

1-Ethyl-2-pyrrolidinone

Other names:	1-Ethyl-2-pyrrolidone
	1-ethylpyrrolidin-2-one
	2-Pyrrolidinone, 1-ethyl-
	Agsol Ex 2
	N-Ethyl-2-pyrrolidone
	N-Ethylpyrrolidinone
	N-Ethylpyrrolidone
Inchi:	InChI=1S/C6H11NO/c1-2-7-5-3-4-6(7)8/h2-5H2,1H3
InchiKey:	ZFPGARUNNKGOBB-UHFFFAOYSA-N
Formula:	C6H11NO
SMILES:	CCN1CCCC1=O
Mol. weight [g/mol]:	113.16
CAS:	2687-91-4

Physical Properties

Property code	Value	Unit	Source
log10ws	-0.57		Crippen Method
logp	0.629		Crippen Method
mcvol	96.090	ml/mol	McGowan Method
ripol	1856.00		NIST Webbook
ripol	1856.00		NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
rfi	1.46461		293.00	Influence of Temperature and Composition upon Density, Viscosity, Speed of Sound, and Refractive Index of Aqueous Solutions of 1-Ethyl-2-pyrrolidinone

rfi	1.46192		298.00	Influence of Temperature and Composition upon Density, Viscosity, Speed of Sound, and Refractive Index of Aqueous Solutions of 1-Ethyl-2-pyrrolidinone
rfi	1.45791		303.00	Influence of Temperature and Composition upon Density, Viscosity, Speed of Sound, and Refractive Index of Aqueous Solutions of 1-Ethyl-2-pyrrolidinone
rfi	1.45415		313.00	Influence of Temperature and Composition upon Density, Viscosity, Speed of Sound, and Refractive Index of Aqueous Solutions of 1-Ethyl-2-pyrrolidinone
rfi	1.45147		323.00	Influence of Temperature and Composition upon Density, Viscosity, Speed of Sound, and Refractive Index of Aqueous Solutions of 1-Ethyl-2-pyrrolidinone
rhoI	989.14	kg/m3	303.15	Density, Speed of Sound, Viscosity, and Excess Properties of N-Ethyl-2-pyrrolidone + 2-(Methylamino)ethanol [or 2-(Ethylamino)ethanol] from T = (293.15 to 323.15) K
rhoI	997.71	kg/m3	293.15	Density, Speed of Sound, Viscosity, and Excess Properties of N-Ethyl-2-pyrrolidone + 2-(Methylamino)ethanol [or 2-(Ethylamino)ethanol] from T = (293.15 to 323.15) K

rhoI	980.56	kg/m3	313.15	Density, Speed of Sound, Viscosity, and Excess Properties of N-Ethyl-2-pyrrolidone + 2-(Methylamino)ethanol [or 2-(Ethylamino)ethanol] from T = (293.15 to 323.15) K
rhoI	971.96	kg/m3	323.15	Density, Speed of Sound, Viscosity, and Excess Properties of N-Ethyl-2-pyrrolidone + 2-(Methylamino)ethanol [or 2-(Ethylamino)ethanol] from T = (293.15 to 323.15) K
speedsl	1513.20	m/s	293.15	Density, Speed of Sound, Viscosity, Surface Tension, and Excess Volume of N-Ethyl-2-pyrrolidone + Ethanolamine (or Diethanolamine or Triethanolamine) from T = (293.15 to 323.15) K
speedsl	1475.00	m/s	303.15	Density, Speed of Sound, Viscosity, Surface Tension, and Excess Volume of N-Ethyl-2-pyrrolidone + Ethanolamine (or Diethanolamine or Triethanolamine) from T = (293.15 to 323.15) K

speedsl	1437.60	m/s	313.15	Density, Speed of Sound, Viscosity, Surface Tension, and Excess Volume of N-Ethyl-2-pyrrolidone + Ethanolamine (or Diethanolamine or Triethanolamine) from T = (293.15 to 323.15) K
speedsl	1400.60	m/s	323.15	Density, Speed of Sound, Viscosity, Surface Tension, and Excess Volume of N-Ethyl-2-pyrrolidone + Ethanolamine (or Diethanolamine or Triethanolamine) from T = (293.15 to 323.15) K

Sources

High Pressure Phase Behavior of Carbon Dioxide + N-Ethyl-2-pyrrolidone and Carbon Dioxide + N-Ethyl-2-pyrrolidone + Ethanolamine (or Diethanolamine or Triethanolamine) from T = (293.15 to 323.15) K
 Density, Speed of Sound, Viscosity, Surface Tension, and Excess Volume of N-Ethyl-2-pyrrolidone + Ethanolamine (or Diethanolamine or Triethanolamine) from T = (293.15 to 323.15) K
 Surface Tension of Aqueous Solutions of Short N-Alkyl-2-pyrrolidinones: Influence of Temperature and Composition upon Density, Viscosity, Speed of Sound, and Refractive Index of Aqueous Solutions of 1-Ethyl-2-pyrrolidinone:

<https://www.doi.org/10.1021/je0301545>
<https://www.doi.org/10.1021/je301123j>
https://www.chemeo.com/doc/models/crippen_log10ws
<https://www.doi.org/10.1021/je500917k>
<http://link.springer.com/article/10.1007/BF02311772>
<https://www.doi.org/10.1021/je4005883>
<http://webbook.nist.gov/cgi/cbook.cgi?ID=C2687914&Units=SI>
<https://www.doi.org/10.1021/je800589e>
<https://www.doi.org/10.1021/je9003959>
<http://pubs.acs.org/doi/abs/10.1021/ci990307I>

Legend

log10ws: Log10 of Water solubility in mol/l
 logp: Octanol/Water partition coefficient
 mcvol: McGowan's characteristic volume

rfi:	Refractive Index
rho:	Liquid Density
ripol:	Polar retention indices
speedsl:	Speed of sound in fluid

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