

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:	<chem>C1=C(c2cccc3ccccc23)CCC1</chem>
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/molxK	617.33	Joback Method
cpg	422.35	J/molxK	659.74	Joback Method
cpg	438.66	J/molxK	702.16	Joback Method
cpg	453.64	J/molxK	744.57	Joback Method
cpg	467.41	J/molxK	786.98	Joback Method
cpg	480.11	J/molxK	829.39	Joback Method
cpg	491.88	J/molxK	871.81	Joback Method

dvisc	0.0017632	Paxs	358.87	Joback Method
dvisc	0.0011542	Paxs	401.95	Joback Method
dvisc	0.0008201	Paxs	445.02	Joback Method
dvisc	0.0006189	Paxs	488.10	Joback Method
dvisc	0.0004889	Paxs	531.18	Joback Method
dvisc	0.0004002	Paxs	574.25	Joback Method
dvisc	0.0003368	Paxs	617.33	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C58195372&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.cheméo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

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

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