Benzene, 1-methyl-3-phenoxy-

Other names:	Ether, phenyl m-tolyl
	m-Methylphenyl phenyl ether
	m-Phenoxytoluene
	Phenyl m-tolyl ether
	1-Methyl-3-phenoxybenzene
	3-Methylphenyl phenyl ether
	3-Phenoxytoluene
	3-Methyldiphenyl ether
	Phenyl 3-tolyl ether
Inchi:	InChI=1S/C13H12O/c1-11-6-5-9-13(10-11)14-12-7-3-2-4-8-12/h2-10H,1H3
InchiKey:	UDONPJKEOAWFGI-UHFFFAOYSA-N
Formula:	C13H12O
SMILES:	Cc1cccc(Oc2ccccc2)c1
Mol. weight [g/mol]:	184.23
CAS:	3586-14-9

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
rinpol	259.00		NIST Webbook
rinpol	259.00		NIST Webbook
tb	545.00 ± 1.00	K	NIST Webbook
tb	545.20	K	NIST Webbook
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: 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=C3586149&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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