Benzene, (2-methoxyethyl)-

Other names:	Ether, methyl phenethyl
	«beta»-Phenylethyl methyl ether
	Methyl phenethyl ether
	Methyl phenethyl oxide
	Methyl phenylethyl ether
	Methyl 2-phenethyl ether
	Phenylethyl methyl ether
	2-Phenylethyl methyl ether
	Kewda ether
	(2-Methoxyethyl)benzene
	1-Methoxy-2-phenylethane
	NSC 81229
Inchi:	InChI=1S/C9H12O/c1-10-8-7-9-5-3-2-4-6-9/h2-6H,7-8H2,1H3
InchiKey:	CQLYXIUHVFRXLT-UHFFFAOYSA-N
Formula:	C9H12O
SMILES:	COCCc1ccccc1
Mol. weight [g/mol]:	136.19
CAS:	3558-60-9

Physical Properties

Property code	Value	Unit	Source
gf	32.31	kJ/mol	Joback Method
hf	-124.78	kJ/mol	Joback Method
hfus	14.29	kJ/mol	Joback Method
hvap	40.31	kJ/mol	Joback Method
log10ws	-1.78		Crippen Method
logp	1.875		Crippen Method
mcvol	119.780	ml/mol	McGowan Method
pc	3199.16	kPa	Joback Method
rinpol	1089.00		NIST Webbook
rinpol	1089.00		NIST Webbook
rinpol	1083.40		NIST Webbook
rinpol	1062.00		NIST Webbook
rinpol	1083.40		NIST Webbook
tb	454.42	K	Joback Method
tc	660.22	K	Joback Method
tf	239.84	K	Joback Method

vc	0.450	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	238.54	J/mol×K	454.42	Joback Method
cpg	252.16	J/mol×K	488.72	Joback Method
cpg	265.10	J/mol×K	523.02	Joback Method
cpg	277.38	J/mol×K	557.32	Joback Method
cpg	289.01	J/mol×K	591.62	Joback Method
cpg	300.02	J/mol×K	625.92	Joback Method
cpg	310.41	J/mol×K	660.22	Joback Method
dvisc	0.0027046	Pa×s	239.84	Joback Method
dvisc	0.0013289	Pa×s	275.60	Joback Method
dvisc	0.0007687	Pa×s	311.37	Joback Method
dvisc	0.0004978	Pa×s	347.13	Joback Method
dvisc	0.0003496	Pa×s	382.89	Joback Method
dvisc	0.0002608	Pa×s	418.66	Joback Method
dvisc	0.0002037	Pa×s	454.42	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C3558609&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
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