf	17.32	kJ/mol	Joback Method
hfus	23.72	kJ/mol	Joback Method
hvap	56.21	kJ/mol	Joback Method
log10ws	-5.65		Crippen Method
logp	4.382		Crippen Method
mcvol	178.990	ml/mol	McGowan Method
pc	2149.31	kPa	Joback Method
rinpol	316.62		NIST Webbook
rinpol	314.65		NIST Webbook
rinpol	1864.00		NIST Webbook
rinpol	1864.00		NIST Webbook
ripol	288.87		NIST Webbook
tb	613.16	K	Joback Method
tc	835.07	K	Joback Method
tf	380.53	K	Joback Method
vc	0.690	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	437.97	J/mol×K	613.16	Joback Method
cpg	454.18	J/mol×K	650.14	Joback Method
cpg	469.48	J/mol×K	687.13	Joback Method
cpg	483.90	J/mol×K	724.11	Joback Method
cpg	497.51	J/mol×K	761.10	Joback Method

cpg	510.34	J/mol×K	798.08	Joback Method
cpg	522.44	J/mol×K	835.07	Joback Method
dvisc	0.0008508	Pa×s	380.53	Joback Method
dvisc	0.0006352	Pa×s	419.30	Joback Method
dvisc	0.0004983	Pa×s	458.07	Joback Method
dvisc	0.0004060	Pa×s	496.85	Joback Method
dvisc	0.0003408	Pa×s	535.62	Joback Method
dvisc	0.0002929	Pa×s	574.39	Joback Method
dvisc	0.0002566	Pa×s	613.16	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=R18521&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
ripol: Polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume

Latest version available from: