Benzene, 1-ethoxy-4-methoxy-

Other names:	p-Ethoxyanisole
	Ethyl p-methoxyphenyl ether
	p-methoxyphenetole
Inchi:	InChI=1S/C9H12O2/c1-3-11-9-6-4-8(10-2)5-7-9/h4-7H,3H2,1-2H3
InchiKey:	FTFNFGIOGXKJSP-UHFFFAOYSA-N
Formula:	C9H12O2
SMILES:	CCOc1ccc(OC)cc1
Mol. weight [g/mol]:	152.19
CAS:	5076-72-2

Physical Properties

Property code	Value	Unit	Source
gf	-82.32	kJ/mol	Joback Method
hf	-268.47	kJ/mol	Joback Method
hfus	15.09	kJ/mol	Joback Method
hvap	43.39	kJ/mol	Joback Method
ie	8.03 ± 0.15	eV	NIST Webbook
ie	7.72 ± 0.01	eV	NIST Webbook
log10ws	-2.13		Crippen Method
logp	2.094		Crippen Method
mcvol	125.650	ml/mol	McGowan Method
pc	3086.42	kPa	Joback Method
tb	481.82	K	Joback Method
tc	687.40	K	Joback Method
tf	312.00	K	NIST Webbook
vc	0.468	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	262.58	J/mol×K	481.82	Joback Method
cpg	275.49	J/mol×K	516.08	Joback Method
cpg	287.86	J/mol×K	550.35	Joback Method
cpg	299.69	J/mol×K	584.61	Joback Method

cpg	310.98	J/mol×K	618.87	Joback Method
cpg	321.73	J/mol×K	653.13	Joback Method
cpg	331.92	J/mol×K	687.40	Joback Method
dvisc	0.0014607	Pa×s	274.59	Joback Method
dvisc	0.0008317	Pa×s	309.13	Joback Method
dvisc	0.0005303	Pa×s	343.67	Joback Method
dvisc	0.0003671	Pa×s	378.21	Joback Method
dvisc	0.0002703	Pa×s	412.74	Joback Method
dvisc	0.0002086	Pa×s	447.28	Joback Method
dvisc	0.0001671	Pa×s	481.82	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	489.50 ± 0.50	K	101.00	NIST Webbook

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C5076722&Units=SI
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

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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume