Benzene, (1-methoxyethenyl)-

Other names:	Ether, methyl 1-phenylvinyl
	«alpha»-Methoxystyrene
	Methyl «alpha»-styryl ether
	1-Methoxy-1-phenylethene
	1-Methoxyvinylbenzene
Inchi:	InChI=1S/C9H10O/c1-8(10-2)9-6-4-3-5-7-9/h3-7H,1H2,2H3
InchiKey:	SIZDIMDMQQFWLM-UHFFFAOYSA-N
Formula:	C9H10O
SMILES:	C=C(OC)c1ccccc1
Mol. weight [g/mol]:	134.18
CAS:	4747-13-1

Physical Properties

Property code	Value	Unit	Source
gf	111.60	kJ/mol	Joback Method
hf	-9.14	kJ/mol	Joback Method
hfus	11.70	kJ/mol	Joback Method
hvap	39.72	kJ/mol	Joback Method
log10ws	-2.30		Crippen Method
logp	2.304		Crippen Method
mcvol	115.480	ml/mol	McGowan Method
pc	3376.28	kPa	Joback Method
rinpol	1084.00		NIST Webbook
rinpol	1084.00		NIST Webbook
rinpol	1091.00		NIST Webbook
tb	450.98	K	Joback Method
tc	665.70	K	Joback Method
tf	224.12	K	Joback Method
vc	0.431	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	222.02	J/mol×K	450.98	Joback Method

cpg	235.18	J/mol×K	486.77	Joback Method
cpg	247.60	J/mol×K	522.55	Joback Method
cpg	259.32	J/mol×K	558.34	Joback Method
cpg	270.35	J/mol×K	594.13	Joback Method
cpg	280.71	J/mol×K	629.91	Joback Method
cpg	290.45	J/mol×K	665.70	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=C4747131&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cpg:	Ideal gas heat capacity
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