Naphthalene, 1-methoxy-

Other names:	«alpha»-Methoxynaphthalene
	Methyl 1-naphthyl ether
	1-Methoxynaphthalene
	«alpha»-Naphthyl methyl ether
	1-Naphthyl methyl ether
	1-Naphthol methyl ether
Inchi:	InChI=1S/C11H10O/c1-12-11-8-4-6-9-5-2-3-7-10(9)11/h2-8H,1H3
InchiKey:	NQMUGNMMFTYOHK-UHFFFAOYSA-N
Formula:	C11H10O
SMILES:	COc1cccc2ccccc12
Mol. weight [g/mol]:	158.20
CAS:	2216-69-5

Physical Properties

Property code	Value	Unit	Source
gf	146.17	kJ/mol	Joback Method
hf	13.54	kJ/mol	Joback Method
hfus	16.11	kJ/mol	Joback Method
hvap	47.07	kJ/mol	Joback Method
ie	7.72	eV	NIST Webbook
ie	7.70	eV	NIST Webbook
log10ws	-3.40		Crippen Method
logp	2.848		Crippen Method
mcvol	128.500	ml/mol	McGowan Method
pc	3341.24	kPa	Joback Method
rinpol	1403.00		NIST Webbook
rinpol	1434.00		NIST Webbook
ripol	2143.00		NIST Webbook
ripol	2135.00		NIST Webbook
tb	524.14	K	Joback Method
tc	755.90	K	Joback Method
tf	307.60	K	Joback Method
vc	0.483	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	275.50	J/mol×K	524.14	Joback Method
cpg	289.40	J/mol×K	562.77	Joback Method
cpg	302.36	J/mol×K	601.39	Joback Method
cpg	314.42	J/mol×K	640.02	Joback Method
cpg	325.64	J/mol×K	678.65	Joback Method
cpg	336.06	J/mol×K	717.28	Joback Method
cpg	345.74	J/mol×K	755.90	Joback Method
dvisc	0.0012644	Pa×s	307.60	Joback Method
dvisc	0.0008530	Pa×s	343.69	Joback Method
dvisc	0.0006202	Pa×s	379.78	Joback Method
dvisc	0.0004766	Pa×s	415.87	Joback Method
dvisc	0.0003819	Pa×s	451.96	Joback Method
dvisc	0.0003163	Pa×s	488.05	Joback Method
dvisc	0.0002688	Pa×s	524.14	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	409.20	K	1.60	NIST Webbook

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C2216695&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

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
ie:	Ionization energy
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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume