2-Pyrrolidinone, 1-ethenyl-

Other names:	1-Ethenyl-2-pyrrolidinone		
	1-Vinyl-2-pyrrolidinone		
	1-Vinyl-2-pyrrolidinone, monomer		
	1-Vinyl-2-pyrrolidone		
	1-Vinylpyrrolidinone		
	1-Vinylpyrrolidone		
	2-Pyrrolidinone, 1-vinyl-		
	N-Vinyl-2-pyrrolidinone		
	N-Vinyl-2-pyrrolidone		
	N-Vinylpyrrolidinone		
	N-vinylpyrrolidone		
	NSC 10222		
	V-Pyrol		
	Vinyl-2-pyrrolidone		
	Vinylbutyrolactam		
	Vinylpyrrolidinone		
	Vinylpyrrolidone		
	pyrrolidone, N-vinyl-		
Inchi:	InChI=1S/C6H9NO/c1-2-7-5-3-4-6(7)8/h2H,1,3-5H2		
InchiKey:	WHNWPMSKXPGLAX-UHFFFAOYSA-N		
Formula:	C6H9NO		
SMILES:	C=CN1CCCC1=O		
Mol. weight [g/mol]:	111.14		
CAS:	88-12-0		

Physical Properties

Property code	Value	Unit	Source
log10ws	-0.92		Crippen Method
logp	0.752		Crippen Method
mcvol	91.790	ml/mol	McGowan Method
rinpol	1102.00		NIST Webbook
rinpol	1102.00		NIST Webbook
rinpol	1077.00		NIST Webbook
rinpol	1102.00		NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source	
dvisc	0.0018360	Paxs	338.15 1-N 1-\	Densities, Viscosities, Speeds of Sound, and Relative Permittivities for Water + Cyclic Amides (2-Pyrrolidinone, 1ethyl-2-pyrrolidinon and √inyl-2-pyrrolidinon at Different Temperatures	ne, e)
dvisc	0.0022590	Paxs	328.15 1-N 1-\	Densities, Viscosities, Speeds of Sound, and Relative Permittivities for Water + Cyclic Amides (2-Pyrrolidinone, tethyl-2-pyrrolidinon and √inyl-2-pyrrolidinon at Different Temperatures	ne, e)
dvisc	0.0025900	Paxs	318.15 1-N 1-\	Densities, Viscosities, Speeds of Sound, and Relative Permittivities for Water + Cyclic Amides (2-Pyrrolidinone, 1ethyl-2-pyrrolidinon and √inyl-2-pyrrolidinon at Different Temperatures	ne, e)
dvisc	0.0029420	Paxs	308.15 1-N 1-\	Densities, Viscosities, Speeds of Sound, and Relative Permittivities for Water + Cyclic Amides (2-Pyrrolidinone, 1ethyl-2-pyrrolidinon and √inyl-2-pyrrolidinon at Different Temperatures	ne, e)

dvisc	0.0043220	Pa×s	298.15 Densities, Viscosities, Speeds of Sound, and Relative Permittivities for Water + Cyclic Amides (2-Pyrrolidinone, 1-Methyl-2-pyrrolidinone, and 1-Vinyl-2-pyrrolidinone) at Different Temperatures	
hfust	15.28	kJ/mol	286.20 NIST Webbook	
hfust	15.28	kJ/mol	286.20 NIST Webbook	
rhol	1017.33	kg/m3	323.15 Density, Refractive Index, and Speed of Sound of the Binary Mixture of 1-Butyl-3-methylimidazolium Tetrafluoroborate	
			N-Vinyl-2-pyrrolidinone from T = (298.15 to 323.15) K at Atmospheric Pressure	
rhol	1026.14	kg/m3	313.15 Density, Refractive Index, and Speed of Sound of the Binary Mixture of 1-Butyl-3-methylimidazolium Tetrafluoroborate + N-Vinyl-2-pyrrolidinone	
			from T = (298.15 to 323.15) K at Atmospheric Pressure	
rhol	1030.55	kg/m3	308.15 Density, Refractive Index, and Speed of Sound of the Binary Mixture of 1-Butyl-3-methylimidazolium Tetrafluoroborate + N-Vinyl-2-pyrrolidinone from T = (298.15 to 323.15) K at Atmospheric Pressure	

rhol	1034.95	kg/m3	303.15 Density, Refractive Index, and Speed of Sound of the Binary Mixture of 1-Butyl-3-methylimidazolium Tetrafluoroborate + N-Vinyl-2-pyrrolidinone from T = (298.15 to 323.15) K at Atmospheric Pressure
rhol	1039.36	kg/m3	298.15 Density, Refractive Index, and Speed of Sound of the Binary Mixture of 1-Butyl-3-methylimidazolium Tetrafluoroborate + N-Vinyl-2-pyrrolidinone from T = (298.15 to 323.15) K at Atmospheric Pressure
rhol	1021.73	kg/m3	318.15 Density, Refractive Index, and Speed of Sound of the Binary Mixture of 1-Butyl-3-methylimidazolium Tetrafluoroborate + N-Vinyl-2-pyrrolidinone from T = (298.15 to 323.15) K at Atmospheric Pressure

Sources

Densities, Viscosities, Speeds of

Crippen Method:

Molecular interaction between binary mixtures 1-butyl-3-methylimidazolium Sciubility of Active States and Nevenyas2-pyrrolidinone at different températurés:

https://www.doi.org/10.1021/je0340809 Densities, Viscosities, Speeds of Sound, and Relative Permittivities for Wine with the subscription of the http://link.springer.com/article/10.1007/BF02311772 http://webbook.nist.gov/cgi/cbook.cgi?ID=C88120&Units=SI http://pubs.acs.org/doi/abs/10.1021/ci990307I https://www.chemeo.com/doc/models/crippen_log10ws https://www.doi.org/10.1016/j.jct.2017.01.014 https://www.doi.org/10.1021/acs.jced.8b00126

Legend

dvisc:	Dynamic viscosity
hfust:	Enthalpy of fusion 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

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