Naphthalene, 1-(1-cyclopenten-1-yl)-

Other names: 1-(1-cyclopenten-1-yl)-naphthalene
Inchi: InChI=1S/C15H14/c1-2-7-12(6-1)15-11-5-9-13-8-3-4-10-14(13)15/h3-6,8-11H,1-2,7H2
InchiKey: IQHWZOGRTZTFDB-UHFFFAOYSA-N
Formula: C15H14
SMILES: C1=C(c2cccc3ccccc23)CCC1
Mol. weight [g/mol]: 194.27
CAS: 58195-37-2

Physical Properties

Property code	Value	Unit	Source
gf	349.44	kJ/mol	Joback Method
hf	190.33	kJ/mol	Joback Method
hfus	18.97	kJ/mol	Joback Method
hvap	55.08	kJ/mol	Joback Method
log10ws	-5.25		Crippen Method
logp	4.407		Crippen Method
mcvol	163.830	ml/mol	McGowan Method
pc	2881.21	kPa	Joback Method
rinpol	281.62		NIST Webbook
tb	617.33	K	Joback Method
tc	871.81	K	Joback Method
tf	358.87	K	Joback Method
vc	0.618	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	404.56	J/mol×K	617.33	Joback Method
cpg	422.35	J/mol×K	659.74	Joback Method
cpg	438.66	J/mol×K	702.16	Joback Method
cpg	453.64	J/mol×K	744.57	Joback Method
cpg	467.41	J/mol×K	786.98	Joback Method
cpg	480.11	J/mol×K	829.39	Joback Method
cpg	491.88	J/mol×K	871.81	Joback Method

dvisc	0.0017632	Pa×s	358.87	Joback Method
dvisc	0.0011542	Pa×s	401.95	Joback Method
dvisc	0.0008201	Pa×s	445.02	Joback Method
dvisc	0.0006189	Pa×s	488.10	Joback Method
dvisc	0.0004889	Pa×s	531.18	Joback Method
dvisc	0.0004002	Pa×s	574.25	Joback Method
dvisc	0.0003368	Pa×s	617.33	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=C58195372&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