Naphthalene, 1,2-dihydro-3-methyl-

Other names:	1,2-Dihydro-3-methylnaphthalene
	2-Methyl-3,4-dihydronaphthalene
	3-Methyl-1,2-dihydronaphthalene
	3,4-Dihydro-2-methylnaphthalene
Inchi:	InChI=1S/C11H12/c1-9-6-7-10-4-2-3-5-11(10)8-9/h2-5,8H,6-7H2,1H3
InchiKey:	LJMXZKYACOOCMW-UHFFFAOYSA-N
Formula:	C11H12
SMILES:	CC1=Cc2ccccc2CC1
Mol. weight [g/mol]:	144.21
CAS:	2717-44-4

Physical Properties

Property code	Value	Unit	Source
gf	221.21	kJ/mol	Joback Method
hf	87.98	kJ/mol	Joback Method
hfus	13.69	kJ/mol	Joback Method
hvap	44.37	kJ/mol	Joback Method
log10ws	-3.41		Crippen Method
logp	3.036		Crippen Method
mcvol	126.930	ml/mol	McGowan Method
pc	3269.04	kPa	Joback Method
tb	502.56	K	Joback Method
tc	734.79	K	Joback Method
tf	284.61	K	Joback Method
vc	0.479	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	269.10	J/mol×K	502.56	Joback Method
cpg	284.80	J/mol×K	541.27	Joback Method
cpg	299.39	J/mol×K	579.97	Joback Method
cpg	312.95	J/mol×K	618.68	Joback Method
cpg	325.55	J/mol×K	657.38	Joback Method

cpg	337.25	J/mol×K	696.09	Joback Method
cpg	348.12	J/mol×K	734.79	Joback Method
dvisc	0.0017269	Pa×s	284.61	Joback Method
dvisc	0.0011033	Pa×s	320.94	Joback Method
dvisc	0.0007721	Pa×s	357.26	Joback Method
dvisc	0.0005772	Pa×s	393.59	Joback Method
dvisc	0.0004532	Pa×s	429.91	Joback Method
dvisc	0.0003695	Pa×s	466.24	Joback Method
dvisc	0.0003103	Pa×s	502.56	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C2717444&Units=SI
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

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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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