

# 1-Ethyl-2-pyrrolidinone

<b>Other names:</b>	1-Ethyl-2-pyrrolidone 1-ethylpyrrolidin-2-one 2-Pyrrolidinone, 1-ethyl- Agsol Ex 2 N-Ethyl-2-pyrrolidone N-Ethylpyrrolidinone N-Ethylpyrrolidone NEP
<b>Inchi:</b>	InChI=1S/C6H11NO/c1-2-7-5-3-4-6(7)8/h2-5H2,1H3
<b>InchiKey:</b>	ZFPGARUNNKGOBB-UHFFFAOYSA-N
<b>Formula:</b>	C6H11NO
<b>SMILES:</b>	CCN1CCCC1=O
<b>Mol. weight [g/mol]:</b>	113.16
<b>CAS:</b>	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
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## 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
rhol	989.14	kg/m <sup>3</sup>	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
rhol	997.71	kg/m <sup>3</sup>	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

Density, Speed of Sound, and Viscosity of Monoethanolamine + Water + N-Ethyl-2-pyrrolidone from T = (293.15 to 323.15) K: Crippen Method: <https://www.doi.org/10.1021/je4005883>  
<http://link.springer.com/article/10.1007/BF02311772>  
<http://pubs.acs.org/doi/abs/10.1021/ci9903071>

High Pressure Phase Behavior of Carbon Dioxide + Density, Speed of Sound, Viscosity, Surface Tension, and Excess Volume of N-Ethyl-2-pyrrolidone or Diethanolamine or Triethanolamine) from T = (293.15 to 323.15) K: Crippen Method: <https://www.doi.org/10.1021/je0301545>  
<https://www.doi.org/10.1021/je301123j>  
<https://www.doi.org/10.1021/je800589e>  
<http://webbook.nist.gov/cgi/cbook.cgi?ID=C2687914&Units=SI>  
[https://www.chemeo.com/doc/models/crippen\\_log10ws](https://www.chemeo.com/doc/models/crippen_log10ws)

Density, Speed of Sound, Viscosity, and Excess Properties of N-Ethyl-2-pyrrolidone and Compositions in the Density, Viscosity, Speed of Sound, and Refractive Index of Aqueous Solutions of 1-Ethyl-2-pyrrolidinone: <https://www.doi.org/10.1021/je500917k>  
<https://www.doi.org/10.1021/je9003959>

## Legend

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

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

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