

Naphthalene, 2-(1-methylpropyl)

Inchi:	InChI=1S/C14H16/c1-3-11(2)13-9-8-12-6-4-5-7-14(12)10-13/h4-11H,3H2,1-2H3
InchiKey:	OCAXZVKUQMRDER-UHFFFAOYSA-N
Formula:	C14H16
SMILES:	CCC(C)c1ccc2ccccc2c1
Mol. weight [g/mol]:	184.28

Physical Properties

Property code	Value	Unit	Source
gf	273.99	kJ/mol	Joback Method
hf	78.56	kJ/mol	Joback Method
hfus	19.16	kJ/mol	Joback Method
hvap	50.95	kJ/mol	Joback Method
log10ws	-4.88		Crippen Method
logp	4.353		Crippen Method
mcvol	164.900	ml/mol	McGowan Method
pc	2517.59	kPa	Joback Method
rinsol	1521.00		NIST Webbook
tb	569.92	K	Joback Method
tc	796.83	K	Joback Method
tf	304.18	K	Joback Method
vc	0.627	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	390.34	J/molxK	569.92	Joback Method
cpg	407.45	J/molxK	607.74	Joback Method
cpg	423.38	J/molxK	645.56	Joback Method
cpg	438.22	J/molxK	683.37	Joback Method
cpg	452.03	J/molxK	721.19	Joback Method
cpg	464.90	J/molxK	759.01	Joback Method
cpg	476.91	J/molxK	796.83	Joback Method
dvisc	0.0020876	Paxs	304.18	Joback Method
dvisc	0.0011870	Paxs	348.47	Joback Method

dvisc	0.0007666	Paxs	392.76	Joback Method
dvisc	0.0005410	Paxs	437.05	Joback Method
dvisc	0.0004070	Paxs	481.34	Joback Method
dvisc	0.0003213	Paxs	525.63	Joback Method
dvisc	0.0002631	Paxs	569.92	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R14975&Units=SI
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

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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