1H-Imidazole, 1-ethyl-

Other names:	1-ethyl-1H-imidazole
	1-ethylimidazole
	Imidazole, 1-ethyl-
	N-Ethylimidazole
Inchi:	InChI=1S/C5H8N2/c1-2-7-4-3-6-5-7/h3-5H,2H2,1H3
InchiKey:	IWDFHWZHHOSSGR-UHFFFAOYSA-N
Formula:	C5H8N2
SMILES:	CCn1ccnc1
Mol. weight [g/mol]:	96.13
CAS:	7098-07-9

Physical Properties

Property code	Value	Unit	Source
hvap	66.00 ± 3.90	kJ/mol	NIST Webbook
log10ws	-1.50		Crippen Method
logp	0.903		Crippen Method
mcvol	81.810	ml/mol	McGowan Method
rinpol	991.00		NIST Webbook
rinpol	991.00		NIST Webbook
rinpol	990.00		NIST Webbook
ripol	1714.00		NIST Webbook
ripol	1714.00		NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hvapt	57.53	kJ/mol	298.15	Thermochemistry of 1-alkylimidazoles
rhol	998.60	kg/m3	293.15	Towards understanding the effect of electrostatic interactions on the density of ionic liquids

rhol	995.20	kg/m3	298.15	Towards understanding the effect of electrostatic interactions on the density of ionic liquids
rhol	991.30	kg/m3	303.15	Towards understanding the effect of electrostatic interactions on the density of ionic liquids
rhol	987.40	kg/m3	308.15	Towards understanding the effect of electrostatic interactions on the density of ionic liquids
rhol	983.50	kg/m3	313.15	Towards understanding the effect of electrostatic interactions on the density of ionic liquids
rhol	978.70	kg/m3	318.15	Towards understanding the effect of electrostatic interactions on the density of ionic liquids
rhol	974.80	kg/m3	323.15	Towards understanding the effect of electrostatic interactions on the density of ionic liquids

Sources

Ternary Liquid-Liquid Equilibria Measurement for Benzene + Cyclohexane + N-Methylimidazole, or N-Ethylimidazole, or N-Methylimidazolium	https://www.doi.org/10.1021/je800376f
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C7098079&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Dibutylphosphate at 298.2 K and Atmospheric Pressure:	
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Towards understanding the effect of electrostatic interactions on the density of ionic liquids:	https://www.doi.org/10.1016/j.fluid.2009.02.011
Thermochemistry of 1-alkylimidazoles:	https://www.doi.org/10.1016/j.jct.2014.08.020

Legend

hvap:	Enthalpy of vaporization at standard conditions
hvapt:	Enthalpy of vaporization at a given temperature
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
rhol:	Liquid Density
rinpol:	Non-polar retention indices
ripol:	Polar retention indices