

Phenol, 4-(1-propenyl)

Other names:	4-Propenylphenol
Inchi:	InChI=1S/C9H10O/c1-2-3-8-4-6-9(10)7-5-8/h2-7,10H,1H3/b3-2+
InchiKey:	UMFCIIBZHQXRCJ-NSCUHMNNSA-N
Formula:	C9H10O
SMILES:	CC=Cc1ccc(O)cc1
Mol. weight [g/mol]:	134.18

Physical Properties

Property code	Value	Unit	Source
gf	62.91	kJ/mol	Joback Method
hf	-52.65	kJ/mol	Joback Method
hfus	19.09	kJ/mol	Joback Method
hvap	50.88	kJ/mol	Joback Method
log10ws	-2.26		Crippen Method
logp	2.425		Crippen Method
mcvol	115.480	ml/mol	McGowan Method
pc	4162.33	kPa	Joback Method
ripol	2343.00		NIST Webbook
ripol	2343.00		NIST Webbook
tb	516.78	K	Joback Method
tc	749.81	K	Joback Method
tf	324.25	K	Joback Method
vc	0.378	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	249.07	J/molxK	516.78	Joback Method
cpg	301.67	J/molxK	710.97	Joback Method
cpg	292.74	J/molxK	672.13	Joback Method
cpg	283.12	J/molxK	633.30	Joback Method
cpg	272.71	J/molxK	594.46	Joback Method
cpg	261.39	J/molxK	555.62	Joback Method
cpg	310.01	J/molxK	749.81	Joback Method

dvisc	0.0000624	Paxs	516.78	Joback Method
dvisc	0.0001000	Paxs	484.69	Joback Method
dvisc	0.0001713	Paxs	452.60	Joback Method
dvisc	0.0003185	Paxs	420.51	Joback Method
dvisc	0.0006563	Paxs	388.43	Joback Method
dvisc	0.0015405	Paxs	356.34	Joback Method
dvisc	0.0042810	Paxs	324.25	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R270696&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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