Naphthalene, 1,2,3,4-tetrahydro-2-methyl-

Other names:	1,2,3,4-TETRAHYDRO-2-METHYLNAPHTHALENE 2-METHYLTETRALIN 2-Methyl-(1,2,3,4-tetrahydronaphthalene) 2-Methyltetraline tetrahydro-2-methylnaphthalene «beta»-Methyltetralin
Inchi:	InChI=1S/C11H14/c1-9-6-7-10-4-2-3-5-11(10)8-9/h2-5,9H,6-8H2,1H3
InchiKey:	WJRGJANWBCPTLH-UHFFFAOYSA-N
Formula:	C11H14
SMILES:	CC1CCc2ccccc2C1
Mol. weight [g/mol]:	146.23
CAS:	3877-19-8

Physical Properties

Property code	Value	Unit	Source
gf	193.17	kJ/mol	Joback Method
hf	21.33	kJ/mol	Joback Method
hfus	13.93	kJ/mol	Joback Method
hvap	43.10	kJ/mol	Joback Method
log10ws	-3.15		Crippen Method
logp	2.811		Crippen Method
mcvol	131.230	ml/mol	McGowan Method
pc	2969.00	kPa	KDB
rinpol	1207.00		NIST Webbook
rinpol	1207.00		NIST Webbook
rinpol	1218.00		NIST Webbook
ripol	1685.00		NIST Webbook
ripol	1685.00		NIST Webbook
tb	491.00	K	KDB
tc	715.20	K	KDB
tf	267.09	K	Joback Method
vc	0.500	m3/kmol	KDB
zc	0.2496410		KDB

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	377.26	J/mol×K	722.14	Joback Method
cpg	364.65	J/mol×K	684.08	Joback Method
cpg	351.11	J/mol×K	646.01	Joback Method
cpg	336.57	J/mol×K	607.95	Joback Method
cpg	320.97	J/mol×K	569.88	Joback Method
cpg	304.24	J/mol×K	531.82	Joback Method
cpg	286.33	J/mol×K	493.75	Joback Method
dvisc	0.0019857	Pa×s	267.09	Joback Method
dvisc	0.0003405	Pa×s	493.75	Joback Method
dvisc	0.0004045	Pa×s	455.97	Joback Method
dvisc	0.0004956	Pa×s	418.20	Joback Method
dvisc	0.0006323	Pa×s	380.42	Joback Method
dvisc	0.0008513	Pa×s	342.64	Joback Method
dvisc	0.0012337	Pa×s	304.87	Joback Method
rhol	950.51	kg/m3	293.10	KDB

Sources

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method: https://en.wikipedia.org/wiki/Joback_method
KDB: https://www.cheric.org/research/kdb/hcprop/showprop.php?cmpid=762
McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C3877198&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
rhol:	Liquid Density
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
zc:	Critical Compressibility

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