

Naphthalene, 1,2,3,4-tetrahydro-2-(1-methylethyl)

Inchi:	InChI=1S/C13H18/c1-10(2)12-8-7-11-5-3-4-6-13(11)9-12/h3-6,10,12H,7-9H2,1-2H3
InchiKey:	ZEHICBNVEHBNRK-UHFFFAOYSA-N
Formula:	C13H18
SMILES:	CC(C)C1CCc2ccccc2C1
Mol. weight [g/mol]:	174.28

Physical Properties

Property code	Value	Unit	Source
gf	207.57	kJ/mol	Joback Method
hf	-25.23	kJ/mol	Joback Method
hfus	15.59	kJ/mol	Joback Method
hvap	47.17	kJ/mol	Joback Method
log10ws	-3.74		Crippen Method
logp	3.448		Crippen Method
mcvol	159.410	ml/mol	McGowan Method
pc	2532.82	kPa	Joback Method
rinpol	1398.00		NIST Webbook
rinpol	1398.00		NIST Webbook
tb	539.07	K	Joback Method
tc	764.58	K	Joback Method
tf	274.63	K	Joback Method
vc	0.599	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	380.74	J/molxK	539.07	Joback Method
cpg	400.53	J/molxK	576.66	Joback Method
cpg	419.03	J/molxK	614.24	Joback Method
cpg	436.32	J/molxK	651.83	Joback Method
cpg	452.45	J/molxK	689.41	Joback Method
cpg	467.49	J/molxK	727.00	Joback Method
cpg	481.52	J/molxK	764.58	Joback Method
dvisc	0.0028503	Paxs	274.63	Joback Method

dvisc	0.0015174	Paxs	318.70	Joback Method
dvisc	0.0009415	Paxs	362.78	Joback Method
dvisc	0.0006478	Paxs	406.85	Joback Method
dvisc	0.0004795	Paxs	450.92	Joback Method
dvisc	0.0003745	Paxs	495.00	Joback Method
dvisc	0.0003045	Paxs	539.07	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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=R71224&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

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