Naphthalene, 2-methoxy-

Other names:	2-Naphthol methyl ether
	2-Naphthyl methyl ether
	2-methoxynaphthalene
	Methyl 2-naphthyl ether
	Methyl «beta»-naphthyl ether
	NSC 4171
	Nerolin
	Nerolin (old)
	Yara yara
	Yura yara
	«beta»-Methoxynaphthalene
	«beta»-Naphthol methyl ether
	«beta»-Naphthyl methyl ether
Inchi:	InChI=1S/C11H10O/c1-12-11-7-6-9-4-2-3-5-10(9)8-11/h2-8H,1H3
InchiKey:	LUZDYPLAQQGJEA-UHFFFAOYSA-N
Formula:	C11H10O
SMILES:	COc1ccc2ccccc2c1
Mol. weight [g/mol]:	158.20
CAS:	93-04-9

Physical Properties

Property code	Value	Unit	Source
chs	-5659.90 ± 1.10	kJ/mol	NIST Webbook
gf	146.17	kJ/mol	Joback Method
hf	13.54	kJ/mol	Joback Method
hfs	-97.90 ± 1.80	kJ/mol	NIST Webbook
hfus	16.11	kJ/mol	Joback Method
hvap	47.07	kJ/mol	Joback Method
ie	7.44	eV	NIST Webbook
ie	7.82	eV	NIST Webbook
ie	7.87	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	1407.00		NIST Webbook
rinpol	1407.00		NIST Webbook

rinpol	1410.00		NIST Webbook
rinpol	1433.20		NIST Webbook
rinpol	1433.20		NIST Webbook
tb	547.20	K	NIST Webbook
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

Sources

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

Computer Aided Solvent scanning for the Separation of 2-methoxynaphthene and 2-acetyl-6-methoxynaphthalene: https://www.doi.org/10.1021/je2009889

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=C93049&Units=SI

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

chs:	Standard solid enthalpy of combustion
cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfs:	Solid phase 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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume