

N,N-Dimethylacetamide

Other names:	Acetamide, N,N-dimethyl- Acetdimethylamide Acetic acid dimethylamide Acetyl dimethylamine CBC 510337 CH3CON(CH3)2 DMA DMAc Dimethylacetamide Dimethylamid kyseliny octove Dimethylamide acetate Hallucinogen N,N-Dimethylethanamide N,N-dimethylacetamide [DMA] NSC 3138 SK 7176 U-5954
Inchi:	InChI=1S/C4H9NO/c1-4(6)5(2)3/h1-3H3
InchiKey:	FXHOOIRPVKKKFG-UHFFFAOYSA-N
Formula:	C4H9NO
SMILES:	CC(=O)N(C)C
Mol. weight [g/mol]:	87.12
CAS:	127-19-5

Physical Properties

Property code	Value	Unit	Source
affp	908.00	kJ/mol	NIST Webbook
basg	877.00	kJ/mol	NIST Webbook
chl	-2582.00 ± 1.50	kJ/mol	NIST Webbook
cpl	175.49	J/molxK	Volumes, Heat Capacities, and Compressibilities of the Mixtures of Acetonitrile with N,N-Dimethylacetamide and Propylene Carbonate
gf	-35.34	kJ/mol	Joback Method
hf	-170.94	kJ/mol	Joback Method
hfl	-278.30 ± 1.50	kJ/mol	NIST Webbook

hfl	-298.20	kJ/mol	NIST Webbook
hfl	-300.10	kJ/mol	NIST Webbook
hfus	50.66	kJ/mol	Enthalpies of vaporization of N,N-dialkyl monamides at 298.15K
hfus	10.20	kJ/mol	Thermodynamic properties of N,N-dimethylformamide and N,N-dimethylacetamide
hvap	53.70 ± 0.40	kJ/mol	NIST Webbook
hvap	54.10	kJ/mol	NIST Webbook
hvap	50.20	kJ/mol	NIST Webbook
hvap	50.70 ± 0.70	kJ/mol	NIST Webbook
hvap	45.80	kJ/mol	NIST Webbook
hvap	46.00 ± 2.00	kJ/mol	NIST Webbook
hvap	43.70	kJ/mol	NIST Webbook
ie	9.20 ± 0.05	eV	NIST Webbook
ie	8.81	eV	NIST Webbook
ie	9.43	eV	NIST Webbook
ie	8.81 ± 0.03	eV	NIST Webbook
log10ws	1.11		Estimated Solubility Method
log10ws	1.11		Aqueous Solubility Prediction Method
logp	0.094		Crippen Method
mcvol	78.770	ml/mol	McGowan Method
pc	4211.09	kPa	Joback Method
rinpol	833.30		NIST Webbook
rinpol	883.00		NIST Webbook
rinpol	833.00		NIST Webbook
rinpol	833.30		NIST Webbook
rinpol	820.00		NIST Webbook
rinpol	835.00		NIST Webbook
rinpol	840.00		NIST Webbook
rinpol	835.00		NIST Webbook
ripol	1437.00		NIST Webbook
ripol	1437.00		NIST Webbook
ripol	1414.00		NIST Webbook
ripol	1409.00		NIST Webbook
ripol	1414.00		NIST Webbook
ripol	1384.00		NIST Webbook
tb	439.15	K	Vapor-Liquid Equilibrium for Binary of 1-Butanol + N,N-Dimethylacetamide and Methyl Isobutyl Ketone + N,N-Dimethylacetamide at 101.3 kPa

tb	438.77	K	Vapor-Liquid Equilibrium Data for N-Methylacetamide and N,N-Dimethylacetamide with Cumene at 97.3 kPa
tb	439.05	K	Isobaric vapour-liquid equilibrium measurements and extractive distillation process for the azeotrope of (N,N-dimethylisopropylamine + acetone)
tb	438.95	K	Experimental isobaric vapour-liquid equilibrium data for the binary system (N, N-dimethyl acetamide + dimethyl sulfoxide) and the quaternary system (sec-butyl acetate + sec-butyl alcohol + N, N-dimethyl acetamide + dimethyl sulfoxide) at 101.3 kPa
tb	439.25	K	Vapor Liquid Equilibrium Data for Binary Systems of N,N-Dimethylacetamide with Cyclohexene, Cyclohexane, and Benzene Separately at Atmospheric Pressure
tb	438.20	K	NIST Webbook
tc	534.50	K	Joback Method
tf	217.24	K	Joback Method
vc	0.283	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	158.37	J/mol×K	445.86	Joback Method
cpg	150.46	J/mol×K	416.32	Joback Method
cpg	142.19	J/mol×K	386.77	Joback Method
cpg	180.05	J/mol×K	534.50	Joback Method
cpg	173.16	J/mol×K	504.95	Joback Method
cpg	165.94	J/mol×K	475.41	Joback Method
cpg	133.54	J/mol×K	357.23	Joback Method
cpl	178.20	J/mol×K	298.15	NIST Webbook

dvisc	0.0007630	Paxs	318.15	Density, Viscosity, and Speed of Sound of (1-Octanol + 2-Methoxyethanol), (1-Octanol + N,N-Dimethylacetamide), and (1-Octanol + Acetophenone) at Temperatures of (298.15, 308.15, and 318.15) K
dvisc	0.0008410	Paxs	308.15	Density, Viscosity, and Speed of Sound of (1-Octanol + 2-Methoxyethanol), (1-Octanol + N,N-Dimethylacetamide), and (1-Octanol + Acetophenone) at Temperatures of (298.15, 308.15, and 318.15) K
dvisc	0.0009370	Paxs	298.15	Density, Viscosity, and Speed of Sound of (1-Octanol + 2-Methoxyethanol), (1-Octanol + N,N-Dimethylacetamide), and (1-Octanol + Acetophenone) at Temperatures of (298.15, 308.15, and 318.15) K
hfust	10.20	kJ/mol	254.20	NIST Webbook
hfust	10.42	kJ/mol	251.40	NIST Webbook
hfust	8.20	kJ/mol	253.20	NIST Webbook
hvapt	45.20	kJ/mol	333.00	NIST Webbook
hvapt	45.10	kJ/mol	397.00	NIST Webbook
hvapt	67.90	kJ/mol	367.50	NIST Webbook
pvap	1.53	kPa	328.15	Vapor Pressures of Propylene Carbonate and N,N-Dimethylacetamide
pvap	17.50	kPa	383.15	Vapor Pressures of Propylene Carbonate and N,N-Dimethylacetamide
pvap	14.52	kPa	378.15	Vapor Pressures of Propylene Carbonate and N,N-Dimethylacetamide
pvap	11.98	kPa	373.15	Vapor Pressures of Propylene Carbonate and N,N-Dimethylacetamide

pvap	9.81	kPa	368.15	Vapor Pressures of Propylene Carbonate and N,N-Dimethylacetamide
pvap	8.00	kPa	363.15	Vapor Pressures of Propylene Carbonate and N,N-Dimethylacetamide
pvap	5.19	kPa	353.15	Vapor Pressures of Propylene Carbonate and N,N-Dimethylacetamide
pvap	4.13	kPa	348.15	Vapor Pressures of Propylene Carbonate and N,N-Dimethylacetamide
pvap	3.27	kPa	343.15	Vapor Pressures of Propylene Carbonate and N,N-Dimethylacetamide
pvap	2.56	kPa	338.15	Vapor Pressures of Propylene Carbonate and N,N-Dimethylacetamide
pvap	1.98	kPa	333.15	Vapor Pressures of Propylene Carbonate and N,N-Dimethylacetamide
pvap	21.01	kPa	388.15	Vapor Pressures of Propylene Carbonate and N,N-Dimethylacetamide
pvap	1.16	kPa	323.15	Vapor Pressures of Propylene Carbonate and N,N-Dimethylacetamide
pvap	0.89	kPa	318.15	Vapor Pressures of Propylene Carbonate and N,N-Dimethylacetamide
pvap	0.68	kPa	313.15	Vapor Pressures of Propylene Carbonate and N,N-Dimethylacetamide
pvap	0.52	kPa	308.15	Vapor Pressures of Propylene Carbonate and N,N-Dimethylacetamide
pvap	0.39	kPa	303.15	Vapor Pressures of Propylene Carbonate and N,N-Dimethylacetamide
pvap	0.29	kPa	298.15	Vapor Pressures of Propylene Carbonate and N,N-Dimethylacetamide

pvap	101.30	kPa	439.15	Vapor-Liquid Equilibrium for Binary of 1-Butanol + N,N-Dimethylacetamide and Methyl Isobutyl Ketone + N,N-Dimethylacetamide at 101.3 kPa
pvap	8.46	kPa	363.15	Vapor Liquid Equilibrium and Excess Enthalpy Data for Systems Containing N,N-Dimethylacetamide
pvap	5.37	kPa	353.15	Vapor Liquid Equilibrium and Excess Enthalpy Data for Systems Containing N,N-Dimethylacetamide
pvap	5.35	kPa	353.15	Vapor Liquid Equilibrium and Excess Enthalpy Data for Systems Containing N,N-Dimethylacetamide
pvap	5.32	kPa	353.15	Vapor Liquid Equilibrium and Excess Enthalpy Data for Systems Containing N,N-Dimethylacetamide
pvap	5.31	kPa	353.15	Vapor Liquid Equilibrium and Excess Enthalpy Data for Systems Containing N,N-Dimethylacetamide
pvap	5.29	kPa	353.15	Vapor Liquid Equilibrium and Excess Enthalpy Data for Systems Containing N,N-Dimethylacetamide
pvap	3.39	kPa	343.15	Vapor Liquid Equilibrium and Excess Enthalpy Data for Systems Containing N,N-Dimethylacetamide
pvap	2.23	kPa	333.15	Vapor Liquid Equilibrium and Excess Enthalpy Data for Systems Containing N,N-Dimethylacetamide

pvap	1.64	kPa	328.15	Vapor Liquid Equilibrium and Excess Enthalpy Data for Systems Containing N,N-Dimethylacetamide
pvap	1.61	kPa	328.15	Vapor Liquid Equilibrium and Excess Enthalpy Data for Systems Containing N,N-Dimethylacetamide
pvap	101.33	kPa	439.25	Vapor Liquid Equilibrium Data for Binary Systems of N,N-Dimethylacetamide with Cyclohexene, Cyclohexane, and Benzene Separately at Atmospheric Pressure
pvap	101.30	kPa	439.05	Isobaric vapour-liquid equilibrium measurements and extractive distillation process for the azeotrope of (N,N-dimethylisopropylamine + acetone)
pvap	0.66	kPa	313.15	(Vapour + liquid) equilibrium in (N,N-dimethylacetamide + ethanol + water) at the temperature 313.15 K
pvap	64.73	kPa	423.15	Thermodynamic properties of (LiCl + N,N-dimethylacetamide) and (LiBr + N,N-dimethylacetamide) at temperatures from (323.15 to 423.15) K
pvap	48.09	kPa	413.15	Thermodynamic properties of (LiCl + N,N-dimethylacetamide) and (LiBr + N,N-dimethylacetamide) at temperatures from (323.15 to 423.15) K

pvap	35.04	kPa	403.15	Thermodynamic properties of (LiCl + N,N-dimethylacetamide) and (LiBr + N,N-dimethylacetamide) at temperatures from (323.15 to 423.15) K
pvap	25.03	kPa	393.15	Thermodynamic properties of (LiCl + N,N-dimethylacetamide) and (LiBr + N,N-dimethylacetamide) at temperatures from (323.15 to 423.15) K
pvap	17.55	kPa	383.15	Thermodynamic properties of (LiCl + N,N-dimethylacetamide) and (LiBr + N,N-dimethylacetamide) at temperatures from (323.15 to 423.15) K
pvap	12.00	kPa	373.15	Thermodynamic properties of (LiCl + N,N-dimethylacetamide) and (LiBr + N,N-dimethylacetamide) at temperatures from (323.15 to 423.15) K
pvap	25.03	kPa	393.15	Vapor Pressures of Propylene Carbonate and N,N-Dimethylacetamide
pvap	5.19	kPa	353.15	Thermodynamic properties of (LiCl + N,N-dimethylacetamide) and (LiBr + N,N-dimethylacetamide) at temperatures from (323.15 to 423.15) K
pvap	3.27	kPa	343.15	Thermodynamic properties of (LiCl + N,N-dimethylacetamide) and (LiBr + N,N-dimethylacetamide) at temperatures from (323.15 to 423.15) K

pvap	1.98	kPa	333.15	Thermodynamic properties of (LiCl + N,N-dimethylacetamide) and (LiBr + N,N-dimethylacetamide) at temperatures from (323.15 to 423.15) K
pvap	1.16	kPa	323.15	Thermodynamic properties of (LiCl + N,N-dimethylacetamide) and (LiBr + N,N-dimethylacetamide) at temperatures from (323.15 to 423.15) K
pvap	1.48	kPa	328.30	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides
pvap	1.28	kPa	325.80	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides
pvap	1.13	kPa	323.30	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides
pvap	1.11	kPa	323.20	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides
pvap	1.00	kPa	320.80	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides
pvap	0.84	kPa	318.20	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides
pvap	0.73	kPa	316.40	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides
pvap	0.71	kPa	315.70	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides

pvap	0.60	kPa	313.20	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides
pvap	0.60	kPa	313.10	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides
pvap	0.50	kPa	310.60	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides
pvap	0.43	kPa	308.10	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides
pvap	0.44	kPa	308.00	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides
pvap	0.38	kPa	305.60	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides
pvap	0.35	kPa	305.20	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides
pvap	0.32	kPa	303.20	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides
pvap	0.31	kPa	303.00	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides
pvap	0.27	kPa	300.70	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides
pvap	0.23	kPa	298.20	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides
pvap	0.23	kPa	298.10	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides

pvap	0.20	kPa	296.30	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides
pvap	0.16	kPa	293.20	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides
pvap	0.14	kPa	291.20	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides
pvap	0.13	kPa	290.80	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides
pvap	29.69	kPa	398.15	Vapor Pressures of Propylene Carbonate and N,N-Dimethylacetamide
pvap	0.10	kPa	286.40	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides
pvap	0.08	kPa	283.00	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides
pvap	0.07	kPa	281.30	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides
pvap	0.06	kPa	279.70	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides
pvap	0.05	kPa	278.20	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides
pvap	0.05	kPa	276.50	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides
pvap	35.02	kPa	403.15	Vapor Pressures of Propylene Carbonate and N,N-Dimethylacetamide

pvap	41.11	kPa	408.15	Vapor Pressures of Propylene Carbonate and N,N-Dimethylacetamide
pvap	48.06	kPa	413.15	Vapor Pressures of Propylene Carbonate and N,N-Dimethylacetamide
pvap	55.91	kPa	418.15	Vapor Pressures of Propylene Carbonate and N,N-Dimethylacetamide
pvap	64.78	kPa	423.15	Vapor Pressures of Propylene Carbonate and N,N-Dimethylacetamide
pvap	8.00	kPa	363.15	Thermodynamic properties of (LiCl + N,N-dimethylacetamide) and (LiBr + N,N-dimethylacetamide) at temperatures from (323.15 to 423.15) K
pvap	0.11	kPa	288.20	Vapour pressures and enthalpies of vaporisation of N,N-di-alkylacetamides
rfi	1.43460		298.15	Partial Molar Volumes of N,N'-1,2-Ethyl-bis(salicyladimine) Schiff Base (Salen) in Organic Solvents at T = (283.15 to 318.15) K
rfi	1.43820		288.15	Partial Molar Volumes of N,N'-1,2-Ethyl-bis(salicyladimine) Schiff Base (Salen) in Organic Solvents at T = (283.15 to 318.15) K
rfi	1.43570		298.15	Densities, Viscosities, and Refractive Indices for Binary and Ternary Mixtures of N,N-Dimethylacetamide (1) + 2-Methylbutan-2-ol (2) + Ethyl Acetate (3) at 298.15 K for the Liquid Region and at Ambient Pressure

rfi	1.43200	308.15	Density, Viscosity, Refractive Index, and Speed of Sound for Binary Mixtures of 1,4-Dioxane with Different Organic Liquids at (298.15, 303.15, and 308.15) K
rfi	1.43420	303.15	Density, Viscosity, Refractive Index, and Speed of Sound for Binary Mixtures of 1,4-Dioxane with Different Organic Liquids at (298.15, 303.15, and 308.15) K
rfi	1.43630	298.15	Density, Viscosity, Refractive Index, and Speed of Sound for Binary Mixtures of 1,4-Dioxane with Different Organic Liquids at (298.15, 303.15, and 308.15) K
rfi	1.43560	298.15	Bubble Temperature Measurements on Binary Mixtures Formed by Cyclohexane at 94.7 kPa
rfi	1.43556	298.15	Excess volumes of mixing in (N,N-dimethylacetamide + methanol + water) and (N,N-dimethylacetamide + ethanol + water) at the temperature 313.15 K
rfi	1.43560	298.15	Bubble temperature measurements on seven binary mixtures formed by ethylbenzene at 94.7 kPa

rfi	1.43570		298.15	Activity coefficients and excess Gibbs energy of binary mixtures of N,N-dimethyl formamide with selected compounds at 95.5 kPa
rfi	1.43520		298.15	Vapor Liquid Equilibrium for Ternary and Binary Mixtures of 2-Isopropoxypropane, 2-Propanol, and N,N-Dimethylacetamide at 101.3 kPa
rfi	1.43120		308.15	Partial Molar Volumes of N,N'-1,2-Ethyl-bis(salicyladimine) Schiff Base (Salen) in Organic Solvents at T = (283.15 to 318.15) K
rfi	1.42600		318.18	Partial Molar Volumes of N,N'-1,2-Ethyl-bis(salicyladimine) Schiff Base (Salen) in Organic Solvents at T = (283.15 to 318.15) K
rhoI	932.00	kg/m3	303.15	Thermodynamic Properties of Binary Mixtures Containing N,N-Dimethylacetamide + 2-Alkanol: Experimental Data and Modeling
rhoI	894.87	kg/m3	343.15	Influence of Aprotic Cosolvents on the Thermophysical Properties of Imidazolium-Based Ionic Liquid
rhoI	890.19	kg/m3	348.15	Influence of Aprotic Cosolvents on the Thermophysical Properties of Imidazolium-Based Ionic Liquid

rhoI	885.51	kg/m3	353.15	Influence of Aprotic Cosolvents on the Thermophysical Properties of Imidazolium-Based Ionic Liquid
rhoI	936.54	kg/m3	298.15	Excess Molar Volumes and Kinematic Viscosities for Binary Mixtures of Dipropylene Glycol Monobutyl Ether and Dipropylene Glycol tert-Butyl Ether with 2-Pyrrolidinone, N-Methyl-2-pyrrolidinone, N,N-Dimethylformamide, and N,N-Dimethylacetamide at 298.15 K
rhoI	936.21	kg/m3	298.15	Thermodynamics of Mixtures Containing a Strongly Polar Compound. 8. Liquid-Liquid Equilibria for N,N-Dialkylamide + Selected N-Alkanes
rhoI	936.88	kg/m3	298.15	Thermodynamics of Mixtures Containing a Very Strongly Polar Compound. 10. Liquid Liquid Equilibria for N,N-Dimethylacetamide + Selected Alkanes
rhoI	940.92	kg/m3	293.15	Volumetric Properties of Binary Mixtures of 1-Butyl-1-Methylpyrrolidinium Tris(pentafluoroethyl)trifluorophosphate with N-Methylformamide, N-Ethylformamide, N,N-Dimethylformamide, N,N-Dibutylformamide, and N,N-Dimethylacetamide from (293.15 to 323.15) K

rhoI	936.30	kg/m3	298.15	Volumetric Properties of Binary Mixtures of 1-Butyl-1-Methylpyrrolidinium Tris(pentafluoroethyl)trifluorophosphate with N-Methylformamide, N-Ethylformamide, N,N-Dimethylformamide, N,N-Dibutylformamide, and N,N-Dimethylacetamide from (293.15 to 323.15) K
rhoI	931.62	kg/m3	303.15	Volumetric Properties of Binary Mixtures of 1-Butyl-1-Methylpyrrolidinium Tris(pentafluoroethyl)trifluorophosphate with N-Methylformamide, N-Ethylformamide, N,N-Dimethylformamide, N,N-Dibutylformamide, and N,N-Dimethylacetamide from (293.15 to 323.15) K
rhoI	926.89	kg/m3	308.15	Volumetric Properties of Binary Mixtures of 1-Butyl-1-Methylpyrrolidinium Tris(pentafluoroethyl)trifluorophosphate with N-Methylformamide, N-Ethylformamide, N,N-Dimethylformamide, N,N-Dibutylformamide, and N,N-Dimethylacetamide from (293.15 to 323.15) K
rhoI	922.09	kg/m3	313.15	Volumetric Properties of Binary Mixtures of 1-Butyl-1-Methylpyrrolidinium Tris(pentafluoroethyl)trifluorophosphate with N-Methylformamide, N-Ethylformamide, N,N-Dimethylformamide, N,N-Dibutylformamide, and N,N-Dimethylacetamide from (293.15 to 323.15) K

rhoI	917.23	kg/m3	318.15	Volumetric Properties of Binary Mixtures of 1-Butyl-1-Methylpyrrolidinium Tris(pentafluoroethyl)trifluorophosphate with N-Methylformamide, N-Ethylformamide, N,N-Dimethylformamide, N,N-Dibutylformamide, and N,N-Dimethylacetamide from (293.15 to 323.15) K
rhoI	912.23	kg/m3	323.15	Volumetric Properties of Binary Mixtures of 1-Butyl-1-Methylpyrrolidinium Tris(pentafluoroethyl)trifluorophosphate with N-Methylformamide, N-Ethylformamide, N,N-Dimethylformamide, N,N-Dibutylformamide, and N,N-Dimethylacetamide from (293.15 to 323.15) K
rhoI	936.50	kg/m3	298.15	Thermodynamic Properties of Binary Mixtures Containing N,N-Dimethylacetamide + 2-Alkanol: Experimental Data and Modeling
rhoI	899.53	kg/m3	338.15	Influence of Aprotic Cosolvents on the Thermophysical Properties of Imidazolium-Based Ionic Liquid
rhoI	927.80	kg/m3	308.15	Thermodynamic Properties of Binary Mixtures Containing N,N-Dimethylacetamide + 2-Alkanol: Experimental Data and Modeling

rhoI	923.50	kg/m3	313.15	Thermodynamic Properties of Binary Mixtures Containing N,N-Dimethylacetamide + 2-Alkanol: Experimental Data and Modeling
rhoI	940.92	kg/m3	293.15	Volumetric Properties of Binary Mixtures of 1-Butyl-3-Methylimidazolium Tris(pentafluoroethyl)trifluorophosphate with N-Methylformamide, N-Ethylformamide, N,N-Dimethylformamide, N,N-Dibutylformamide, and N,N-Dimethylacetamide from (293.15 to 323.15) K
rhoI	936.30	kg/m3	298.15	Volumetric Properties of Binary Mixtures of 1-Butyl-3-Methylimidazolium Tris(pentafluoroethyl)trifluorophosphate with N-Methylformamide, N-Ethylformamide, N,N-Dimethylformamide, N,N-Dibutylformamide, and N,N-Dimethylacetamide from (293.15 to 323.15) K
rhoI	931.62	kg/m3	303.15	Volumetric Properties of Binary Mixtures of 1-Butyl-3-Methylimidazolium Tris(pentafluoroethyl)trifluorophosphate with N-Methylformamide, N-Ethylformamide, N,N-Dimethylformamide, N,N-Dibutylformamide, and N,N-Dimethylacetamide from (293.15 to 323.15) K

rhoI	926.89	kg/m3	308.15	Volumetric Properties of Binary Mixtures of 1-Butyl-3-Methylimidazolium Tris(pentafluoroethyl)trifluorophosphate with N-Methylformamide, N-Ethylformamide, N,N-Dimethylformamide, N,N-Dibutylformamide, and N,N-Dimethylacetamide from (293.15 to 323.15) K
rhoI	922.09	kg/m3	313.15	Volumetric Properties of Binary Mixtures of 1-Butyl-3-Methylimidazolium Tris(pentafluoroethyl)trifluorophosphate with N-Methylformamide, N-Ethylformamide, N,N-Dimethylformamide, N,N-Dibutylformamide, and N,N-Dimethylacetamide from (293.15 to 323.15) K
rhoI	917.23	kg/m3	318.15	Volumetric Properties of Binary Mixtures of 1-Butyl-3-Methylimidazolium Tris(pentafluoroethyl)trifluorophosphate with N-Methylformamide, N-Ethylformamide, N,N-Dimethylformamide, N,N-Dibutylformamide, and N,N-Dimethylacetamide from (293.15 to 323.15) K
rhoI	912.23	kg/m3	323.15	Volumetric Properties of Binary Mixtures of 1-Butyl-3-Methylimidazolium Tris(pentafluoroethyl)trifluorophosphate with N-Methylformamide, N-Ethylformamide, N,N-Dimethylformamide, N,N-Dibutylformamide, and N,N-Dimethylacetamide from (293.15 to 323.15) K

rhoI	937.00	kg/m3	298.15	Densities and Isothermal Compressibilities at Pressures up to 20 MPa of the Systems N,N-Dimethylformamide or N,N-Dimethylacetamide + r,o-Dichloroalkane
rhoI	926.90	kg/m3	308.15	Densities and Isothermal Compressibilities at Pressures up to 20 MPa of the Systems N,N-Dimethylformamide or N,N-Dimethylacetamide + r,o-Dichloroalkane
rhoI	904.16	kg/m3	333.15	Influence of Aprotic Cosolvents on the Thermophysical Properties of Imidazolium-Based Ionic Liquid
rhoI	908.81	kg/m3	328.15	Influence of Aprotic Cosolvents on the Thermophysical Properties of Imidazolium-Based Ionic Liquid
rhoI	913.44	kg/m3	323.15	Influence of Aprotic Cosolvents on the Thermophysical Properties of Imidazolium-Based Ionic Liquid
rhoI	918.06	kg/m3	318.15	Influence of Aprotic Cosolvents on the Thermophysical Properties of Imidazolium-Based Ionic Liquid
rhoI	922.66	kg/m3	313.15	Influence of Aprotic Cosolvents on the Thermophysical Properties of Imidazolium-Based Ionic Liquid

rhoI	927.26	kg/m3	308.15	Influence of Aprotic Cosolvents on the Thermophysical Properties of Imidazolium-Based Ionic Liquid	
rhoI	931.85	kg/m3	303.15	Influence of Aprotic Cosolvents on the Thermophysical Properties of Imidazolium-Based Ionic Liquid	
rhoI	875.43	kg/m3	363.15	Density, Viscosity, and Electrical Conductivity of Protic Amidium Bis(trifluoromethanesulfonyl)amide Ionic Liquids	
rhoI	884.90	kg/m3	353.15	Density, Viscosity, and Electrical Conductivity of Protic Amidium Bis(trifluoromethanesulfonyl)amide Ionic Liquids	
rhoI	894.31	kg/m3	343.15	Density, Viscosity, and Electrical Conductivity of Protic Amidium Bis(trifluoromethanesulfonyl)amide Ionic Liquids	
rhoI	903.68	kg/m3	333.15	Density, Viscosity, and Electrical Conductivity of Protic Amidium Bis(trifluoromethanesulfonyl)amide Ionic Liquids	
rhoI	912.99	kg/m3	323.15	Density, Viscosity, and Electrical Conductivity of Protic Amidium Bis(trifluoromethanesulfonyl)amide Ionic Liquids	
rhoI	922.26	kg/m3	313.15	Density, Viscosity, and Electrical Conductivity of Protic Amidium Bis(trifluoromethanesulfonyl)amide Ionic Liquids	

rho1	931.51	kg/m3	303.15	Density, Viscosity, and Electrical Conductivity of Protic Amidium Bis(trifluoromethanesulfonyl)amide Ionic Liquids	
rho1	936.13	kg/m3	298.15	Density, Viscosity, and Electrical Conductivity of Protic Amidium Bis(trifluoromethanesulfonyl)amide Ionic Liquids	
rho1	940.74	kg/m3	293.15	Density, Viscosity, and Electrical Conductivity of Protic Amidium Bis(trifluoromethanesulfonyl)amide Ionic Liquids	
rho1	945.35	kg/m3	288.15	Density, Viscosity, and Electrical Conductivity of Protic Amidium Bis(trifluoromethanesulfonyl)amide Ionic Liquids	
rho1	949.95	kg/m3	283.15	Density, Viscosity, and Electrical Conductivity of Protic Amidium Bis(trifluoromethanesulfonyl)amide Ionic Liquids	
rho1	954.56	kg/m3	278.15	Density, Viscosity, and Electrical Conductivity of Protic Amidium Bis(trifluoromethanesulfonyl)amide Ionic Liquids	
rho1	959.16	kg/m3	273.15	Density, Viscosity, and Electrical Conductivity of Protic Amidium Bis(trifluoromethanesulfonyl)amide Ionic Liquids	

rhoI	894.91	kg/m3	343.15	Density and Speed of Sound of Binary Mixtures of Ionic Liquid 1-Ethyl-3-methylimidazolium Tetrafluoroborate, N,N-Dimethylformamide, and N,N-Dimethylacetamide at Temperature Range of 293.15 343.15 K: Measurement and PC-SAFT Modeling
rhoI	899.60	kg/m3	338.15	Density and Speed of Sound of Binary Mixtures of Ionic Liquid 1-Ethyl-3-methylimidazolium Tetrafluoroborate, N,N-Dimethylformamide, and N,N-Dimethylacetamide at Temperature Range of 293.15 343.15 K: Measurement and PC-SAFT Modeling
rhoI	904.27	kg/m3	333.15	Density and Speed of Sound of Binary Mixtures of Ionic Liquid 1-Ethyl-3-methylimidazolium Tetrafluoroborate, N,N-Dimethylformamide, and N,N-Dimethylacetamide at Temperature Range of 293.15 343.15 K: Measurement and PC-SAFT Modeling
rhoI	908.93	kg/m3	328.15	Density and Speed of Sound of Binary Mixtures of Ionic Liquid 1-Ethyl-3-methylimidazolium Tetrafluoroborate, N,N-Dimethylformamide, and N,N-Dimethylacetamide at Temperature Range of 293.15 343.15 K: Measurement and PC-SAFT Modeling

rhoI	913.59	kg/m3	323.15	Density and Speed of Sound of Binary Mixtures of Ionic Liquid 1-Ethyl-3-methylimidazolium Tetrafluoroborate, N,N-Dimethylformamide, and N,N-Dimethylacetamide at Temperature Range of 293.15 343.15 K: Measurement and PC-SAFT Modeling
rhoI	918.23	kg/m3	318.15	Density and Speed of Sound of Binary Mixtures of Ionic Liquid 1-Ethyl-3-methylimidazolium Tetrafluoroborate, N,N-Dimethylformamide, and N,N-Dimethylacetamide at Temperature Range of 293.15 343.15 K: Measurement and PC-SAFT Modeling
rhoI	922.86	kg/m3	313.15	Density and Speed of Sound of Binary Mixtures of Ionic Liquid 1-Ethyl-3-methylimidazolium Tetrafluoroborate, N,N-Dimethylformamide, and N,N-Dimethylacetamide at Temperature Range of 293.15 343.15 K: Measurement and PC-SAFT Modeling
rhoI	927.49	kg/m3	308.15	Density and Speed of Sound of Binary Mixtures of Ionic Liquid 1-Ethyl-3-methylimidazolium Tetrafluoroborate, N,N-Dimethylformamide, and N,N-Dimethylacetamide at Temperature Range of 293.15 343.15 K: Measurement and PC-SAFT Modeling

rhoI	932.11	kg/m3	303.15	Density and Speed of Sound of Binary Mixtures of Ionic Liquid 1-Ethyl-3-methylimidazolium Tetrafluoroborate, N,N-Dimethylformamide, and N,N-Dimethylacetamide at Temperature Range of 293.15 343.15 K: Measurement and PC-SAFT Modeling
rhoI	936.73	kg/m3	298.15	Density and Speed of Sound of Binary Mixtures of Ionic Liquid 1-Ethyl-3-methylimidazolium Tetrafluoroborate, N,N-Dimethylformamide, and N,N-Dimethylacetamide at Temperature Range of 293.15 343.15 K: Measurement and PC-SAFT Modeling
rhoI	941.34	kg/m3	293.15	Density and Speed of Sound of Binary Mixtures of Ionic Liquid 1-Ethyl-3-methylimidazolium Tetrafluoroborate, N,N-Dimethylformamide, and N,N-Dimethylacetamide at Temperature Range of 293.15 343.15 K: Measurement and PC-SAFT Modeling
rhoI	917.89	kg/m3	318.15	Conductance and Ionic Association of Imidazolium-Based Ionic Liquids in N,N-Dimethylacetamide
rhoI	922.52	kg/m3	313.15	Conductance and Ionic Association of Imidazolium-Based Ionic Liquids in N,N-Dimethylacetamide

rhoI	927.14	kg/m3	308.15	Conductance and Ionic Association of Imidazolium-Based Ionic Liquids in N,N-Dimethylacetamide
rhoI	931.76	kg/m3	303.15	Conductance and Ionic Association of Imidazolium-Based Ionic Liquids in N,N-Dimethylacetamide
rhoI	936.38	kg/m3	298.15	Conductance and Ionic Association of Imidazolium-Based Ionic Liquids in N,N-Dimethylacetamide
rhoI	940.98	kg/m3	293.15	Conductance and Ionic Association of Imidazolium-Based Ionic Liquids in N,N-Dimethylacetamide
rhoI	945.59	kg/m3	288.15	Conductance and Ionic Association of Imidazolium-Based Ionic Liquids in N,N-Dimethylacetamide
rhoI	950.19	kg/m3	283.15	Conductance and Ionic Association of Imidazolium-Based Ionic Liquids in N,N-Dimethylacetamide
rhoI	922.43	kg/m3	313.15	Density, Speed of Sound, Refractive Index, and Viscosity of the Binary Mixtures of N,N-dimethylacetamide with Methanol and Ethanol
rhoI	936.29	kg/m3	298.15	Density, Speed of Sound, Refractive Index, and Viscosity of the Binary Mixtures of N,N-dimethylacetamide with Methanol and Ethanol
rhoI	950.13	kg/m3	283.15	Density, Speed of Sound, Refractive Index, and Viscosity of the Binary Mixtures of N,N-dimethylacetamide with Methanol and Ethanol

rhoI	903.86	kg/m3	333.15	Density and Viscosity Measurements for Binary Mixtures of 1-Ethyl-3-methylimidazolium Tetrafluoroborate ([Emim][BF4]) with Dimethylacetamide, Dimethylformamide, and Dimethyl Sulfoxide
rhoI	913.17	kg/m3	323.15	Density and Viscosity Measurements for Binary Mixtures of 1-Ethyl-3-methylimidazolium Tetrafluoroborate ([Emim][BF4]) with Dimethylacetamide, Dimethylformamide, and Dimethyl Sulfoxide
rhoI	922.44	kg/m3	313.15	Density and Viscosity Measurements for Binary Mixtures of 1-Ethyl-3-methylimidazolium Tetrafluoroborate ([Emim][BF4]) with Dimethylacetamide, Dimethylformamide, and Dimethyl Sulfoxide
rhoI	931.69	kg/m3	303.15	Density and Viscosity Measurements for Binary Mixtures of 1-Ethyl-3-methylimidazolium Tetrafluoroborate ([Emim][BF4]) with Dimethylacetamide, Dimethylformamide, and Dimethyl Sulfoxide

rhoI	935.90	kg/m3	298.15	Conductometric, refractometric and FT-IR spectroscopic study of [EMIm]NO ₃ , [EMIm]CH ₃ SO ₃ , and [EMIm]OTs in N,N-dimethyl formamide, N,N-dimethyl acetamide and dimethyl sulphoxide
rhoI	917.78	kg/m3	318.15	Solvation of ionic liquids based on N-methyl-N-alkylmorpholinium cations in N,N-dimethylformamide and N,N-dimethylacetamide - Volumetric and compressibility studies
rhoI	922.41	kg/m3	313.15	Solvation of ionic liquids based on N-methyl-N-alkylmorpholinium cations in N,N-dimethylformamide and N,N-dimethylacetamide - Volumetric and compressibility studies
rhoI	927.05	kg/m3	308.15	Solvation of ionic liquids based on N-methyl-N-alkylmorpholinium cations in N,N-dimethylformamide and N,N-dimethylacetamide - Volumetric and compressibility studies
rhoI	931.67	kg/m3	303.15	Solvation of ionic liquids based on N-methyl-N-alkylmorpholinium cations in N,N-dimethylformamide and N,N-dimethylacetamide - Volumetric and compressibility studies
rhoI	936.28	kg/m3	298.15	Solvation of ionic liquids based on N-methyl-N-alkylmorpholinium cations in N,N-dimethylformamide and N,N-dimethylacetamide - Volumetric and compressibility studies

rho1	885.51	kg/m3	353.15	Effect of organic solvents on lowering the viscosity of 1-hexyl-3-methylimidazolium chloride
rho1	890.19	kg/m3	348.15	Effect of organic solvents on lowering the viscosity of 1-hexyl-3-methylimidazolium chloride
rho1	894.87	kg/m3	343.15	Effect of organic solvents on lowering the viscosity of 1-hexyl-3-methylimidazolium chloride
rho1	899.53	kg/m3	338.15	Effect of organic solvents on lowering the viscosity of 1-hexyl-3-methylimidazolium chloride
rho1	904.16	kg/m3	333.15	Effect of organic solvents on lowering the viscosity of 1-hexyl-3-methylimidazolium chloride
rho1	908.81	kg/m3	328.15	Effect of organic solvents on lowering the viscosity of 1-hexyl-3-methylimidazolium chloride
rho1	913.44	kg/m3	323.15	Effect of organic solvents on lowering the viscosity of 1-hexyl-3-methylimidazolium chloride
rho1	918.06	kg/m3	318.15	Effect of organic solvents on lowering the viscosity of 1-hexyl-3-methylimidazolium chloride
rho1	922.66	kg/m3	313.15	Effect of organic solvents on lowering the viscosity of 1-hexyl-3-methylimidazolium chloride

rhoI	927.26	kg/m3	308.15	Effect of organic solvents on lowering the viscosity of 1-hexyl-3-methylimidazolium chloride
rhoI	931.85	kg/m3	303.15	Effect of organic solvents on lowering the viscosity of 1-hexyl-3-methylimidazolium chloride
rhoI	917.79	kg/m3	318.15	Solvation of alkaline earth metal ions in N,N-dimethylformamide and N,N-dimethylacetamide - A volumetric and acoustic study
rhoI	922.42	kg/m3	313.15	Solvation of alkaline earth metal ions in N,N-dimethylformamide and N,N-dimethylacetamide - A volumetric and acoustic study
rhoI	927.05	kg/m3	308.15	Solvation of alkaline earth metal ions in N,N-dimethylformamide and N,N-dimethylacetamide - A volumetric and acoustic study
rhoI	931.67	kg/m3	303.15	Solvation of alkaline earth metal ions in N,N-dimethylformamide and N,N-dimethylacetamide - A volumetric and acoustic study
rhoI	936.28	kg/m3	298.15	Solvation of alkaline earth metal ions in N,N-dimethylformamide and N,N-dimethylacetamide - A volumetric and acoustic study

rhoI	918.50	kg/m3	318.15	Densities, ultrasonic speeds, viscosities and excess properties of binary mixtures of methyl methacrylate with N,N-dimethylformamide and N,N-dimethylacetamide at different temperatures
rhoI	923.00	kg/m3	313.15	Densities, ultrasonic speeds, viscosities and excess properties of binary mixtures of methyl methacrylate with N,N-dimethylformamide and N,N-dimethylacetamide at different temperatures
rhoI	927.50	kg/m3	308.15	Densities, ultrasonic speeds, viscosities and excess properties of binary mixtures of methyl methacrylate with N,N-dimethylformamide and N,N-dimethylacetamide at different temperatures
rhoI	932.00	kg/m3	303.15	Densities, ultrasonic speeds, viscosities and excess properties of binary mixtures of methyl methacrylate with N,N-dimethylformamide and N,N-dimethylacetamide at different temperatures

rhoI	936.50	kg/m3	298.15	Densities, ultrasonic speeds, viscosities and excess properties of binary mixtures of methyl methacrylate with N,N-dimethylformamide and N,N-dimethylacetamide at different temperatures
rhoI	941.00	kg/m3	293.15	Densities, ultrasonic speeds, viscosities and excess properties of binary mixtures of methyl methacrylate with N,N-dimethylformamide and N,N-dimethylacetamide at different temperatures
rhoI	945.50	kg/m3	288.15	Densities, ultrasonic speeds, viscosities and excess properties of binary mixtures of methyl methacrylate with N,N-dimethylformamide and N,N-dimethylacetamide at different temperatures
rhoI	903.76	kg/m3	333.15	Apparent molar volumes and compressibilities of lanthanum, gadolinium, lutetium and sodium trifluoromethanesulfonates in N,N-dimethylformamide and N,N-dimethylacetamide

rhoI	913.08	kg/m3	323.15	Apparent molar volumes and compressibilities of lanthanum, gadolinium, lutetium and sodium trifluoromethanesulfonates in N,N-dimethylformamide and N,N-dimethylacetamide
rhoI	922.35	kg/m3	313.15	Apparent molar volumes and compressibilities of lanthanum, gadolinium, lutetium and sodium trifluoromethanesulfonates in N,N-dimethylformamide and N,N-dimethylacetamide
rhoI	931.61	kg/m3	303.15	Apparent molar volumes and compressibilities of lanthanum, gadolinium, lutetium and sodium trifluoromethanesulfonates in N,N-dimethylformamide and N,N-dimethylacetamide
rhoI	936.22	kg/m3	298.15	Apparent molar volumes and compressibilities of lanthanum, gadolinium, lutetium and sodium trifluoromethanesulfonates in N,N-dimethylformamide and N,N-dimethylacetamide
rhoI	940.83	kg/m3	293.15	Apparent molar volumes and compressibilities of lanthanum, gadolinium, lutetium and sodium trifluoromethanesulfonates in N,N-dimethylformamide and N,N-dimethylacetamide

rhoI	950.04	kg/m3	283.15	Apparent molar volumes and compressibilities of lanthanum, gadolinium, lutetium and sodium trifluoromethanesulfonates in N,N-dimethylformamide and N,N-dimethylacetamide
rhoI	936.50	kg/m3	298.15	Densities and volumetric properties of binary mixtures of N,N-dimethylformamide/N,N-dimethylacetamide with some alkyl acrylates at temperatures from 288.15 K to 318.15 K
rhoI	936.80	kg/m3	298.15	Physics and chemistry of an ionic liquid in some industrially important solvent media probed by physicochemical techniques
rhoI	917.86	kg/m3	318.15	Apparent molar volumes and expansibilities of H2O and D2O in N,N-dimethylformamide and N,N-dimethylacetamide in the range of T = (278.15 to 318.15) K at p = 0.1 MPa: A comparative analysis
rhoI	927.14	kg/m3	308.15	Apparent molar volumes and expansibilities of H2O and D2O in N,N-dimethylformamide and N,N-dimethylacetamide in the range of T = (278.15 to 318.15) K at p = 0.1 MPa: A comparative analysis

rhoI	936.38	kg/m3	298.15	Apparent molar volumes and expansibilities of H2O and D2O in N,N-dimethylformamide and N,N-dimethylacetamide in the range of T = (278.15 to 318.15) K at p = 0.1 MPa: A comparative analysis
rhoI	945.59	kg/m3	288.15	Apparent molar volumes and expansibilities of H2O and D2O in N,N-dimethylformamide and N,N-dimethylacetamide in the range of T = (278.15 to 318.15) K at p = 0.1 MPa: A comparative analysis
rhoI	954.78	kg/m3	278.15	Apparent molar volumes and expansibilities of H2O and D2O in N,N-dimethylformamide and N,N-dimethylacetamide in the range of T = (278.15 to 318.15) K at p = 0.1 MPa: A comparative analysis
rhoI	936.34	kg/m3	298.15	Excess molar enthalpies and (vapour + liquid) equilibria for mixtures containing N,N-dialkylamides and α,α -dichloroalkanes
rhoI	913.13	kg/m3	323.15	Density and speed of sound of lithium bromide with organic solvents: Measurement and correlation
rhoI	936.34	kg/m3	298.15	(Vapour + liquid) equilibria and excess molar enthalpies for binary mixtures containing N,N-dialkylamides and 1-chloroalkanes

rhoI	918.60	kg/m3	318.15	Densities and volumetric properties of (acetonitrile + an amide) binary mixtures at temperatures between 293.15 K and 318.15 K
rhoI	923.10	kg/m3	313.15	Densities and volumetric properties of (acetonitrile + an amide) binary mixtures at temperatures between 293.15 K and 318.15 K
rhoI	927.60	kg/m3	308.15	Densities and volumetric properties of (acetonitrile + an amide) binary mixtures at temperatures between 293.15 K and 318.15 K
rhoI	932.00	kg/m3	303.15	Densities and volumetric properties of (acetonitrile + an amide) binary mixtures at temperatures between 293.15 K and 318.15 K
rhoI	936.50	kg/m3	298.15	Densities and volumetric properties of (acetonitrile + an amide) binary mixtures at temperatures between 293.15 K and 318.15 K
rhoI	941.00	kg/m3	293.15	Densities and volumetric properties of (acetonitrile + an amide) binary mixtures at temperatures between 293.15 K and 318.15 K

rhoI	936.27	kg/m3	298.15	Volumetric and compressibility behaviour of ionic liquid, 1-n-butyl-3-methylimidazolium hexafluorophosphate and tetrabutylammonium hexafluorophosphate in organic solvents at T = 298.15 K
rhoI	936.54	kg/m3	293.15	Volumetric properties of binary mixtures of (water + organic solvents) at temperatures between T = 288.15 K and T = 303.15 K at p = 0.1 MPa
rhoI	936.36	kg/m3	298.15	Limiting partial molar volumes and expansibilities of ammonium perchlorate, tetraalkylammonium perchlorates, and tetrabutylammonium tetraphenylborate in N,N-dimethylformamide
rhoI	936.14	kg/m3	298.15	Thermodynamics of amide + amine mixtures. 5. Excess molar enthalpies of N,N-dimethylformamide or N,N-dimethylacetamide + N-propylpropan-1-amine, + N-butylbutan-1-amine, + butan-1-amine, or + hexan-1-amine systems at 298.15 K. Application of the ERAS model

rhoI	936.73	kg/m3	298.15	PrhoT measurement and PC-SAFT modeling of N,N-dimethyl formamide, N-methyl formamide, N,N-dimethyl acetamide, and ethylenediamine from T = (293.15-423.15) K and pressures up to 35 MPa	
rhoI	941.35	kg/m3	303.15	Effect of various substituents on benzene ring and their impact on volumetric, acoustic and transport properties of binary liquid mixtures with dimethylacetamide	
rhoI	936.31	kg/m3	298.15	Thermodynamic properties of vanadyl (N,N'-salicylideneethylenediamine) Schiff base complex in ionic liquid + N,N-dimethylacetamide solutions	
rhoI	922.10	kg/m3	313.15	Interpretation of Association Behavior and Molecular Interactions in Binary Mixtures from Thermoacoustics and Molecular Compression Data	
rhoI	926.80	kg/m3	308.15	Interpretation of Association Behavior and Molecular Interactions in Binary Mixtures from Thermoacoustics and Molecular Compression Data	

rhoI	936.00	kg/m3	303.15	Interpretation of Association Behavior and Molecular Interactions in Binary Mixtures from Thermoacoustics and Molecular Compression Data
rhoI	950.20	kg/m3	298.15	Interpretation of Association Behavior and Molecular Interactions in Binary Mixtures from Thermoacoustics and Molecular Compression Data
rhoI	962.30	kg/m3	293.15	Interpretation of Association Behavior and Molecular Interactions in Binary Mixtures from Thermoacoustics and Molecular Compression Data
rhoI	936.27	kg/m3	298.15	Volumetric Properties of the Ionic Liquid, 1-Butyl-3-methylimidazolium Tetrafluoroborate, in Organic Solvents at T = 298.15 K
speedsl	1455.37	m/s	298.15	Adiabatic Compressibilities of Divalent Transition-Metal Perchlorates and Chlorides in N,N-Dimethylacetamide and Dimethylsulfoxide
speedsl	1455.37	m/s	298.15	Apparent Molar Compressibilities and Volumes of Some 1,1-Electrolytes in N,N-Dimethylacetamide and N,N-Dimethylformamide

speedsl	1455.91	m/s	298.15	Isentropic compressibilities of (amide + water) mixtures: A comparative study
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Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/T + C \cdot \ln(T) + D \cdot T^2$
Coeff. A	-4.27944e+01
Coeff. B	-3.73912e+03
Coeff. C	9.62289e+00
Coeff. D	-1.35470e-05
Temperature range (K), min.	253.15
Temperature range (K), max.	658.00

Datasets

Mass density, kg/m3

Pressure, kPa - Liquid	Temperature, K - Liquid	Mass density, kg/m3 - Liquid
85.90	298.15	936.57

Reference <https://www.doi.org/10.1016/j.fluid.2013.05.001>

Temperature, K	Pressure, kPa	Mass density, kg/m3
298.15	100.00	936.31

Reference <https://www.doi.org/10.1016/j.jct.2014.09.022>

Temperature, K	Pressure, kPa	Mass density, kg/m3
288.15	100.00	945.7
288.15	2000.00	946.7

288.15	4000.00	947.8
288.15	6000.00	949.0
288.15	8100.00	950.1
288.15	9900.00	951.1
288.15	12000.00	952.2
288.15	13900.00	953.2
288.15	16000.00	954.3
288.15	18100.00	955.4
288.15	20000.00	956.5
298.15	100.00	937.0
298.15	2000.00	938.1
298.15	4100.00	939.4
298.15	6100.00	940.6
298.15	8100.00	941.8
298.15	10000.00	943.0
298.15	12100.00	944.1
298.15	14200.00	945.3
298.15	16300.00	946.4
298.15	18400.00	947.5
298.15	20100.00	948.6
308.15	100.00	927.9
308.15	2000.00	929.1
308.15	4100.00	930.4
308.15	6100.00	931.6
308.15	8100.00	932.8
308.15	10100.00	934.0
308.15	12100.00	935.3
308.15	14200.00	936.5
308.15	16300.00	937.6
308.15	18200.00	938.7
308.15	20200.00	939.9
318.15	100.00	918.7
318.15	2000.00	919.8
318.15	4000.00	921.2
318.15	6000.00	922.5
318.15	8000.00	923.8
318.15	9900.00	925.0
318.15	12000.00	926.3
318.15	14000.00	927.5
318.15	16000.00	928.7
318.15	18100.00	930.0
318.15	20000.00	931.3

Refractive index (Na D-line)

Pressure, kPa - Liquid	Temperature, K - Liquid	Refractive index (Na D-line) - Liquid
85.90	298.15	1.436
Reference	https://www.doi.org/10.1016/j.ict.2013.04.022	

Sources

Thermochemistry of

1-Bromoadamantane in binary mixtures

The thermodynamic properties of Mixtures Containing a Very Strongly Polar Compound in Liquid-Liquid Equilibrium from NMR Spectroscopy + Selected Measurements of Density and Refractive Index as a Function of Temperature K:

Binary Mixtures of amyl acetate with Cetyltrimethylammonium Bromide with Generalization of Protic Amidum Aqueous Phase Partitioning Data

New experimental data for the binary system methyl n-butyl ether-hexanes-Dimethyl sulfoxide and its quaternary system (n-pentane-0.6mole-% dimethylsulfoxide) at atmospheric pressure.

Spectrophotometric determination of surface tension of organic liquids by means of pendant drop method

Experimental study of thermodynamics of phase change of different pure substances containing

N,N-Dimethylethanamine-2-Alkanol: Thermodynamic Data of Miscible Acid Crystals in Different Classes of Organic Solvents at 298.15 K:

Solubility of Tripolycyanamide and Cyanuric Acid in Ethanediol,

RN-Dimensional SAFT model for N,N-dimethylformamide-N-methylacetamide-N,N-dimethylacetamide-ethylene diamine from T=273K up to critical temperatures

A Study of the Self-Association Behavior and Molecular Interactions in Binary Mixtures of Methyl Cellosilates and Trialkoxymethylenes

N,N-Dimethylacetamide Experimental Indices for Binary and Ternary Mixtures

K_m-RN-Dimethylacetamide Kinematic Viscosities for Binary Mixtures Acetate Diisobutylene Compressed Hydrogen Gas and Nitrogen-Methyl Cellosilate Butyl Ether and Propylene Glycol-Etherylcellosilicate

Mixtures of water and organic solvents)

(C₁C₂H₅)_nF_{2n+2} Fluorides at the 298.15 K

Poly(2-vinylpyridine)-g-Poly(vinylimidazole) Copolymer in Organic Solvent

Binary Mixtures Formed by Cyclohexane-nitroacrylonitrile, N,N-Dimethylformamide,

Influence of Aprotic Solvents on the Transport Properties of Vaporizable Polymers Based on Polyvinyl Systems of

N,N-Dimethylacetamide with Cyclohexene, Cyclohexane, and Benzene Separately at Atmospheric Pressure:

[https://www.doi.org/10.1016/j.tca.2005.11.035](#)

[https://www.doi.org/10.1021/je400487e](#)

[https://www.doi.org/10.1016/j.jct.2013.04.022](#)

[https://www.doi.org/10.1016/j.jct.2015.10.016](#)

[https://www.doi.org/10.1021/acs.jced.6b00575](#)

[https://www.doi.org/10.1016/j.jct.2019.05.005](#)

[https://www.doi.org/10.1016/j.jct.2005.07.018](#)

[https://www.doi.org/10.1016/j.fluid.2016.04.007](#)

[https://www.doi.org/10.1016/j.jct.2019.03.029](#)

[https://www.doi.org/10.1021/je400917j](#)

[https://www.doi.org/10.1021/je400714f](#)

[https://www.doi.org/10.1021/je101161d](#)

[https://www.doi.org/10.1021/je0342015](#)

[https://www.doi.org/10.1016/j.fluid.2016.08.014](#)

[https://www.doi.org/10.1016/j.fluid.2013.03.009](#)

[https://www.doi.org/10.1016/j.jct.2005.05.008](#)

[https://www.doi.org/10.1007/s10765-016-2096-3](#)

[https://www.doi.org/10.1021/je500478t](#)

[https://www.doi.org/10.1021/je050538q](#)

[https://www.doi.org/10.1021/je049657g](#)

[https://www.doi.org/10.1021/je8004134](#)

[https://www.doi.org/10.1016/j.jct.2005.07.012](#)

[https://www.doi.org/10.1007/s10765-008-0395-z](#)

[https://www.doi.org/10.1021/je020148t](#)

[https://www.doi.org/10.1021/je060454x](#)

[https://www.doi.org/10.1021/acs.jced.7b00002](#)

[https://www.doi.org/10.1021/acs.jced.5b00011](#)

Joback Method:

https://en.wikipedia.org/wiki/Joback_method

Densities and Isothermal Compressibilities at Pressures up to 20 MPa of the Systems

<https://www.doi.org/10.1021/je700096m>

Densities and Volumetric Properties of

<https://www.doi.org/10.1016/j.jct.2012.10.015>

N,N-Dimethylacetamide or N,N-Dimethylformamide + N,N-Dimethylacetamide

<https://www.doi.org/10.1021/je050428j>

Conformational Analysis of the Equilibrium of

<https://www.doi.org/10.1021/je500801w>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1016/j.jct.2012.09.003>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1016/j.fluid.2015.03.048>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1021/acs.jced.5b00753>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1016/j.jct.2007.05.015>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1021/je2009973>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1016/j.fluid.2008.07.018>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1021/je060301+>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1021/acs.jced.6b00354>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1016/j.tca.2013.02.022>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1016/j.jct.2004.11.015>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C127195&Units=SI>

Volumetric Properties of Binary Mixtures of

<https://www.doi.org/10.1021/je400803f>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1016/j.jct.2005.03.010>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1016/j.fluid.2015.02.022>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1021/je700339f>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1021/je4007822>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1021/acs.jced.9b00535>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1016/j.jct.2017.12.018>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1021/je5002945>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1016/j.jct.2007.01.017>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1016/j.jct.2007.06.017>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1016/j.jct.2014.09.022>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1021/je700635r>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1021/acs.jced.5b00747>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1021/je100170v>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1016/j.jct.2018.03.019>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1016/j.fluid.2013.07.010>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1016/j.tca.2005.08.006>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1016/j.jct.2005.08.001>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1021/je9007074>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<http://pubs.acs.org/doi/abs/10.1021/ci9903071>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1016/j.jct.2007.04.006>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1021/je300994y>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1016/j.fluid.2015.12.052>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1021/je3013793>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1021/je049609w>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<http://link.springer.com/article/10.1007/BF02311772>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

<https://www.doi.org/10.1021/acs.jced.5b00201>

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

Equilibrium of N,N-Dimethylacetamide + N,N-Dimethylformamide

[illegible]

http://pubs.acs.org/doi/suppl/10.1021/ci034243x/suppl_file/ci034243xsi20040112_053635.txt

Legend

affp:	Proton affinity
basg:	Gas basicity
chl:	Standard liquid enthalpy of combustion
cpg:	Ideal gas heat capacity
cpl:	Liquid phase heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfl:	Liquid phase enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hfust:	Enthalpy of fusion at a given temperature
hvap:	Enthalpy of vaporization at standard conditions
hvapt:	Enthalpy of vaporization at a given temperature
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
pvap:	Vapor pressure
rfi:	Refractive Index
rho:	Liquid Density
rinpol:	Non-polar retention indices
ripol:	Polar retention indices
speedsl:	Speed of sound in fluid
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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