Phenol, 2-ethoxy-

Other names:	1-Hydroxy-2-ethoxybenzene
	2-Ethyloxyphenol
	2-ethoxyphenol
	Catechol monoethyl ether
	NSC 1809
	Pyrocatechol monoethyl ether
	catechol, monoethyl ether
	guaethol
	guaiethol
	guethol
	o-ethoxyphenol
	phenol, o-ethoxy-
Inchi:	InChI=1S/C8H10O2/c1-2-10-8-6-4-3-5-7(8)9/h3-6,9H,2H2,1H3
InchiKey:	MOEFFSWKSMRFRQ-UHFFFAOYSA-N
Formula:	C8H10O2
SMILES:	CCOc1ccccc1O
Mol. weight [g/mol]:	138.16
CAS:	94-71-3

Physical Properties

Property code	Value	Unit	Source
gf	-130.73	kJ/mol	Joback Method
hf	-281.45	kJ/mol	Joback Method
hfus	17.49	kJ/mol	Joback Method
hvap	51.10	kJ/mol	Joback Method
log10ws	-1.56		Crippen Method
logp	1.791		Crippen Method
mcvol	111.560	ml/mol	McGowan Method
pc	4311.22	kPa	Joback Method
rinpol	1124.70		NIST Webbook
rinpol	1132.00		NIST Webbook
rinpol	1127.80		NIST Webbook
ripol	1876.00		NIST Webbook
ripol	1831.00		NIST Webbook
ripol	1831.00		NIST Webbook
tb	489.70 ± 0.80	K	NIST Webbook
tb	490.00	K	NIST Webbook

tb	490.20	K	NIST Webbook
tc	735.66	K	Joback Method
tf	301.50 ± 0.50	K	NIST Webbook
vc	0.359	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	305.97	J/mol×K	735.66	Joback Method
cpg	258.48	J/mol×K	549.41	Joback Method
cpg	269.29	J/mol×K	586.66	Joback Method
cpg	279.38	J/mol×K	623.91	Joback Method
cpg	288.82	J/mol×K	661.16	Joback Method
cpg	297.67	J/mol×K	698.41	Joback Method
cpg	246.89	J/mol×K	512.16	Joback Method
dvisc	0.0027165	Pa×s	340.29	Joback Method
dvisc	0.0011593	Pa×s	368.94	Joback Method
dvisc	0.0005594	Pa×s	397.58	Joback Method
dvisc	0.0002977	Pa×s	426.23	Joback Method
dvisc	0.0001715	Pa×s	454.87	Joback Method
dvisc	0.0001055	Pa×s	483.51	Joback Method
dvisc	0.0000685	Pa×s	512.16	Joback Method
pvap	100.76	kPa	486.03	Vapor Pressures and Vaporization Enthalpy of 2-Ethoxyphenol
pvap	46.82	kPa	457.01	Vapor Pressures and Vaporization Enthalpy of 2-Ethoxyphenol
pvap	33.38	kPa	445.61	Vapor Pressures and Vaporization Enthalpy of 2-Ethoxyphenol
pvap	24.89	kPa	436.26	Vapor Pressures and Vaporization Enthalpy of 2-Ethoxyphenol
pvap	19.24	kPa	428.48	Vapor Pressures and Vaporization Enthalpy of 2-Ethoxyphenol
pvap	16.11	kPa	423.31	Vapor Pressures and Vaporization Enthalpy of 2-Ethoxyphenol

pvap	13.71	kPa	418.79	Vapor Pressures and Vaporization Enthalpy of 2-Ethoxyphenol
pvap	11.73	kPa	414.50	Vapor Pressures and Vaporization Enthalpy of 2-Ethoxyphenol
pvap	9.39	kPa	408.63	Vapor Pressures and Vaporization Enthalpy of 2-Ethoxyphenol
pvap	7.51	kPa	402.92	Vapor Pressures and Vaporization Enthalpy of 2-Ethoxyphenol
pvap	5.99	kPa	397.40	Vapor Pressures and Vaporization Enthalpy of 2-Ethoxyphenol
pvap	4.76	kPa	391.94	Vapor Pressures and Vaporization Enthalpy of 2-Ethoxyphenol
pvap	3.72	kPa	386.29	Vapor Pressures and Vaporization Enthalpy of 2-Ethoxyphenol
pvap	3.25	kPa	383.28	Vapor Pressures and Vaporization Enthalpy of 2-Ethoxyphenol
pvap	2.83	kPa	380.22	Vapor Pressures and Vaporization Enthalpy of 2-Ethoxyphenol

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Vapor Pressures and Vaporization Enthalpy of 2-Ethoxyphenol:	https://www.doi.org/10.1021/je300784x
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=C94713&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
pvap:	Vapor pressure
rinpol:	Non-polar retention indices
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume