Benzene, 1-methyl-4-(dimethoxymethyl)-

Other names: p-(dimethoxymethyl)toluene
Inchi: InChI=1S/C10H14O2/c1-8-4-6-9(7-5-8)10(11-2)12-3/h4-7,10H,1-3H3
InchiKey: MKZGLAOLSFUPRT-UHFFFAOYSA-N
Formula: C10H14O2
SMILES: COC(OC)c1ccc(C)cc1
Mol. weight [g/mol]: 166.22
CAS: 3395-83-3

Physical Properties

Property code	Value	Unit	Source
gf	-76.34	kJ/mol	Joback Method
hf	-294.39	kJ/mol	Joback Method
hfus	14.16	kJ/mol	Joback Method
hvap	45.22	kJ/mol	Joback Method
log10ws	-2.30		Crippen Method
logp	2.286		Crippen Method
mcvol	139.740	ml/mol	McGowan Method
pc	2805.41	kPa	Joback Method
tb	504.26	K	Joback Method
tc	711.53	K	Joback Method
tf	270.86	K	Joback Method
vc	0.517	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	306.21	J/mol×K	504.26	Joback Method
cpg	320.60	J/mol×K	538.81	Joback Method
cpg	334.35	J/mol×K	573.35	Joback Method
cpg	347.46	J/mol×K	607.90	Joback Method
cpg	359.93	J/mol×K	642.44	Joback Method
cpg	371.75	J/mol×K	676.99	Joback Method
cpg	382.94	J/mol×K	711.53	Joback Method
dvisc	0.0019953	Pa×s	270.86	Joback Method

dvisc	0.0009879	Pa×s	309.76	Joback Method
dvisc	0.0005722	Pa×s	348.66	Joback Method
dvisc	0.0003698	Pa×s	387.56	Joback Method
dvisc	0.0002588	Pa×s	426.46	Joback Method
dvisc	0.0001923	Pa×s	465.36	Joback Method
dvisc	0.0001495	Pa×s	504.26	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=C3395833&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