Benzene, 1-methyl-2-phenoxy-

Other names:	Ether, phenyl o-tolyl
	o-Methylphenyl phenyl ether
	Phenyl o-tolyl ether
	2-Methylphenyl phenyl ether
	1-Methyl-2-phenoxybenzene
	o-phenoxytoluene
Inchi:	InChI=1S/C13H12O/c1-11-7-5-6-10-13(11)14-12-8-3-2-4-9-12/h2-10H,1H3
InchiKey:	WCOYPFBMFKXWBM-UHFFFAOYSA-N
Formula:	C13H12O
SMILES:	Cc1ccccc1Oc1ccccc1
Mol. weight [g/mol]:	184.23
CAS:	3991-61-5

Physical Properties

Property code	Value	Unit	Source
gf	168.77	kJ/mol	Joback Method
hf	17.72	kJ/mol	Joback Method
hfus	18.31	kJ/mol	Joback Method
hvap	52.16	kJ/mol	Joback Method
log10ws	-3.58		Crippen Method
logp	3.787		Crippen Method
mcvol	152.380	ml/mol	McGowan Method
pc	2966.57	kPa	Joback Method
tb	577.60	K	Joback Method
tc	819.70	K	Joback Method
tf	323.86	K	Joback Method
vc	0.566	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	349.29	J/mol×K	577.60	Joback Method
cpg	365.54	J/mol×K	617.95	Joback Method
cpg	380.63	J/mol×K	658.30	Joback Method

cpg	394.61	J/mol×K	698.65	Joback Method
cpg	407.52	J/mol×K	739.00	Joback Method
cpg	419.42	J/mol×K	779.35	Joback Method
cpg	430.34	J/mol×K	819.70	Joback Method
dvisc	0.0014893	Pa×s	323.86	Joback Method
dvisc	0.0008203	Pa×s	366.15	Joback Method
dvisc	0.0005112	Pa×s	408.44	Joback Method
dvisc	0.0003482	Pa×s	450.73	Joback Method
dvisc	0.0002533	Pa×s	493.02	Joback Method
dvisc	0.0001937	Pa×s	535.31	Joback Method
dvisc	0.0001541	Pa×s	577.60	Joback Method

Sources

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
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C3991615&Units=SI

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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