Naphthalene, 1,2,4,6,7-pentamethyl

Inchi: InChI=1S/C15H18/c1-9-7-14-12(4)6-11(3)13(5)15(14)8-10(9)2/h6-8H,1-5H3
InchiKey: VDMSONZJLIHRGZ-UHFFFAOYSA-N
Formula: C15H18
SMILES: Cc1cc2c(C)cc(C)c(C)c2cc1C
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	308.89		NIST Webbook
rinpol	306.58		NIST Webbook
ripol	278.78		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=R549170&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

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