

N-octyl-2-pyrrolidone

Other names:	1-octyl-2-pyrrolidinone 1-octyl-2-pyrrolidone N-octyl-2-pyrrolidinone
Inchi:	InChI=1S/C12H23NO/c1-2-3-4-5-6-7-10-13-11-8-9-12(13)14/h2-11H2,1H3
InchiKey:	WPPOGHDFAVQKLN-UHFFFAOYSA-N
Formula:	C12H23NO
SMILES:	CCCCCCCCN1CCCC1=O
Mol. weight [g/mol]:	197.32

Physical Properties

Property code	Value	Unit	Source
log10ws	-3.09		Crippen Method
logp	2.969		Crippen Method
mcvol	180.630	ml/mol	McGowan Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
rfi	1.46346		298.15	Excess thermodynamic properties of ionic liquid 1-butyl-3-methylimidazolium tetrafluoroborate and N-octyl-2-pyrrolidone from T = (298.15 to 323.15) K at atmospheric pressure

rfi	1.45761	313.15	Excess thermodynamic properties of ionic liquid 1-butyl-3-methylimidazolium tetrafluoroborate and N-octyl-2-pyrrolidone from T = (298.15 to 323.15) K at atmospheric pressure
rfi	1.45955	308.15	Excess thermodynamic properties of ionic liquid 1-butyl-3-methylimidazolium tetrafluoroborate and N-octyl-2-pyrrolidone from T = (298.15 to 323.15) K at atmospheric pressure
rfi	1.45367	323.15	Excess thermodynamic properties of ionic liquid 1-butyl-3-methylimidazolium tetrafluoroborate and N-octyl-2-pyrrolidone from T = (298.15 to 323.15) K at atmospheric pressure
rfi	1.46152	303.15	Excess thermodynamic properties of ionic liquid 1-butyl-3-methylimidazolium tetrafluoroborate and N-octyl-2-pyrrolidone from T = (298.15 to 323.15) K at atmospheric pressure
rfi	1.45564	318.15	Excess thermodynamic properties of ionic liquid 1-butyl-3-methylimidazolium tetrafluoroborate and N-octyl-2-pyrrolidone from T = (298.15 to 323.15) K at atmospheric pressure

rhoI	900.17	kg/m3	323.15	Excess thermodynamic properties of ionic liquid 1-butyl-3-methylimidazolium tetrafluoroborate and N-octyl-2-pyrrolidone from T = (298.15 to 323.15) K at atmospheric pressure
rhoI	914.80	kg/m3	303.15	Excess thermodynamic properties of ionic liquid 1-butyl-3-methylimidazolium tetrafluoroborate and N-octyl-2-pyrrolidone from T = (298.15 to 323.15) K at atmospheric pressure
rhoI	911.14	kg/m3	308.15	Excess thermodynamic properties of ionic liquid 1-butyl-3-methylimidazolium tetrafluoroborate and N-octyl-2-pyrrolidone from T = (298.15 to 323.15) K at atmospheric pressure
rhoI	907.49	kg/m3	313.15	Excess thermodynamic properties of ionic liquid 1-butyl-3-methylimidazolium tetrafluoroborate and N-octyl-2-pyrrolidone from T = (298.15 to 323.15) K at atmospheric pressure
rhoI	903.83	kg/m3	318.15	Excess thermodynamic properties of ionic liquid 1-butyl-3-methylimidazolium tetrafluoroborate and N-octyl-2-pyrrolidone from T = (298.15 to 323.15) K at atmospheric pressure

rhoI	918.45	kg/m3	298.15	Excess thermodynamic properties of ionic liquid 1-butyl-3-methylimidazolium tetrafluoroborate and N-octyl-2-pyrrolidone from T = (298.15 to 323.15) K at atmospheric pressure
speedsl	1363.97	m/s	323.15	Excess thermodynamic properties of ionic liquid 1-butyl-3-methylimidazolium tetrafluoroborate and N-octyl-2-pyrrolidone from T = (298.15 to 323.15) K at atmospheric pressure
speedsl	1380.92	m/s	318.15	Excess thermodynamic properties of ionic liquid 1-butyl-3-methylimidazolium tetrafluoroborate and N-octyl-2-pyrrolidone from T = (298.15 to 323.15) K at atmospheric pressure
speedsl	1415.26	m/s	308.15	Excess thermodynamic properties of ionic liquid 1-butyl-3-methylimidazolium tetrafluoroborate and N-octyl-2-pyrrolidone from T = (298.15 to 323.15) K at atmospheric pressure
speedsl	1432.64	m/s	303.15	Excess thermodynamic properties of ionic liquid 1-butyl-3-methylimidazolium tetrafluoroborate and N-octyl-2-pyrrolidone from T = (298.15 to 323.15) K at atmospheric pressure

speedsl	1450.18	m/s	298.15	Excess thermodynamic properties of ionic liquid 1-butyl-3-methylimidazolium tetrafluoroborate and N-octyl-2-pyrrolidone from T = (298.15 to 323.15) K at atmospheric pressure
speedsl	1398.02	m/s	313.15	Excess thermodynamic properties of ionic liquid 1-butyl-3-methylimidazolium tetrafluoroborate and N-octyl-2-pyrrolidone from T = (298.15 to 323.15) K at atmospheric pressure

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Excess thermodynamic properties of ionic liquid 1-butyl-3-methylimidazolium tetrafluoroborate and N-octyl-2-pyrrolidone from T = (298.15 to 323.15) K at atmospheric pressure:	https://www.doi.org/10.1016/j.jct.2015.06.005
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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
speedsl:	Speed of sound in fluid

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