Benzene, 1-methoxy-4-(phenylmethyl)-

Other names:	Anisole, p-benzyl-
	p-Benzylanisole
	1-Benzyl-4-methoxybenzene
	p-Methoxydiphenylmethane
	p-Methoxyphenylphenylmethane
	4-Methoxydiphenylmethane
Inchi:	InChI=1S/C14H14O/c1-15-14-9-7-13(8-10-14)11-12-5-3-2-4-6-12/h2-10H,11H2,1H3
InchiKey:	GQLYCRTUQGSDSM-UHFFFAOYSA-N
Formula:	C14H14O
SMILES:	COc1ccc(Cc2ccccc2)cc1
Mol. weight [g/mol]:	198.26
CAS:	834-14-0

Physical Properties

Property code	Value	Unit	Source
gf	177.19	kJ/mol	Joback Method
hf	-2.92	kJ/mol	Joback Method
hfus	20.90	kJ/mol	Joback Method
hvap	54.38	kJ/mol	Joback Method
ie	8.20 ± 0.05	eV	NIST Webbook
log10ws	-3.69		Crippen Method
logp	3.286		Crippen Method
mcvol	166.470	ml/mol	McGowan Method
pc	2679.08	kPa	Joback Method
tb	565.00 ± 10.00	K	NIST Webbook
tc	837.55	K	Joback Method
tf	335.13	K	Joback Method
vc	0.622	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	397.75	J/mol×K	600.48	Joback Method
cpg	414.65	J/mol×K	639.99	Joback Method

cpg	430.37	J/mol×K	679.50	Joback Method
cpg	444.95	J/mol×K	719.01	Joback Method
cpg	458.45	J/mol×K	758.53	Joback Method
cpg	470.90	J/mol×K	798.04	Joback Method
cpg	482.36	J/mol×K	837.55	Joback Method
dvisc	0.0014623	Pa×s	335.13	Joback Method
dvisc	0.0007910	Pa×s	379.36	Joback Method
dvisc	0.0004865	Pa×s	423.58	Joback Method
dvisc	0.0003280	Pa×s	467.81	Joback Method
dvisc	0.0002367	Pa×s	512.03	Joback Method
dvisc	0.0001799	Pa×s	556.25	Joback Method
dvisc	0.0001424	Pa×s	600.48	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=C834140&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
ie: Ionization energy
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