

Propylene Glycol

Other names:	(.+-.)-1,2-propanediol (.+/-.)-1,2-Propanediol (R,S)-1,2-propanediol (RS)-1,2-Propanediol 1,2-Dihydroxypropane 1,2-PROPANEDIOL 1,2-PROPYLENE GLYCOL 1,2-Propandiol 1,2-Propylenglykol 1,2-propanediol (propylene glycol) 2,3-Propanediol 2-Hydroxypropanol DL-1,2-Propanediol DL-Propylene glycol Dowfrost Ilexan P Isopropylene glycol METHYLETHYLENE GLYCOL Methylethyl glycol Monopropylene glycol NSC 69860 PG 12 Prolugen Propane-1,2-diol Propylene glycol USP Propylenglycol SIRLENE Sentry Propylene Glycol Solar winter ban Solargard P Trimethyl glycol Ucar 35 propanediol propylene glycol (1,2-propanediol) «alpha»-Propylene glycol Â«alphaÂ»-Propylene glycol
Inchi:	InChI=1S/C3H8O2/c1-3(5)2-4/h3-5H,2H2,1H3
InchiKey:	DNIAPMSPWPWGF-UHFFFAOYSA-N
Formula:	C3H8O2
SMILES:	CC(O)CO

Mol. weight [g/mol]: 76.09
CAS: 57-55-6

Physical Properties

Property code	Value	Unit	Source
chl	-1823.50 ± 1.80	kJ/mol	NIST Webbook
chl	-1822.90 ± 4.10	kJ/mol	NIST Webbook
chl	-1838.10 ± 2.30	kJ/mol	NIST Webbook
dm	3.60	debye	KDB
gf	-301.70	kJ/mol	Joback Method
hf	-421.00 ± 3.00	kJ/mol	NIST Webbook
hf	-435.30	kJ/mol	NIST Webbook
hf	-424.20	kJ/mol	KDB
hf	-429.80 ± 4.10	kJ/mol	NIST Webbook
hfl	-500.30 ± 1.80	kJ/mol	NIST Webbook
hfl	-501.00 ± 4.10	kJ/mol	NIST Webbook
hfl	-486.00 ± 3.00	kJ/mol	NIST Webbook
hfus	8.18	kJ/mol	Joback Method
hvap	55.24	kJ/mol	Joback Method
log10ws	0.28		Crippen Method
logp	-0.640		Crippen Method
mcvol	64.870	ml/mol	McGowan Method
nfpaf	%!d(float64=1)		KDB
nfpah	%!d(float64=1)		KDB
pc	6070.00	kPa	KDB
rinpol	719.00		NIST Webbook
rinpol	753.00		NIST Webbook
rinpol	758.00		NIST Webbook
rinpol	764.00		NIST Webbook
rinpol	710.00		NIST Webbook
rinpol	745.00		NIST Webbook
rinpol	722.00		NIST Webbook
rinpol	745.00		NIST Webbook
rinpol	710.00		NIST Webbook
rinpol	710.00		NIST Webbook
rinpol	722.00		NIST Webbook
rinpol	745.00		NIST Webbook
rinpol	705.00		NIST Webbook
rinpol	740.00		NIST Webbook
rinpol	732.00		NIST Webbook

ripol	716.00		NIST Webbook
ripol	758.00		NIST Webbook
ripol	1583.00		NIST Webbook
ripol	1594.00		NIST Webbook
ripol	1599.00		NIST Webbook
ripol	1603.00		NIST Webbook
ripol	1611.00		NIST Webbook
ripol	1589.00		NIST Webbook
ripol	1585.00		NIST Webbook
ripol	1612.00		NIST Webbook
ripol	1611.00		NIST Webbook
ripol	1599.00		NIST Webbook
ripol	1603.00		NIST Webbook
ripol	1597.00		NIST Webbook
ripol	1599.00		NIST Webbook
ripol	1612.00		NIST Webbook
ripol	1600.00		NIST Webbook
ripol	1591.00		NIST Webbook
ripol	1605.00		NIST Webbook
ripol	1603.00		NIST Webbook
ripol	1603.00		NIST Webbook
ripol	1612.00		NIST Webbook
ripol	1602.00		NIST Webbook
ripol	1599.00		NIST Webbook
ripol	1600.00		NIST Webbook
tb	460.15 ± 2.00	K	NIST Webbook
tb	460.20	K	NIST Webbook
tb	460.45	K	NIST Webbook
tb	461.65 ± 3.00	K	NIST Webbook
tb	458.45 ± 3.00	K	NIST Webbook
tb	460.15 ± 2.00	K	NIST Webbook
tb	462.00 ± 2.00	K	NIST Webbook
tb	460.55 ± 0.50	K	NIST Webbook
tb	459.15 ± 1.00	K	NIST Webbook
tb	460.50	K	KDB
tb	461.00 ± 0.20	K	NIST Webbook
tb	460.60 ± 0.50	K	NIST Webbook
tb	461.15 ± 3.00	K	NIST Webbook
tb	459.15 ± 1.00	K	NIST Webbook
tb	459.80 ± 0.50	K	NIST Webbook
tb	459.15 ± 2.00	K	NIST Webbook
tc	625.00	K	KDB
tf	213.00	K	KDB
vc	0.237	m3/kmol	KDB

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	165.24	J/mol×K	614.38	Joback Method
cpg	160.76	J/mol×K	587.31	Joback Method
cpg	156.10	J/mol×K	560.24	Joback Method
cpg	151.24	J/mol×K	533.17	Joback Method
cpg	146.19	J/mol×K	506.10	Joback Method
cpg	140.93	J/mol×K	479.03	Joback Method
cpg	135.47	J/mol×K	451.96	Joback Method
cpl	197.00	J/mol×K	313.15	Heat capacities of the mixed-solvents desiccants (glycols +water + salts)
cpl	180.30	J/mol×K	276.70	NIST Webbook
cpl	177.00	J/mol×K	303.00	NIST Webbook
cpl	189.90	J/mol×K	298.00	NIST Webbook
cpl	215.30	J/mol×K	353.15	Heat capacities of the mixed-solvents desiccants (glycols +water + salts)
cpl	210.60	J/mol×K	343.15	Heat capacities of the mixed-solvents desiccants (glycols +water + salts)
cpl	206.00	J/mol×K	333.15	Heat capacities of the mixed-solvents desiccants (glycols +water + salts)
cpl	201.30	J/mol×K	323.15	Heat capacities of the mixed-solvents desiccants (glycols +water + salts)
cpl	192.80	J/mol×K	303.15	Heat capacities of the mixed-solvents desiccants (glycols +water + salts)

dvisc	0.0195800	Paxs	313.15	Excess molar volume and viscosity deviation for binary mixtures of polyethylene glycol dimethyl ether 250 with 1,2-alkanediols (C3 C6) at T = (293.15 to 323.15) K
dvisc	0.0127900	Paxs	323.15	Excess molar volume and viscosity deviation for binary mixtures of polyethylene glycol dimethyl ether 250 with 1,2-alkanediols (C3 C6) at T = (293.15 to 323.15) K
dvisc	0.0324000	Paxs	303.15	Vapour pressures, densities, and viscosities of the aqueous solutions containing (triethylene glycol or propylene glycol) and (LiCl or LiBr)
dvisc	0.0326300	Paxs	303.15	Excess molar volume and viscosity deviation for binary mixtures of polyethylene glycol dimethyl ether 250 with 1,2-alkanediols (C3 C6) at T = (293.15 to 323.15) K
dvisc	0.0121000	Paxs	323.15	Vapour pressures, densities, and viscosities of the aqueous solutions containing (triethylene glycol or propylene glycol) and (LiCl or LiBr)

dvisc	0.0081900	Pa×s	333.15	Vapour pressures, densities, and viscosities of the aqueous solutions containing (triethylene glycol or propylene glycol) and (LiCl or LiBr)
dvisc	0.0057040	Pa×s	343.15	Vapour pressures, densities, and viscosities of the aqueous solutions containing (triethylene glycol or propylene glycol) and (LiCl or LiBr)
dvisc	0.0434340	Pa×s	298.15	Densities, Excess Molar Volumes, Viscosities, Speeds of Sound, Excess Isentropic Compressibilities, and Relative Permittivities for Alkyl (Methyl, Ethyl, Butyl, and Isoamyl) Acetates + Glycols at Different Temperatures
dvisc	0.0242440	Pa×s	308.15	Densities, Excess Molar Volumes, Viscosities, Speeds of Sound, Excess Isentropic Compressibilities, and Relative Permittivities for Alkyl (Methyl, Ethyl, Butyl, and Isoamyl) Acetates + Glycols at Different Temperatures

dvisc	0.0454403	Pa×s	298.15	Densities, Viscosities, and Volumetric Properties of Binary Mixtures of 1,2-Propanediol + 1-Heptanol or 1-Hexanol and 1,2-Ethenediol + 2-Butanol or 2-Propanol at T = (298.15, 303.15, and 308.15) K
dvisc	0.0263377	Pa×s	308.15	Densities, Viscosities, and Volumetric Properties of Binary Mixtures of 1,2-Propanediol + 1-Heptanol or 1-Hexanol and 1,2-Ethenediol + 2-Butanol or 2-Propanol at T = (298.15, 303.15, and 308.15) K
dvisc	0.0562100	Pa×s	293.15	Excess molar volume and viscosity deviation for binary mixtures of polyethylene glycol dimethyl ether 250 with 1,2-alkanediols (C3 C6) at T = (293.15 to 323.15) K
dvisc	0.0191200	Pa×s	313.15	Vapour pressures, densities, and viscosities of the aqueous solutions containing (triethylene glycol or propylene glycol) and (LiCl or LiBr)
dvisc	0.0339949	Pa×s	303.15	Densities, Viscosities, and Volumetric Properties of Binary Mixtures of 1,2-Propanediol + 1-Heptanol or 1-Hexanol and 1,2-Ethenediol + 2-Butanol or 2-Propanol at T = (298.15, 303.15, and 308.15) K

hvapt	56.20 ± 0.20	kJ/mol	430.50	NIST Webbook
hvapt	52.00 ± 0.30	kJ/mol	430.50	NIST Webbook
hvapt	58.60	kJ/mol	389.50	NIST Webbook
hvapt	64.00 ± 2.00	kJ/mol	353.00	NIST Webbook
hvapt	58.20	kJ/mol	378.00	NIST Webbook
hvapt	56.00	kJ/mol	431.50	NIST Webbook
hvapt	66.50	kJ/mol	390.50	NIST Webbook
hvapt	47.50 ± 0.60	kJ/mol	430.50	NIST Webbook
hvapt	60.00 ± 0.30	kJ/mol	430.50	NIST Webbook
pvap	36.61	kPa	429.55	Excess properties and isobaric (vapor + liquid) equilibrium at sub-atmospheric pressures of binary (1,2-propanediol + 1,3-propanediol) system: Measurement and modelling
pvap	40.01	kPa	432.05	Excess properties and isobaric (vapor + liquid) equilibrium at sub-atmospheric pressures of binary (1,2-propanediol + 1,3-propanediol) system: Measurement and modelling
pvap	43.33	kPa	433.70	Excess properties and isobaric (vapor + liquid) equilibrium at sub-atmospheric pressures of binary (1,2-propanediol + 1,3-propanediol) system: Measurement and modelling

pvap	46.66	kPa	436.07	Excess properties and isobaric (vapor + liquid) equilibrium at sub-atmospheric pressures of binary (1,2-propanediol + 1,3-propanediol) system: Measurement and modelling
pvap	50.00	kPa	437.77	Excess properties and isobaric (vapor + liquid) equilibrium at sub-atmospheric pressures of binary (1,2-propanediol + 1,3-propanediol) system: Measurement and modelling
pvap	53.25	kPa	439.74	Excess properties and isobaric (vapor + liquid) equilibrium at sub-atmospheric pressures of binary (1,2-propanediol + 1,3-propanediol) system: Measurement and modelling
pvap	56.74	kPa	441.27	Excess properties and isobaric (vapor + liquid) equilibrium at sub-atmospheric pressures of binary (1,2-propanediol + 1,3-propanediol) system: Measurement and modelling

pvap	59.99	kPa	443.15	Excess properties and isobaric (vapor + liquid) equilibrium at sub-atmospheric pressures of binary (1,2-propanediol + 1,3-propanediol) system: Measurement and modelling
pvap	19.99	kPa	413.23	Excess properties and isobaric (vapor + liquid) equilibrium at sub-atmospheric pressures of binary (1,2-propanediol + 1,3-propanediol) system: Measurement and modelling
pvap	26.66	kPa	421.21	Excess properties and isobaric (vapor + liquid) equilibrium at sub-atmospheric pressures of binary (1,2-propanediol + 1,3-propanediol) system: Measurement and modelling
pvap	33.33	kPa	427.16	Excess properties and isobaric (vapor + liquid) equilibrium at sub-atmospheric pressures of binary (1,2-propanediol + 1,3-propanediol) system: Measurement and modelling

pvap	39.99	kPa	432.05	Excess properties and isobaric (vapor + liquid) equilibrium at sub-atmospheric pressures of binary (1,2-propanediol + 1,3-propanediol) system: Measurement and modelling
pvap	8.20	kPa	393.22	Vapor-Liquid Equilibrium for Propylene Glycol + 2-(2-Hexyloxyethoxy)ethanol and 1-Methyl-2-pyrrolidone + 1-Methoxypropan-2-ol
pvap	8.21	kPa	393.25	Vapor-Liquid Equilibrium for Propylene Glycol + 2-(2-Hexyloxyethoxy)ethanol and 1-Methyl-2-pyrrolidone + 1-Methoxypropan-2-ol
pvap	10.23	kPa	398.09	Vapor-Liquid Equilibrium for Propylene Glycol + 2-(2-Hexyloxyethoxy)ethanol and 1-Methyl-2-pyrrolidone + 1-Methoxypropan-2-ol
pvap	12.77	kPa	403.14	Vapor-Liquid Equilibrium for Propylene Glycol + 2-(2-Hexyloxyethoxy)ethanol and 1-Methyl-2-pyrrolidone + 1-Methoxypropan-2-ol
pvap	12.77	kPa	403.15	Vapor-Liquid Equilibrium for Propylene Glycol + 2-(2-Hexyloxyethoxy)ethanol and 1-Methyl-2-pyrrolidone + 1-Methoxypropan-2-ol

pvap	33.57	kPa	427.23	Excess properties and isobaric (vapor + liquid) equilibrium at sub-atmospheric pressures of binary (1,2-propanediol + 1,3-propanediol) system: Measurement and modelling
pvap	19.36	kPa	413.10	Vapor-Liquid Equilibrium for Propylene Glycol + 2-(2-Hexyloxyethoxy)ethanol and 1-Methyl-2-pyrrolidone + 1-Methoxypropan-2-ol
pvap	19.39	kPa	413.15	Vapor-Liquid Equilibrium for Propylene Glycol + 2-(2-Hexyloxyethoxy)ethanol and 1-Methyl-2-pyrrolidone + 1-Methoxypropan-2-ol
pvap	23.68	kPa	418.16	Vapor-Liquid Equilibrium for Propylene Glycol + 2-(2-Hexyloxyethoxy)ethanol and 1-Methyl-2-pyrrolidone + 1-Methoxypropan-2-ol
pvap	28.69	kPa	423.15	Vapor-Liquid Equilibrium for Propylene Glycol + 2-(2-Hexyloxyethoxy)ethanol and 1-Methyl-2-pyrrolidone + 1-Methoxypropan-2-ol
pvap	28.81	kPa	423.26	Vapor-Liquid Equilibrium for Propylene Glycol + 2-(2-Hexyloxyethoxy)ethanol and 1-Methyl-2-pyrrolidone + 1-Methoxypropan-2-ol

pvap	4.00	kPa	378.00	Phase Equilibrium and Physical Properties for the Purification of Propylene Carbonate (PC) and γ -Butyrolactone (GBL)
pvap	10.00	kPa	398.24	Phase Equilibrium and Physical Properties for the Purification of Propylene Carbonate (PC) and γ -Butyrolactone (GBL)
pvap	12.00	kPa	402.54	Phase Equilibrium and Physical Properties for the Purification of Propylene Carbonate (PC) and γ -Butyrolactone (GBL)
pvap	20.00	kPa	415.13	Phase Equilibrium and Physical Properties for the Purification of Propylene Carbonate (PC) and γ -Butyrolactone (GBL)
pvap	30.00	kPa	425.72	Phase Equilibrium and Physical Properties for the Purification of Propylene Carbonate (PC) and γ -Butyrolactone (GBL)
pvap	40.00	kPa	433.59	Phase Equilibrium and Physical Properties for the Purification of Propylene Carbonate (PC) and γ -Butyrolactone (GBL)

pvap	50.00	kPa	439.90	Phase Equilibrium and Physical Properties for the Purification of Propylene Carbonate (PC) and γ-Butyrolactone (GBL)
pvap	60.00	kPa	445.20	Phase Equilibrium and Physical Properties for the Purification of Propylene Carbonate (PC) and γ-Butyrolactone (GBL)
pvap	70.00	kPa	449.79	Phase Equilibrium and Physical Properties for the Purification of Propylene Carbonate (PC) and γ-Butyrolactone (GBL)
pvap	80.00	kPa	453.84	Phase Equilibrium and Physical Properties for the Purification of Propylene Carbonate (PC) and γ-Butyrolactone (GBL)
pvap	90.00	kPa	457.48	Phase Equilibrium and Physical Properties for the Purification of Propylene Carbonate (PC) and γ-Butyrolactone (GBL)
pvap	100.00	kPa	460.79	Phase Equilibrium and Physical Properties for the Purification of Propylene Carbonate (PC) and γ-Butyrolactone (GBL)

pvap	10.00	kPa	398.23	Isobaric Vapor Liquid Equilibria for the Binary Mixtures Composed of Ethylene Glycol, 1,2-Propylene Glycol, 1,2-Butanediol, and 1,3-Butanediol at 10.00 kPa
pvap	0.62	kPa	345.15	Vapor Liquid Equilibria for Water + Propylene Glycols Binary Systems: Experimental Data and Regression
pvap	0.70	kPa	347.15	Vapor Liquid Equilibria for Water + Propylene Glycols Binary Systems: Experimental Data and Regression
pvap	0.84	kPa	350.15	Vapor Liquid Equilibria for Water + Propylene Glycols Binary Systems: Experimental Data and Regression
pvap	1.00	kPa	353.15	Vapor Liquid Equilibria for Water + Propylene Glycols Binary Systems: Experimental Data and Regression
pvap	1.13	kPa	355.15	Vapor Liquid Equilibria for Water + Propylene Glycols Binary Systems: Experimental Data and Regression

pvap	1.27	kPa	357.15	Vapor Liquid Equilibria for Water + Propylene Glycols Binary Systems: Experimental Data and Regression
pvap	1.51	kPa	360.15	Vapor Liquid Equilibria for Water + Propylene Glycols Binary Systems: Experimental Data and Regression
pvap	1.78	kPa	363.15	Vapor Liquid Equilibria for Water + Propylene Glycols Binary Systems: Experimental Data and Regression
pvap	1.99	kPa	365.15	Vapor Liquid Equilibria for Water + Propylene Glycols Binary Systems: Experimental Data and Regression
pvap	30.00	kPa	424.50	Excess properties and isobaric (vapor + liquid) equilibrium at sub-atmospheric pressures of binary (1,2-propanediol + 1,3-propanediol) system: Measurement and modelling
pvap	2.60	kPa	370.15	Vapor Liquid Equilibria for Water + Propylene Glycols Binary Systems: Experimental Data and Regression

pvap	3.03	kPa	373.15	Vapor Liquid Equilibria for Water + Propylene Glycols Binary Systems: Experimental Data and Regression
pvap	3.36	kPa	375.15	Vapor Liquid Equilibria for Water + Propylene Glycols Binary Systems: Experimental Data and Regression
pvap	3.72	kPa	377.15	Vapor Liquid Equilibria for Water + Propylene Glycols Binary Systems: Experimental Data and Regression
pvap	26.62	kPa	421.20	Excess properties and isobaric (vapor + liquid) equilibrium at sub-atmospheric pressures of binary (1,2-propanediol + 1,3-propanediol) system: Measurement and modelling
pvap	23.34	kPa	417.15	Excess properties and isobaric (vapor + liquid) equilibrium at sub-atmospheric pressures of binary (1,2-propanediol + 1,3-propanediol) system: Measurement and modelling

pvap	19.96	kPa	412.95	Excess properties and isobaric (vapor + liquid) equilibrium at sub-atmospheric pressures of binary (1,2-propanediol + 1,3-propanediol) system: Measurement and modelling
pvap	16.61	kPa	408.60	Excess properties and isobaric (vapor + liquid) equilibrium at sub-atmospheric pressures of binary (1,2-propanediol + 1,3-propanediol) system: Measurement and modelling
pvap	13.33	kPa	402.95	Excess properties and isobaric (vapor + liquid) equilibrium at sub-atmospheric pressures of binary (1,2-propanediol + 1,3-propanediol) system: Measurement and modelling
pvap	10.00	kPa	396.95	Excess properties and isobaric (vapor + liquid) equilibrium at sub-atmospheric pressures of binary (1,2-propanediol + 1,3-propanediol) system: Measurement and modelling

pvap	6.67	kPa	389.39	Excess properties and isobaric (vapor + liquid) equilibrium at sub-atmospheric pressures of binary (1,2-propanediol + 1,3-propanediol) system: Measurement and modelling
pvap	24.59	kPa	420.15	Vapor-liquid equilibrium for propylene glycols binary systems: Experimental data and regression
pvap	20.22	kPa	415.15	Vapor-liquid equilibrium for propylene glycols binary systems: Experimental data and regression
pvap	16.53	kPa	410.15	Vapor-liquid equilibrium for propylene glycols binary systems: Experimental data and regression
pvap	13.44	kPa	405.15	Vapor-liquid equilibrium for propylene glycols binary systems: Experimental data and regression
pvap	10.86	kPa	400.15	Vapor-liquid equilibrium for propylene glycols binary systems: Experimental data and regression
pvap	8.71	kPa	395.15	Vapor-liquid equilibrium for propylene glycols binary systems: Experimental data and regression
pvap	6.95	kPa	390.15	Vapor-liquid equilibrium for propylene glycols binary systems: Experimental data and regression

pvap	5.50	kPa	385.15	Vapor-liquid equilibrium for propylene glycols binary systems: Experimental data and regression
pvap	4.32	kPa	380.15	Vapor-liquid equilibrium for propylene glycols binary systems: Experimental data and regression
pvap	3.36	kPa	375.15	Vapor-liquid equilibrium for propylene glycols binary systems: Experimental data and regression
pvap	2.60	kPa	370.15	Vapor-liquid equilibrium for propylene glycols binary systems: Experimental data and regression
pvap	1.99	kPa	365.15	Vapor-liquid equilibrium for propylene glycols binary systems: Experimental data and regression
pvap	1.51	kPa	360.15	Vapor-liquid equilibrium for propylene glycols binary systems: Experimental data and regression
pvap	1.13	kPa	355.15	Vapor-liquid equilibrium for propylene glycols binary systems: Experimental data and regression
pvap	0.84	kPa	350.15	Vapor-liquid equilibrium for propylene glycols binary systems: Experimental data and regression

pvap	15.89	kPa	408.30	Vapor-Liquid Equilibrium for Propylene Glycol + 2-(2-Hexyloxyethoxy)ethanol and 1-Methyl-2-pyrrolidone + 1-Methoxypropan-2-ol
pvap	2.21	kPa	367.15	Vapor Liquid Equilibria for Water + Propylene Glycols Binary Systems: Experimental Data and Regression
rfi	1.43247		293.15	Experimental determination and modeling of excess molar volumes, viscosities and refractive indices of the binary systems (pyridine + 1-propanol, + 1,2-propanediol, + 1,3-propanediol, and + glycerol). New UNIFAC-VISCO parameters determination
rfi	1.43230		298.15	Densities, Excess Molar Volumes, Viscosity, and Refractive Indices of Binary and Ternary Liquid Mixtures of Methanol (1) + Ethanol (2) + 1,2-Propanediol (3) at P = 81.5 kPa
rfi	1.43143		293.15	Liquid-Liquid Equilibria of (Limonene + Linalool + Ethylene Glycol or Diethylene Glycol or Triethylene Glycol or 1,2-Propylene Glycol) Ternary Systems

rfi	1.43100	298.15	Study of the Acoustic and Thermodynamic Properties of 1,2- and 1,3-Propanediol by Means of High-Pressure Speed of Sound Measurements at Temperatures from (293 to 318) K and Pressures up to 101 MPa
rfi	1.43230	298.15	Excess Molar Enthalpies of 1,2-Propanediol + Alkan-1-ols (C1-C6) and Their Correlations at 298.15 K and Ambient Pressure (81.5 kPa)
rfi	1.43140	298.15	Densities, Dynamic Viscosities, Speeds of Sound, and Relative Permittivities for Water + Alkanediols (Propane-1,2- and -1,3-diol and Butane-1,2-, -1,3-, -1,4-, and -2,3-Diol) at Different Temperatures
rfi	1.43262	298.15	Phase Equilibrium Involving Xylose, Water, and Ethylene Glycol or 1,2-Propylene Glycol at Different Temperatures

rfi	1.42230	323.15	Experimental determination and modeling of excess molar volumes, viscosities and refractive indices of the binary systems (pyridine + 1-propanol, + 1,2-propanediol, + 1,3-propanediol, and + glycerol). New UNIFAC-VISCO parameters determination
rfi	1.43350	298.15	Vapor Liquid Equilibrium for Ternary and Binary Mixtures of Tetrahydrofuran, Cyclohexane, and 1,2-Propanediol at 101.3 kPa
rfi	1.42407	318.15	Experimental determination and modeling of excess molar volumes, viscosities and refractive indices of the binary systems (pyridine + 1-propanol, + 1,2-propanediol, + 1,3-propanediol, and + glycerol). New UNIFAC-VISCO parameters determination
rfi	1.42581	313.15	Experimental determination and modeling of excess molar volumes, viscosities and refractive indices of the binary systems (pyridine + 1-propanol, + 1,2-propanediol, + 1,3-propanediol, and + glycerol). New UNIFAC-VISCO parameters determination

rfi	1.42751	308.15	Experimental determination and modeling of excess molar volumes, viscosities and refractive indices of the binary systems (pyridine + 1-propanol, + 1,2-propanediol, + 1,3-propanediol, and + glycerol). New UNIFAC-VISCO parameters determination
rfi	1.42915	303.15	Experimental determination and modeling of excess molar volumes, viscosities and refractive indices of the binary systems (pyridine + 1-propanol, + 1,2-propanediol, + 1,3-propanediol, and + glycerol). New UNIFAC-VISCO parameters determination
rfi	1.43081	298.15	Experimental determination and modeling of excess molar volumes, viscosities and refractive indices of the binary systems (pyridine + 1-propanol, + 1,2-propanediol, + 1,3-propanediol, and + glycerol). New UNIFAC-VISCO parameters determination

rfi	1.43411		288.15	Experimental determination and modeling of excess molar volumes, viscosities and refractive indices of the binary systems (pyridine + 1-propanol, + 1,2-propanediol, + 1,3-propanediol, and + glycerol). New UNIFAC-VISCO parameters determination
-----	---------	--	--------	--

rhoI	1036.00	kg/m3	293.00	KDB
------	---------	-------	--------	-----

rhoI	1005.79	kg/m3	333.15	Densities, viscosities, and refractive indices of the binary systems (PEG200 + 1,2-propanediol, +1,3-propanediol) and (PEG400 + 1,2-propanediol, +1,3-propanediol) at (288.15 to 333.15) K and atmospheric pressure: Measurements and modeling
------	---------	-------	--------	--

rhoI	1036.17	kg/m3	293.15	Volume effects for binary mixtures of propane-1,2-diol with methanol, propan-1-ol, hexan-1-ol, octan-1-ol, or nonan-1-ol at temperatures (293.15 to 318.15) K
------	---------	-------	--------	---

rhoI	1032.52	kg/m3	298.15	Volume effects for binary mixtures of propane-1,2-diol with methanol, propan-1-ol, hexan-1-ol, octan-1-ol, or nonan-1-ol at temperatures (293.15 to 318.15) K
------	---------	-------	--------	---

rhoI	1028.83	kg/m3	303.15	Volume effects for binary mixtures of propane-1,2-diol with methanol, propan-1-ol, hexan-1-ol, octan-1-ol, or nonan-1-ol at temperatures (293.15 to 318.15) K
rhoI	1025.09	kg/m3	308.15	Volume effects for binary mixtures of propane-1,2-diol with methanol, propan-1-ol, hexan-1-ol, octan-1-ol, or nonan-1-ol at temperatures (293.15 to 318.15) K
rhoI	1021.31	kg/m3	313.15	Volume effects for binary mixtures of propane-1,2-diol with methanol, propan-1-ol, hexan-1-ol, octan-1-ol, or nonan-1-ol at temperatures (293.15 to 318.15) K
rhoI	1017.49	kg/m3	318.15	Volume effects for binary mixtures of propane-1,2-diol with methanol, propan-1-ol, hexan-1-ol, octan-1-ol, or nonan-1-ol at temperatures (293.15 to 318.15) K
rhoI	1036.13	kg/m3	293.15	Volume effects for binary mixtures of propane-1,2-diol with methanol, propan-1-ol, hexan-1-ol, octan-1-ol, or nonan-1-ol at temperatures (293.15 to 318.15) K

rhoI	1032.48	kg/m3	298.15	Volume effects for binary mixtures of propane-1,2-diol with methanol, propan-1-ol, hexan-1-ol, octan-1-ol, or nonan-1-ol at temperatures (293.15 to 318.15) K
rhoI	1028.78	kg/m3	303.15	Volume effects for binary mixtures of propane-1,2-diol with methanol, propan-1-ol, hexan-1-ol, octan-1-ol, or nonan-1-ol at temperatures (293.15 to 318.15) K
rhoI	1025.05	kg/m3	308.15	Volume effects for binary mixtures of propane-1,2-diol with methanol, propan-1-ol, hexan-1-ol, octan-1-ol, or nonan-1-ol at temperatures (293.15 to 318.15) K
rhoI	1021.28	kg/m3	313.15	Volume effects for binary mixtures of propane-1,2-diol with methanol, propan-1-ol, hexan-1-ol, octan-1-ol, or nonan-1-ol at temperatures (293.15 to 318.15) K
rhoI	1017.47	kg/m3	318.15	Volume effects for binary mixtures of propane-1,2-diol with methanol, propan-1-ol, hexan-1-ol, octan-1-ol, or nonan-1-ol at temperatures (293.15 to 318.15) K

rhoI	1036.21	kg/m3	293.15	Volume effects for binary mixtures of propane-1,2-diol with methanol, propan-1-ol, hexan-1-ol, octan-1-ol, or nonan-1-ol at temperatures (293.15 to 318.15) K
rhoI	1032.55	kg/m3	298.15	Volume effects for binary mixtures of propane-1,2-diol with methanol, propan-1-ol, hexan-1-ol, octan-1-ol, or nonan-1-ol at temperatures (293.15 to 318.15) K
rhoI	1028.84	kg/m3	303.15	Volume effects for binary mixtures of propane-1,2-diol with methanol, propan-1-ol, hexan-1-ol, octan-1-ol, or nonan-1-ol at temperatures (293.15 to 318.15) K
rhoI	1025.09	kg/m3	308.15	Volume effects for binary mixtures of propane-1,2-diol with methanol, propan-1-ol, hexan-1-ol, octan-1-ol, or nonan-1-ol at temperatures (293.15 to 318.15) K
rhoI	1021.31	kg/m3	313.15	Volume effects for binary mixtures of propane-1,2-diol with methanol, propan-1-ol, hexan-1-ol, octan-1-ol, or nonan-1-ol at temperatures (293.15 to 318.15) K

rhoI	1036.22	kg/m3	293.15	Volume effects for binary mixtures of propane-1,2-diol with methanol, propan-1-ol, hexan-1-ol, octan-1-ol, or nonan-1-ol at temperatures (293.15 to 318.15) K
rhoI	1032.56	kg/m3	298.15	Volume effects for binary mixtures of propane-1,2-diol with methanol, propan-1-ol, hexan-1-ol, octan-1-ol, or nonan-1-ol at temperatures (293.15 to 318.15) K
rhoI	1028.85	kg/m3	303.15	Volume effects for binary mixtures of propane-1,2-diol with methanol, propan-1-ol, hexan-1-ol, octan-1-ol, or nonan-1-ol at temperatures (293.15 to 318.15) K
rhoI	1025.10	kg/m3	308.15	Volume effects for binary mixtures of propane-1,2-diol with methanol, propan-1-ol, hexan-1-ol, octan-1-ol, or nonan-1-ol at temperatures (293.15 to 318.15) K
rhoI	1021.31	kg/m3	313.15	Volume effects for binary mixtures of propane-1,2-diol with methanol, propan-1-ol, hexan-1-ol, octan-1-ol, or nonan-1-ol at temperatures (293.15 to 318.15) K

rhoI	1017.49	kg/m3	318.15	Volume effects for binary mixtures of propane-1,2-diol with methanol, propan-1-ol, hexan-1-ol, octan-1-ol, or nonan-1-ol at temperatures (293.15 to 318.15) K
rhoI	1036.30	kg/m3	293.15	Thermodynamic and spectroscopic interpretation of molecular interactions of nicotine + alcohol binary mixtures
rhoI	1032.62	kg/m3	298.15	Thermodynamic and spectroscopic interpretation of molecular interactions of nicotine + alcohol binary mixtures
rhoI	1028.91	kg/m3	303.15	Thermodynamic and spectroscopic interpretation of molecular interactions of nicotine + alcohol binary mixtures
rhoI	1025.16	kg/m3	308.15	Thermodynamic and spectroscopic interpretation of molecular interactions of nicotine + alcohol binary mixtures
rhoI	1021.39	kg/m3	313.15	Thermodynamic and spectroscopic interpretation of molecular interactions of nicotine + alcohol binary mixtures
rhoI	1017.57	kg/m3	318.15	Thermodynamic and spectroscopic interpretation of molecular interactions of nicotine + alcohol binary mixtures

rhoI	1013.72	kg/m3	323.15	Thermodynamic and spectroscopic interpretation of molecular interactions of nicotine + alcohol binary mixtures
rhoI	1036.00	kg/m3	293.15	Thermodynamic and transport properties of acetonitrile + alkanediols liquid mixtures at different temperatures, experimental measurements and modeling
rhoI	1033.00	kg/m3	298.15	Thermodynamic and transport properties of acetonitrile + alkanediols liquid mixtures at different temperatures, experimental measurements and modeling
rhoI	1029.00	kg/m3	303.15	Thermodynamic and transport properties of acetonitrile + alkanediols liquid mixtures at different temperatures, experimental measurements and modeling
rhoI	1033.60	kg/m3	298.15	Excess enthalpies of binary mixtures of some propylamines + some propanols at 298.15K
rhoI	1028.80	kg/m3	303.15	Thermodynamic study on some alkanediol solutions: measurement and molecular modeling
rhoI	1025.20	kg/m3	308.15	Thermodynamic study on some alkanediol solutions: measurement and molecular modeling

rhoI	1032.70	kg/m3	298.15	Thermodynamic study on some alkanediol solutions: measurement and molecular modeling
rhoI	1039.87	kg/m3	288.15	Experimental measurements and modelling of volumetric properties, refractive index and viscosity of selected binary systems with butyl lactate at 288.15 to 323.15 K and atmospheric pressure. New UNIFAC-VISCO interaction parameters.
rhoI	1020.75	kg/m3	313.15	Volumetric, ultrasonic and spectroscopic (FT-IR) studies for the binary mixtures of imidazolium based ILs with 1,2-propanediol
rhoI	1032.56	kg/m3	298.15	Experimental measurements and modelling of volumetric properties, refractive index and viscosity of selected binary systems with butyl lactate at 288.15 to 323.15 K and atmospheric pressure. New UNIFAC-VISCO interaction parameters.

rhoI	1028.88	kg/m3	303.15	Experimental measurements and modelling of volumetric properties, refractive index and viscosity of selected binary systems with butyl lactate at 288.15 to 323.15 K and atmospheric pressure. New UNIFAC-VISCO interaction parameters.
rhoI	1025.14	kg/m3	308.15	Experimental measurements and modelling of volumetric properties, refractive index and viscosity of selected binary systems with butyl lactate at 288.15 to 323.15 K and atmospheric pressure. New UNIFAC-VISCO interaction parameters.
rhoI	1021.35	kg/m3	313.15	Experimental measurements and modelling of volumetric properties, refractive index and viscosity of selected binary systems with butyl lactate at 288.15 to 323.15 K and atmospheric pressure. New UNIFAC-VISCO interaction parameters.

rhoI	1017.52	kg/m3	318.15	Experimental measurements and modelling of volumetric properties, refractive index and viscosity of selected binary systems with butyl lactate at 288.15 to 323.15 K and atmospheric pressure. New UNIFAC-VISCO interaction parameters.
rhoI	1013.66	kg/m3	323.15	Experimental measurements and modelling of volumetric properties, refractive index and viscosity of selected binary systems with butyl lactate at 288.15 to 323.15 K and atmospheric pressure. New UNIFAC-VISCO interaction parameters.
rhoI	1032.30	kg/m3	298.15	Isobaric Vapor Liquid Equilibria for Binary Systems of Diethyl Carbonate + Propylene Carbonate, Diethyl Carbonate + Propylene Glycol, and Ethanol + Propylene Carbonate at 101.3 kPa
rhoI	1039.77	kg/m3	288.15	Apparent Molar Volumes and Isentropic Compressibilities of Tetraalkylammonium Bromides in Aqueous Propane-1,2-diol. An Attempt to Design Hydraulic Liquids

rhoI	1036.15	kg/m3	293.15	Apparent Molar Volumes and Isentropic Compressibilities of Tetraalkylammonium Bromides in Aqueous Propane-1,2-diol. An Attempt to Design Hydraulic Liquids
rhoI	1032.49	kg/m3	298.15	Apparent Molar Volumes and Isentropic Compressibilities of Tetraalkylammonium Bromides in Aqueous Propane-1,2-diol. An Attempt to Design Hydraulic Liquids
rhoI	1028.78	kg/m3	303.15	Apparent Molar Volumes and Isentropic Compressibilities of Tetraalkylammonium Bromides in Aqueous Propane-1,2-diol. An Attempt to Design Hydraulic Liquids
rhoI	1025.03	kg/m3	308.15	Apparent Molar Volumes and Isentropic Compressibilities of Tetraalkylammonium Bromides in Aqueous Propane-1,2-diol. An Attempt to Design Hydraulic Liquids
rhoI	1021.25	kg/m3	313.15	Apparent Molar Volumes and Isentropic Compressibilities of Tetraalkylammonium Bromides in Aqueous Propane-1,2-diol. An Attempt to Design Hydraulic Liquids

rhoI	1017.43	kg/m3	318.15	Apparent Molar Volumes and Isentropic Compressibilities of Tetraalkylammonium Bromides in Aqueous Propane-1,2-diol. An Attempt to Design Hydraulic Liquids
rhoI	1039.78	kg/m3	288.15	Apparent Molar Volumes and Isentropic Compressibilities of Tetraalkylammonium Bromides in Aqueous Propane-1,2-diol. An Attempt to Design Hydraulic Liquids
rhoI	1036.16	kg/m3	293.15	Apparent Molar Volumes and Isentropic Compressibilities of Tetraalkylammonium Bromides in Aqueous Propane-1,2-diol. An Attempt to Design Hydraulic Liquids
rhoI	1021.24	kg/m3	313.15	Apparent Molar Volumes and Isentropic Compressibilities of Tetraalkylammonium Bromides in Aqueous Propane-1,2-diol. An Attempt to Design Hydraulic Liquids
rhoI	1017.42	kg/m3	318.15	Apparent Molar Volumes and Isentropic Compressibilities of Tetraalkylammonium Bromides in Aqueous Propane-1,2-diol. An Attempt to Design Hydraulic Liquids

rhoI	1032.48	kg/m3	298.15	Apparent Molar Volumes and Isentropic Compressibilities of Tetraalkylammonium Bromides in Aqueous Propane-1,2-diol. An Attempt to Design Hydraulic Liquids
rhoI	1028.77	kg/m3	303.15	Apparent Molar Volumes and Isentropic Compressibilities of Tetraalkylammonium Bromides in Aqueous Propane-1,2-diol. An Attempt to Design Hydraulic Liquids
rhoI	1032.58	kg/m3	298.15	Densities and Viscosities for Binary Liquid Mixtures of Butan-1-ol + Propane-1,2-diol, + Butane-1,2-diol and 2-Methylpropan-1-ol + Propane-1,2-diol, + Butane-1,2-diol from 298.15 to 333.15 K at 0.1 MPa
rhoI	1028.88	kg/m3	303.15	Densities and Viscosities for Binary Liquid Mixtures of Butan-1-ol + Propane-1,2-diol, + Butane-1,2-diol and 2-Methylpropan-1-ol + Propane-1,2-diol, + Butane-1,2-diol from 298.15 to 333.15 K at 0.1 MPa

rhoI	1025.13	kg/m3	308.15	Densities and Viscosities for Binary Liquid Mixtures of Butan-1-ol + Propane-1,2-diol, + Butane-1,2-diol and 2-Methylpropan-1-ol + Propane-1,2-diol, + Butane-1,2-diol from 298.15 to 333.15 K at 0.1 MPa
rhoI	1021.35	kg/m3	313.15	Densities and Viscosities for Binary Liquid Mixtures of Butan-1-ol + Propane-1,2-diol, + Butane-1,2-diol and 2-Methylpropan-1-ol + Propane-1,2-diol, + Butane-1,2-diol from 298.15 to 333.15 K at 0.1 MPa
rhoI	1017.52	kg/m3	318.15	Densities and Viscosities for Binary Liquid Mixtures of Butan-1-ol + Propane-1,2-diol, + Butane-1,2-diol and 2-Methylpropan-1-ol + Propane-1,2-diol, + Butane-1,2-diol from 298.15 to 333.15 K at 0.1 MPa
rhoI	1013.66	kg/m3	323.15	Densities and Viscosities for Binary Liquid Mixtures of Butan-1-ol + Propane-1,2-diol, + Butane-1,2-diol and 2-Methylpropan-1-ol + Propane-1,2-diol, + Butane-1,2-diol from 298.15 to 333.15 K at 0.1 MPa

rhoI	1009.75	kg/m3	328.15	Densities and Viscosities for Binary Liquid Mixtures of Butan-1-ol + Propane-1,2-diol, + Butane-1,2-diol and 2-Methylpropan-1-ol + Propane-1,2-diol, + Butane-1,2-diol from 298.15 to 333.15 K at 0.1 MPa
rhoI	1005.80	kg/m3	333.15	Densities and Viscosities for Binary Liquid Mixtures of Butan-1-ol + Propane-1,2-diol, + Butane-1,2-diol and 2-Methylpropan-1-ol + Propane-1,2-diol, + Butane-1,2-diol from 298.15 to 333.15 K at 0.1 MPa
rhoI	1052.17	kg/m3	273.15	Density of Working Liquids for Diffusion Vacuum Pumps
rhoI	1044.74	kg/m3	283.15	Density of Working Liquids for Diffusion Vacuum Pumps
rhoI	1037.22	kg/m3	293.15	Density of Working Liquids for Diffusion Vacuum Pumps
rhoI	1029.64	kg/m3	303.15	Density of Working Liquids for Diffusion Vacuum Pumps
rhoI	1021.98	kg/m3	313.15	Density of Working Liquids for Diffusion Vacuum Pumps
rhoI	1014.25	kg/m3	323.15	Density of Working Liquids for Diffusion Vacuum Pumps
rhoI	1006.45	kg/m3	333.15	Density of Working Liquids for Diffusion Vacuum Pumps
rhoI	998.57	kg/m3	343.15	Density of Working Liquids for Diffusion Vacuum Pumps

rhoI	990.62	kg/m3	353.15	Density of Working Liquids for Diffusion Vacuum Pumps
rhoI	982.60	kg/m3	363.15	Density of Working Liquids for Diffusion Vacuum Pumps
rhoI	1051.30	kg/m3	273.15	Viscosities, Densities, and Refractive Indices of Aqueous Propane-1,3-diol
rhoI	1042.90	kg/m3	283.15	Viscosities, Densities, and Refractive Indices of Aqueous Propane-1,3-diol
rhoI	1035.50	kg/m3	293.15	Viscosities, Densities, and Refractive Indices of Aqueous Propane-1,3-diol
rhoI	1028.10	kg/m3	303.15	Viscosities, Densities, and Refractive Indices of Aqueous Propane-1,3-diol
rhoI	1020.60	kg/m3	313.15	Viscosities, Densities, and Refractive Indices of Aqueous Propane-1,3-diol
rhoI	1013.00	kg/m3	323.15	Viscosities, Densities, and Refractive Indices of Aqueous Propane-1,3-diol
rhoI	1005.30	kg/m3	333.15	Viscosities, Densities, and Refractive Indices of Aqueous Propane-1,3-diol
rhoI	997.70	kg/m3	343.15	Viscosities, Densities, and Refractive Indices of Aqueous Propane-1,3-diol
rhoI	989.50	kg/m3	353.15	Viscosities, Densities, and Refractive Indices of Aqueous Propane-1,3-diol

rhoI	1065.80	kg/m3	253.15	Viscosities, Densities, and Refractive Indices of Aqueous Propane-1,3-diol
rhoI	1062.20	kg/m3	258.15	Viscosities, Densities, and Refractive Indices of Aqueous Propane-1,3-diol
rhoI	1058.60	kg/m3	263.15	Viscosities, Densities, and Refractive Indices of Aqueous Propane-1,3-diol
rhoI	1054.90	kg/m3	268.15	Viscosities, Densities, and Refractive Indices of Aqueous Propane-1,3-diol
rhoI	1026.15	kg/m3	308.15	Excess Molar Enthalpies of Binary Mixtures Containing Glycols or Polyglycols + Dimethyl Sulfoxide at 308.15 K
rhoI	1026.15	kg/m3	308.15	Excess Molar Enthalpies and Hydrogen Bonding in Binary Mixtures Containing Glycols or Poly(Ethylene Glycols) and 2-Phenylethyl Alcohol at 308.15 K and Atmospheric Pressure
rhoI	1032.50	kg/m3	298.15	Densities and Excess Molar Volumes for Binary Glycerol + 1-Propanol, + 2-Propanol, + 1,2-Propanediol, and + 1,3-Propanediol Mixtures at Different Temperatures

rhoI	1029.20	kg/m3	303.15	Densities and Excess Molar Volumes for Binary Glycerol + 1-Propanol, + 2-Propanol, + 1,2-Propanediol, and + 1,3-Propanediol Mixtures at Different Temperatures
rhoI	1025.30	kg/m3	308.15	Densities and Excess Molar Volumes for Binary Glycerol + 1-Propanol, + 2-Propanol, + 1,2-Propanediol, and + 1,3-Propanediol Mixtures at Different Temperatures
rhoI	1021.50	kg/m3	313.15	Densities and Excess Molar Volumes for Binary Glycerol + 1-Propanol, + 2-Propanol, + 1,2-Propanediol, and + 1,3-Propanediol Mixtures at Different Temperatures
rhoI	1018.00	kg/m3	318.15	Densities and Excess Molar Volumes for Binary Glycerol + 1-Propanol, + 2-Propanol, + 1,2-Propanediol, and + 1,3-Propanediol Mixtures at Different Temperatures
rhoI	1014.00	kg/m3	323.15	Densities and Excess Molar Volumes for Binary Glycerol + 1-Propanol, + 2-Propanol, + 1,2-Propanediol, and + 1,3-Propanediol Mixtures at Different Temperatures

rhoI	1010.20	kg/m3	328.15	Densities and Excess Molar Volumes for Binary Glycerol + 1-Propanol, + 2-Propanol, + 1,2-Propanediol, and + 1,3-Propanediol Mixtures at Different Temperatures	
rhoI	1006.20	kg/m3	333.15	Densities and Excess Molar Volumes for Binary Glycerol + 1-Propanol, + 2-Propanol, + 1,2-Propanediol, and + 1,3-Propanediol Mixtures at Different Temperatures	
rhoI	1031.90	kg/m3	298.15	Isobaric Vapor Liquid Equilibrium for Two Binary Systems{Propane-1,2-diol + Ethane-1,2-diol and Propane-1,2-diol + Butane-1,2-diol} at p = (10.0, 20.0, and 40.0) kPa	
rhoI	1036.57	kg/m3	293.15	Densities and Excess Molar Volumes for Binary Mixtures of 1,4-Butanediol + 1,2-Propanediol, + 1,3-Propanediol, and + Ethane-1,2-diol from (293.15 to 328.15) K	
rhoI	1032.86	kg/m3	298.15	Densities and Excess Molar Volumes for Binary Mixtures of 1,4-Butanediol + 1,2-Propanediol, + 1,3-Propanediol, and + Ethane-1,2-diol from (293.15 to 328.15) K	

rhoI	1029.15	kg/m3	303.15	Densities and Excess Molar Volumes for Binary Mixtures of 1,4-Butanediol + 1,2-Propanediol, + 1,3-Propanediol, and + Ethane-1,2-diol from (293.15 to 328.15) K
rhoI	1025.57	kg/m3	308.15	Densities and Excess Molar Volumes for Binary Mixtures of 1,4-Butanediol + 1,2-Propanediol, + 1,3-Propanediol, and + Ethane-1,2-diol from (293.15 to 328.15) K
rhoI	1021.44	kg/m3	313.15	Densities and Excess Molar Volumes for Binary Mixtures of 1,4-Butanediol + 1,2-Propanediol, + 1,3-Propanediol, and + Ethane-1,2-diol from (293.15 to 328.15) K
rhoI	1017.59	kg/m3	318.15	Densities and Excess Molar Volumes for Binary Mixtures of 1,4-Butanediol + 1,2-Propanediol, + 1,3-Propanediol, and + Ethane-1,2-diol from (293.15 to 328.15) K
rhoI	1013.74	kg/m3	323.15	Densities and Excess Molar Volumes for Binary Mixtures of 1,4-Butanediol + 1,2-Propanediol, + 1,3-Propanediol, and + Ethane-1,2-diol from (293.15 to 328.15) K

rhoI	1009.71	kg/m3	328.15	Densities and Excess Molar Volumes for Binary Mixtures of 1,4-Butanediol + 1,2-Propanediol, + 1,3-Propanediol, and + Ethane-1,2-diol from (293.15 to 328.15) K
rhoI	1024.55	kg/m3	308.15	Volumetric, ultrasonic and spectroscopic (FT-IR) studies for the binary mixtures of imidazolium based ILs with 1,2-propanediol
rhoI	1028.31	kg/m3	303.15	Volumetric, ultrasonic and spectroscopic (FT-IR) studies for the binary mixtures of imidazolium based ILs with 1,2-propanediol
rhoI	1032.03	kg/m3	298.15	Volumetric, ultrasonic and spectroscopic (FT-IR) studies for the binary mixtures of imidazolium based ILs with 1,2-propanediol
rhoI	1035.73	kg/m3	293.15	Volumetric, ultrasonic and spectroscopic (FT-IR) studies for the binary mixtures of imidazolium based ILs with 1,2-propanediol
rhoI	1032.55	kg/m3	298.15	Excess volumes and excess heat capacities of {1,2- alkanediol + methanol} mixtures and ionic volumes in these systems

rhoI	1009.78	kg/m3	328.15	Densities, surface tensions, and isobaric vapor-liquid equilibria for the mixtures of 2-propanol, water, and 1,2-propanediol
rhoI	1017.51	kg/m3	318.15	Densities, surface tensions, and isobaric vapor-liquid equilibria for the mixtures of 2-propanol, water, and 1,2-propanediol
rhoI	1025.21	kg/m3	308.15	Densities, surface tensions, and isobaric vapor-liquid equilibria for the mixtures of 2-propanol, water, and 1,2-propanediol
rhoI	1032.69	kg/m3	298.15	Densities, surface tensions, and isobaric vapor-liquid equilibria for the mixtures of 2-propanol, water, and 1,2-propanediol
rhoI	1013.66	kg/m3	323.15	Volumetric and viscometric behavior of the binary systems ethyl lactate + 1,2- propanediol, + 1,3-propanediol, + tetrahydrofuran and + tetraethylene glycol dimethyl ether. New UNIFAC-VISCO and ASOG-VISCO parameters determination

rhoI	1017.52	kg/m3	318.15	Volumetric and viscometric behavior of the binary systems ethyl lactate + 1,2- propanediol, + 1,3-propanediol, + tetrahydrofuran and + tetraethylene glycol dimethyl ether. New UNIFAC-VISCO and ASOG-VISCO parameters determination
rhoI	1021.35	kg/m3	313.15	Volumetric and viscometric behavior of the binary systems ethyl lactate + 1,2- propanediol, + 1,3-propanediol, + tetrahydrofuran and + tetraethylene glycol dimethyl ether. New UNIFAC-VISCO and ASOG-VISCO parameters determination
rhoI	1009.75	kg/m3	328.15	Densities, viscosities, and refractive indices of the binary systems (PEG200 + 1,2-propanediol, +1,3-propanediol) and (PEG400 + 1,2-propanediol, +1,3-propanediol) at (288.15 to 333.15) K and atmospheric pressure: Measurements and modeling

rhoI	1025.14	kg/m3	308.15	Volumetric and viscometric behavior of the binary systems ethyl lactate + 1,2- propanediol, + 1,3-propanediol, + tetrahydrofuran and + tetraethylene glycol dimethyl ether. New UNIFAC-VISCO and ASOG-VISCO parameters determination
rhoI	1028.88	kg/m3	303.15	Volumetric and viscometric behavior of the binary systems ethyl lactate + 1,2- propanediol, + 1,3-propanediol, + tetrahydrofuran and + tetraethylene glycol dimethyl ether. New UNIFAC-VISCO and ASOG-VISCO parameters determination
rhoI	1032.59	kg/m3	298.15	Volumetric and viscometric behavior of the binary systems ethyl lactate + 1,2- propanediol, + 1,3-propanediol, + tetrahydrofuran and + tetraethylene glycol dimethyl ether. New UNIFAC-VISCO and ASOG-VISCO parameters determination

rhoI	1013.66	kg/m3	323.15	Densities, viscosities, and refractive indices of the binary systems (PEG200 + 1,2-propanediol, +1,3-propanediol) and (PEG400 + 1,2-propanediol, +1,3-propanediol) at (288.15 to 333.15) K and atmospheric pressure: Measurements and modeling
rhoI	1039.87	kg/m3	288.15	Volumetric and viscometric behavior of the binary systems ethyl lactate + 1,2- propanediol, + 1,3-propanediol, + tetrahydrofuran and + tetraethylene glycol dimethyl ether. New UNIFAC-VISCO and ASOG-VISCO parameters determination
rhoI	1021.48	kg/m3	313.15	Excess volumes and excess heat capacities for alkanediol + water systems in the temperature interval (283.15-313.15) K
rhoI	1029.10	kg/m3	303.15	Excess volumes and excess heat capacities for alkanediol + water systems in the temperature interval (283.15-313.15) K
rhoI	1032.86	kg/m3	298.15	Excess volumes and excess heat capacities for alkanediol + water systems in the temperature interval (283.15-313.15) K

rhoI	1036.58	kg/m3	293.15	Excess volumes and excess heat capacities for alkanediol + water systems in the temperature interval (283.15-313.15) K
rhoI	1043.89	kg/m3	283.15	Excess volumes and excess heat capacities for alkanediol + water systems in the temperature interval (283.15-313.15) K
rhoI	1017.52	kg/m3	318.15	Densities, viscosities, and refractive indices of the binary systems (PEG200 + 1,2-propanediol, +1,3-propanediol) and (PEG400 + 1,2-propanediol, +1,3-propanediol) at (288.15 to 333.15) K and atmospheric pressure: Measurements and modeling
rhoI	1021.35	kg/m3	313.15	Densities, viscosities, and refractive indices of the binary systems (PEG200 + 1,2-propanediol, +1,3-propanediol) and (PEG400 + 1,2-propanediol, +1,3-propanediol) at (288.15 to 333.15) K and atmospheric pressure: Measurements and modeling

rhoI	1025.14	kg/m3	308.15	Densities, viscosities, and refractive indices of the binary systems (PEG200 + 1,2-propanediol, +1,3-propanediol) and (PEG400 + 1,2-propanediol, +1,3-propanediol) at (288.15 to 333.15) K and atmospheric pressure: Measurements and modeling
rhoI	1028.88	kg/m3	303.15	Densities, viscosities, and refractive indices of the binary systems (PEG200 + 1,2-propanediol, +1,3-propanediol) and (PEG400 + 1,2-propanediol, +1,3-propanediol) at (288.15 to 333.15) K and atmospheric pressure: Measurements and modeling
rhoI	1032.59	kg/m3	298.15	Densities, viscosities, and refractive indices of the binary systems (PEG200 + 1,2-propanediol, +1,3-propanediol) and (PEG400 + 1,2-propanediol, +1,3-propanediol) at (288.15 to 333.15) K and atmospheric pressure: Measurements and modeling

rhoI	1036.25	kg/m3	293.15	Densities, viscosities, and refractive indices of the binary systems (PEG200 + 1,2-propanediol, +1,3-propanediol) and (PEG400 + 1,2-propanediol, +1,3-propanediol) at (288.15 to 333.15) K and atmospheric pressure: Measurements and modeling
rhoI	1039.87	kg/m3	288.15	Densities, viscosities, and refractive indices of the binary systems (PEG200 + 1,2-propanediol, +1,3-propanediol) and (PEG400 + 1,2-propanediol, +1,3-propanediol) at (288.15 to 333.15) K and atmospheric pressure: Measurements and modeling
rhoI	997.86	kg/m3	343.15	Densities and derived thermodynamic properties of (2-methoxyethanol + 1-propanol, or 2-propanol, or 1,2-propandiol) at temperatures from T = (293.15 to 343.15) K
rhoI	1005.86	kg/m3	333.15	Densities and derived thermodynamic properties of (2-methoxyethanol + 1-propanol, or 2-propanol, or 1,2-propandiol) at temperatures from T = (293.15 to 343.15) K

rhoI	1013.68	kg/m3	323.15	Densities and derived thermodynamic properties of (2-methoxyethanol + 1-propanol, or 2-propanol, or 1,2-propandiol) at temperatures from T = (293.15 to 343.15) K
rhoI	1021.35	kg/m3	313.15	Densities and derived thermodynamic properties of (2-methoxyethanol + 1-propanol, or 2-propanol, or 1,2-propandiol) at temperatures from T = (293.15 to 343.15) K
rhoI	1028.89	kg/m3	303.15	Densities and derived thermodynamic properties of (2-methoxyethanol + 1-propanol, or 2-propanol, or 1,2-propandiol) at temperatures from T = (293.15 to 343.15) K
rhoI	1036.30	kg/m3	293.15	Densities and derived thermodynamic properties of (2-methoxyethanol + 1-propanol, or 2-propanol, or 1,2-propandiol) at temperatures from T = (293.15 to 343.15) K
rhoI	1036.25	kg/m3	293.15	Volumetric and viscometric behavior of the binary systems ethyl lactate + 1,2- propanediol, + 1,3-propanediol, + tetrahydrofuran and + tetraethylene glycol dimethyl ether. New UNIFAC-VISCO and ASOG-VISCO parameters determination

rhoI	1016.92	kg/m ³	318.15	Volumetric, ultrasonic and spectroscopic (FT-IR) studies for the binary mixtures of imidazolium based ILs with 1,2-propanediol
rhoI	1036.25	kg/m ³	293.15	Experimental measurements and modelling of volumetric properties, refractive index and viscosity of selected binary systems with butyl lactate at 288.15 to 323.15 K and atmospheric pressure. New UNIFAC-VISCO interaction parameters.
speedsl	1510.60	m/s	298.15	Volumetric and compressibility properties of liquid water as a solute in glycolic, propylene carbonate, and tetramethylurea solutions at T = 298.15 K
tcondI	0.20	W/m×K	332.90	Density, Viscosity and Thermal Conductivity of Aqueous Solutions of Propylene Glycol, Dipropylene Glycol, and Tripropylene Glycol between 290 K and 460 K
tcondI	0.19	W/m×K	411.40	Density, Viscosity and Thermal Conductivity of Aqueous Solutions of Propylene Glycol, Dipropylene Glycol, and Tripropylene Glycol between 290 K and 460 K

tcondl	0.21	W/m×K	283.15	Thermal conductivity of dry anatase and rutile nano-powders and ethylene and propylene glycol-based TiO2 nanofluids
tcondl	0.19	W/m×K	391.10	Density, Viscosity and Thermal Conductivity of Aqueous Solutions of Propylene Glycol, Dipropylene Glycol, and Tripropylene Glycol between 290 K and 460 K
tcondl	0.19	W/m×K	371.60	Density, Viscosity and Thermal Conductivity of Aqueous Solutions of Propylene Glycol, Dipropylene Glycol, and Tripropylene Glycol between 290 K and 460 K
tcondl	0.19	W/m×K	430.40	Density, Viscosity and Thermal Conductivity of Aqueous Solutions of Propylene Glycol, Dipropylene Glycol, and Tripropylene Glycol between 290 K and 460 K
tcondl	0.21	W/m×K	303.15	Thermal conductivity of dry anatase and rutile nano-powders and ethylene and propylene glycol-based TiO2 nanofluids
tcondl	0.21	W/m×K	323.15	Thermal conductivity of dry anatase and rutile nano-powders and ethylene and propylene glycol-based TiO2 nanofluids

tcondl	0.21	W/m×K	343.15	Thermal conductivity of dry anatase and rutile nano-powders and ethylene and propylene glycol-based TiO2 nanofluids
tcondl	0.20	W/m×K	299.10	Density, Viscosity and Thermal Conductivity of Aqueous Solutions of Propylene Glycol, Dipropylene Glycol, and Tripropylene Glycol between 290 K and 460 K
tcondl	0.18	W/m×K	450.80	Density, Viscosity and Thermal Conductivity of Aqueous Solutions of Propylene Glycol, Dipropylene Glycol, and Tripropylene Glycol between 290 K and 460 K
tcondl	0.20	W/m×K	313.60	Density, Viscosity and Thermal Conductivity of Aqueous Solutions of Propylene Glycol, Dipropylene Glycol, and Tripropylene Glycol between 290 K and 460 K
tcondl	0.19	W/m×K	352.30	Density, Viscosity and Thermal Conductivity of Aqueous Solutions of Propylene Glycol, Dipropylene Glycol, and Tripropylene Glycol between 290 K and 460 K

vols	9.65e-04	m3/kg	293.15	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.56e-04	m3/kg	279.15	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.57e-04	m3/kg	281.15	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.58e-04	m3/kg	282.16	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.58e-04	m3/kg	283.16	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture

vols	9.59e-04	m3/kg	284.16	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.60e-04	m3/kg	285.16	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.60e-04	m3/kg	286.16	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.61e-04	m3/kg	287.16	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.62e-04	m3/kg	288.16	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture

vols	9.62e-04	m3/kg	289.16	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.63e-04	m3/kg	290.15	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.64e-04	m3/kg	291.15	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.64e-04	m3/kg	292.15	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.55e-04	m3/kg	278.15	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture

vols	9.66e-04	m3/kg	294.15	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.54e-04	m3/kg	277.15	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.67e-04	m3/kg	296.16	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.68e-04	m3/kg	297.16	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.68e-04	m3/kg	298.16	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture

vols	9.69e-04	m3/kg	299.16	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.70e-04	m3/kg	300.16	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.70e-04	m3/kg	301.16	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.71e-04	m3/kg	302.16	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.72e-04	m3/kg	303.16	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture

vols	9.73e-04	m3/kg	304.15	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.73e-04	m3/kg	305.15	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.74e-04	m3/kg	306.15	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.75e-04	m3/kg	307.15	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.75e-04	m3/kg	308.15	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture

vols	9.76e-04	m3/kg	309.15	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.77e-04	m3/kg	310.15	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.78e-04	m3/kg	311.15	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.78e-04	m3/kg	312.15	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.79e-04	m3/kg	313.15	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture

vols	9.62e-04	m3/kg	288.34	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.54e-04	m3/kg	276.15	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.53e-04	m3/kg	275.15	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.53e-04	m3/kg	274.15	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.52e-04	m3/kg	273.15	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture

vols	9.62e-04	m3/kg	288.31	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.66e-04	m3/kg	295.15	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.56e-04	m3/kg	280.15	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture
vols	9.62e-04	m3/kg	288.05	Volumetric Properties of Pressure-Transmitting Fluids up to 350 MPa: Water, Ethanol, Ethylene Glycol, Propylene Glycol, Castor Oil, Silicon Oil, and Some of Their Binary Mixture

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.64972e+01
Coeff. B	-4.64181e+03

Coeff. C	-6.92380e+01
Temperature range (K), min.	335.73
Temperature range (K), max.	485.20

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/T + C \cdot \ln(T) + D \cdot T^2$
Coeff. A	2.23565e+02
Coeff. B	-1.60975e+04
Coeff. C	-3.08431e+01
Coeff. D	2.42067e-05
Temperature range (K), min.	213.15
Temperature range (K), max.	626.00

Datasets

Mass density, kg/m3

Temperature, K - Liquid	Pressure, kPa - Liquid	Mass density, kg/m3 - Liquid
298.15	98.00	1032.56
303.15	98.00	1028.87
312.98	98.00	1022.16
335.78	98.00	1005.31
364.39	98.00	981.63
394.95	98.00	953.22
423.51	98.00	926.76
452.17	98.00	900.36
298.15	49030.00	1055.29
303.15	49030.00	1052.03
313.00	49030.00	1046.22
335.80	49030.00	1029.3
364.66	49030.00	1007.36
395.11	49030.00	982.98
423.62	49030.00	959.18
452.10	49030.00	934.51
298.15	98060.00	1072.94
303.15	98060.00	1070.79
313.05	98060.00	1065.24

335.76	98060.00	1050.34
364.83	98060.00	1031.15
395.17	98060.00	1010.62
423.90	98060.00	989.94
452.14	98060.00	965.53
298.15	147100.00	1088.48
303.15	147100.00	1086.25
313.03	147100.00	1081.67
335.78	147100.00	1068.19
364.87	147100.00	1051.61
395.38	147100.00	1033.92
423.97	147100.00	1016.34
452.19	147100.00	996.01
298.15	196130.00	1104.32
303.15	196130.00	1101.4
313.04	196130.00	1095.69
335.80	196130.00	1082.92
365.00	196130.00	1067.32
395.57	196130.00	1051.9
424.05	196130.00	1038.38
452.18	196130.00	1022.83
298.15	245160.00	1115.28
303.15	245160.00	1112.65
313.03	245160.00	1107.51
336.01	245160.00	1095.8
364.99	245160.00	1081.56
395.68	245160.00	1067.12
424.30	245160.00	1054.25
452.07	245160.00	1042.31

Reference

<https://www.doi.org/10.1016/j.fluid.2017.07.006>

Temperature, K	Pressure, kPa	Mass density, kg/m3
278.15	100.00	1047.1
278.15	1000.00	1047.3
278.15	5000.00	1049.2
278.15	10000.00	1051.2
278.15	15000.00	1053.4
278.15	20000.00	1055.5
278.15	25000.00	1057.6
278.15	30000.00	1059.6
278.15	35000.00	1061.6
278.15	40000.00	1063.6

278.15	45000.00	1065.6
278.15	50000.00	1067.5
278.15	55000.00	1069.3
278.15	60000.00	1071.4
288.15	100.00	1039.9
288.15	1000.00	1040.2
288.15	5000.00	1042.1
288.15	10000.00	1044.4
288.15	15000.00	1046.7
288.15	20000.00	1048.9
288.15	25000.00	1051.1
288.15	30000.00	1053.2
288.15	35000.00	1055.4
288.15	40000.00	1057.4
288.15	45000.00	1059.4
288.15	50000.00	1061.4
288.15	55000.00	1063.4
288.15	60000.00	1065.3
298.15	100.00	1032.5
298.15	1000.00	1032.9
298.15	5000.00	1034.8
298.15	10000.00	1037.2
298.15	15000.00	1039.6
298.15	20000.00	1041.9
298.15	25000.00	1044.1
298.15	30000.00	1046.3
298.15	35000.00	1048.4
298.15	40000.00	1050.6
298.15	45000.00	1052.5
298.15	50000.00	1054.6
298.15	55000.00	1056.6
298.15	60000.00	1058.5
308.15	100.00	1025.3
308.15	1000.00	1025.5
308.15	5000.00	1027.5
308.15	10000.00	1030.1
308.15	15000.00	1032.5
308.15	20000.00	1034.9
308.15	25000.00	1037.2
308.15	30000.00	1039.5
308.15	35000.00	1041.6
308.15	40000.00	1043.8
308.15	45000.00	1046.0
308.15	50000.00	1048.1

308.15	55000.00	1050.1
308.15	60000.00	1052.2
318.15	100.00	1017.7
318.15	1000.00	1018.0
318.15	5000.00	1020.2
318.15	10000.00	1022.8
318.15	15000.00	1025.4
318.15	20000.00	1027.9
318.15	25000.00	1030.3
318.15	30000.00	1032.7
318.15	35000.00	1035.0
318.15	40000.00	1037.2
318.15	45000.00	1039.4
318.15	50000.00	1041.5
318.15	55000.00	1043.6
318.15	60000.00	1045.7
328.15	100.00	1010.0
328.15	1000.00	1010.3
328.15	5000.00	1012.7
328.15	10000.00	1015.4
328.15	15000.00	1018.0
328.15	20000.00	1020.6
328.15	25000.00	1023.1
328.15	30000.00	1025.6
328.15	35000.00	1027.9
328.15	40000.00	1030.3
328.15	45000.00	1032.5
328.15	50000.00	1034.7
328.15	55000.00	1036.9
328.15	60000.00	1039.0
338.15	100.00	1002.2
338.15	1000.00	1002.4
338.15	5000.00	1004.8
338.15	10000.00	1007.6
338.15	15000.00	1010.4
338.15	20000.00	1013.0
338.15	25000.00	1015.6
338.15	30000.00	1018.2
338.15	35000.00	1020.7
338.15	40000.00	1023.2
338.15	45000.00	1025.5
338.15	50000.00	1027.9
338.15	55000.00	1030.2
338.15	60000.00	1032.4

348.15	100.00	994.1
348.15	1000.00	994.5
348.15	5000.00	996.9
348.15	10000.00	999.9
348.15	15000.00	1002.8
348.15	20000.00	1005.5
348.15	25000.00	1008.2
348.15	30000.00	1010.9
348.15	35000.00	1013.4
348.15	40000.00	1016.0
348.15	45000.00	1018.4
348.15	50000.00	1020.9
348.15	55000.00	1023.2
348.15	60000.00	1025.6
358.15	100.00	985.8
358.15	1000.00	986.2
358.15	5000.00	988.8
358.15	10000.00	991.9
358.15	15000.00	995.0
358.15	20000.00	997.8
358.15	25000.00	1000.6
358.15	30000.00	1003.4
358.15	35000.00	1006.0
358.15	40000.00	1008.5
358.15	45000.00	1011.2
358.15	50000.00	1013.6
358.15	55000.00	1016.1
358.15	60000.00	1018.5

Reference

<https://www.doi.org/10.1016/j.jct.2012.08.014>

Temperature, K	Pressure, kPa	Mass density, kg/m3
272.69	5240.00	1054.19
272.68	10290.00	1056.38
272.68	15270.00	1058.53
272.72	20360.00	1060.64
272.73	30580.00	1064.73
272.73	50680.00	1072.45
272.77	71000.00	1079.68
272.74	91400.00	1086.61
272.76	50810.00	1072.51
272.78	15370.00	1058.52
293.18	5180.00	1039.1

293.18	10100.00	1041.39
293.18	15210.00	1043.73
293.18	20190.00	1045.96
293.18	30240.00	1050.35
293.18	50550.00	1058.66
293.18	70760.00	1066.35
293.18	90990.00	1073.55
293.18	50680.00	1058.72
293.18	15310.00	1043.77
313.12	5120.00	1024.21
313.13	10070.00	1026.73
313.13	15110.00	1029.21
313.12	20290.00	1031.71
313.13	30290.00	1036.38
313.12	50710.00	1045.31
313.12	71030.00	1053.5
313.12	91240.00	1061.08
313.12	50990.00	1045.42
313.12	15580.00	1029.43
352.99	5010.00	993.23
353.00	10100.00	996.26
353.00	15280.00	999.29
352.99	20210.00	1002.06
352.99	30360.00	1007.57
353.00	50610.00	1017.74
352.99	70750.00	1027.01
352.99	91060.00	1035.61
352.99	50620.00	1017.76
352.99	15390.00	999.36
392.94	5080.00	959.54
392.94	10090.00	963.15
392.95	15190.00	966.67
392.96	20230.00	970.02
392.97	30430.00	976.54
392.95	50730.00	988.44
392.94	70890.00	999.07
392.94	90950.00	1008.71
392.95	50820.00	988.49
392.96	15180.00	966.75
283.21	5190.00	1046.44
283.19	10060.00	1048.67
283.17	15100.00	1050.92
283.17	20200.00	1053.13
283.17	30530.00	1057.48

283.18	50550.00	1065.43
283.19	70990.00	1072.96
283.18	91270.00	1079.99
283.18	50490.00	1065.4
283.17	15140.00	1050.94
298.12	5090.00	1035.37
298.12	10070.00	1037.74
298.12	15240.00	1040.15
298.12	20170.00	1042.4
298.12	30300.00	1046.89
298.12	50590.00	1055.32
298.11	70930.00	1063.17
298.12	91050.00	1070.41
298.12	50650.00	1055.35
298.12	15160.00	1040.11
333.05	5260.00	1009.12
333.05	10050.00	1011.76
333.05	15120.00	1014.46
333.05	20250.00	1017.1
333.05	30400.00	1022.19
333.05	50610.00	1031.67
333.06	70910.00	1040.39
333.06	91130.00	1048.43
333.06	51080.00	1031.87
333.06	15210.00	1014.48
373.34	10320.00	980.11
373.34	15330.00	983.26
373.34	20360.00	986.4
373.34	30530.00	992.32
373.34	50610.00	1003.25
373.34	70990.00	1013.23
373.35	91190.00	1022.41
373.35	50860.00	1003.34
373.35	15540.00	983.34
373.35	5160.00	976.65
313.03	5190.00	1024.2
313.03	10100.00	1026.69
313.03	15280.00	1029.25
313.03	20240.00	1031.64
313.03	30440.00	1036.4
313.03	50660.00	1045.24
313.03	70960.00	1053.42
313.03	91090.00	1061.0
313.03	50710.00	1045.28

313.03

15210.00

1029.23

Reference

<https://www.doi.org/10.1016/j.jct.2018.10.016>

Speed of sound, m/s

Temperature, K - Liquid	Pressure, kPa - Liquid	Speed of sound, m/s - Liquid
303.15	99.00	1494.429
303.15	5091.00	1513.504
303.15	10060.00	1532.024
303.15	15098.00	1550.199
303.15	20084.00	1567.713
303.15	25068.00	1584.711
303.15	30167.00	1601.587
313.15	99.00	1465.858
313.15	5014.00	1485.499
313.15	10053.00	1504.824
313.15	15011.00	1523.212
313.15	20095.00	1541.536
313.15	25202.00	1559.357
313.15	30222.00	1576.498
333.15	100.00	1408.863
333.15	5039.00	1429.721
333.15	10054.00	1450.066
333.15	15107.00	1469.848
333.15	20131.00	1488.963
333.15	25131.00	1507.384
333.15	30024.00	1524.874
353.15	99.00	1350.887
353.15	5042.00	1373.03
353.15	10055.00	1394.56
353.15	15135.00	1415.607
353.15	20093.00	1435.461
353.15	25086.00	1454.828
353.15	30207.00	1474.064

Reference

<https://www.doi.org/10.1016/j.jct.2016.06.001>

Sources

[illegible]

<https://www.doi.org/10.1016/j.jct.2013.10.028>

<https://www.doi.org/10.1016/j.jct.2014.04.024>

<https://www.doi.org/10.1021/je100964a>

<https://www.doi.org/10.1016/j.jct.2017.07.023>

<https://www.doi.org/10.1016/j.jct.2006.06.001>

<https://www.doi.org/10.1021/je501036r>

<https://www.doi.org/10.1021/je800633a>

<https://www.doi.org/10.1021/je060496l>

<https://www.doi.org/10.1021/je700577t>

<https://www.doi.org/10.1016/j.fluid.2004.07.017>

<https://www.doi.org/10.1016/j.fluid.2011.11.001>

<https://www.doi.org/10.1016/j.jct.2018.05.030>

<https://www.doi.org/10.1016/j.tca.2013.03.025>

<https://www.cheric.org/research/kdb/hcprop/showprop.php?cmpid=910>

<https://www.doi.org/10.1016/j.jct.2018.04.007>

<https://www.doi.org/10.1016/j.fluid.2007.07.076>

<https://www.doi.org/10.1016/j.tca.2013.03.010>

<https://www.doi.org/10.1016/j.jct.2012.12.005>

<https://www.doi.org/10.1021/acs.jced.8b01055>

<https://www.doi.org/10.1016/j.fluid.2015.12.007>

<https://www.doi.org/10.1021/acs.jced.7b00621>

<https://www.doi.org/10.1016/j.fluid.2014.04.002>

<https://www.doi.org/10.1021/je3009842>

<http://pubs.acs.org/doi/abs/10.1021/ci990307l>

<https://www.doi.org/10.1016/j.tca.2010.10.012>

<https://www.doi.org/10.1021/acs.jced.8b00988>

<https://www.doi.org/10.1016/j.fluid.2012.03.014>

<https://www.doi.org/10.1021/acs.jced.7b00709>

<https://www.doi.org/10.1021/acs.jced.5b00964>

<https://www.doi.org/10.1021/je400605x>

<https://www.doi.org/10.1021/je2001649>

<https://www.doi.org/10.1021/je034007i>

<https://www.doi.org/10.1021/acs.jced.5b00167>

<https://www.doi.org/10.1016/j.jct.2015.04.033>

<https://www.doi.org/10.1021/acs.jced.5b00680>

<https://www.doi.org/10.1021/je301222e>

<https://www.doi.org/10.1021/je9010568>

<https://www.doi.org/10.1021/acs.jced.8b01001>

<https://www.doi.org/10.1021/je5010824>

[illegible]

<https://www.doi.org/10.1021/je400082c>

<https://www.doi.org/10.1021/ie4004993>

<https://www.doi.org/10.1021/ie049960h>

<https://www.doi.org/10.1016/j.tca.2006.08.006>

<https://www.doi.org/10.1021/acs.jced.8b00028>

<https://www.doi.org/10.1016/j.ijct.2017.03.022>

<https://www.doi.org/10.1016/j.ijct.2014.06.006>

<https://www.doi.org/10.1021/acs.iced.9b00099>

<https://www.doi.org/10.1016/j.fluid.2014.08.028>

<https://www.doi.org/10.1021/ie0340248>

<https://www.doi.org/10.1016/j.ijct.2012.02.022>

<https://www.doi.org/10.1016/j.fluid.2011.06.008>

<https://www.doi.org/10.1016/j.fluid.2017.07.006>

<https://www.doi.org/10.1016/j.ijct.2018.11.022>

<https://www.doi.org/10.1016/j.fluid.2010.03.031>

<https://www.doi.org/10.1016/j.fluid.2011.11.004>

<https://www.doi.org/10.1021/acs.iced.5b00064>

<https://www.doi.org/10.1021/ie900451d>

4-benzodiazepine-4-oxide,
<https://www.doi.org/10.1031/ie101344v>

<https://www.doi.org/10.1021/je060086v>

<https://www.doi.org/10.1016/j.ijet.2013.06.001>

<https://www.doi.org/10.1031/jc9000954v>

<https://www.doi.org/10.1031/jc040043c>

<https://www.doi.org/10.1031/jc050276c>

<https://www.doi.org/10.1016/j.fluid.2009.12.006>

<https://www.doi.org/10.1016/j.jst.2020.11.018>

<https://www.doi.org/10.1016/j.jst.2013.08.014>

<http://www.doi.org/10.1016/j.jst.2013.04.002>

<https://www.doi.org/10.1016/j.jst.2008.12.022>

<https://www.doi.org/10.1016/j.jst.2016.06.001>

[illegible]

<https://doi.org/10.1001/jama.2001.50015.1>

<https://www.doi.org/10.1016/j.jst.2022.07.001>

bioRxiv preprint doi: <https://doi.org/10.1101/191351>; this version posted September 27, 2017. The copyright holder for this preprint (which was not certified by peer review) is the author/funder, who has granted bioRxiv a license to display the preprint in perpetuity. It is made available under aCC-BY-NC-ND 4.0 International license.

Figure 1. The effect of the number of nodes on the performance of the proposed algorithm

DOI: 10.1016/j.jmb.2018.07.009

100% 99% 98% 97% 96% 95% 94% 93% 92% 91% 90% 89% 88% 87% 86% 85% 84% 83% 82% 81% 80% 79% 78% 77% 76% 75% 74% 73% 72% 71% 70% 69% 68% 67% 66% 65% 64% 63% 62% 61% 60% 59% 58% 57% 56% 55% 54% 53% 52% 51% 50% 49% 48% 47% 46% 45% 44% 43% 42% 41% 40% 39% 38% 37% 36% 35% 34% 33% 32% 31% 30% 29% 28% 27% 26% 25% 24% 23% 22% 21% 20% 19% 18% 17% 16% 15% 14% 13% 12% 11% 10% 9% 8% 7% 6% 5% 4% 3% 2% 1% 0%

[illegible]

1. *Journal of the American Medical Association*, 1997; 278: 1019-1024.

<https://doi.org/10.1002/for>

<https://www.industry.gov.au/publications/2018-05-17/assessing-the-impact-of-the-2017-18-budget-changes-on-the-2017-18-annual-report>

<https://www.industry.gov.au/content/industry/energy-and-minerals/energy/coal>

ine)

<https://www.aclenergy.com/energy/jrcalifornia.html>

Thermophysical Properties of Ternary Systems Potassium Formate + Polyethylene Glycol in Water: Solubility, Viscosity, and Density of Sodium 2,4-diaminobenzene sulfonate in liquid mixtures of methanol-water. Solubilities of Carbon Dioxide in Ethanol Mixtures of Ghaline Chloride and Propylene Glycol. Compressibility Properties of liquid water as a solute in glycols, propylene glycol, and reactive tetraamides. Diffusion Coefficients of Small Molecules in Water and Modeling of excess molar volumes, densities, and refractive indices of the presence of Glycidyl Propylene Ether in Propylene Glycol. Vapor Pressure of Ethanol, Propyl Alcohol, and 2-Propanol. Diffusion Coefficients of Water in Polypropylene Glycol. Dry anastase and rutile nano-powders and ethylene Solubility and Modeling of Hesperidin in Glycerol Mixtures of Ethanol, Isopropyl Alcohol, and Propylene Glycol, and Ethanol, Propanol, 2-Propanol. Measurement and Estimation of the Diffusivity Behavior of Ethylene Glycol in Glycerol. Diffusion Coefficients of Ethanol in Glycerol at (293.15 to 333.15) K and pressures up to 91.4 MPa: Densities and Excess Molar Volumes for Binary Mixtures of 1,4-Butanediol + 2-Propanol, and 2-Propanol, and Glycerol, and Capacities of 1,4-butanediol to 2-Propanol and excess and ionic volumes in the binary systems of Butanediol-phenyl-2-pyridyl-2-pyridyl-2-pyridyl-2-pyridyl mixtures at (298.15 to 318.15) K. Equilibrium for Propylene Glycol + 2-(2-Hexyloxyethoxy)ethanol and mixtures of Mannitol and Sodium Bicarbonate in Water. 2-(Methanol, Ethanol, 2-Propanol) and Thermodynamic Analysis of Ethanol and Glycerol Different Refractive Indices and Densities of ternary systems of desiccant systems for propylene glycol, diethylene glycol, triethylene glycol, and polyethylene glycol. Propylene Glycol, and Ethanol in Water. Diffusive Permeability in Six Pure Solvents at (293.15 to 333.15) K. The mixed-solvents desiccants (glycols + water + salts): KDB Vapor Pressure Data;

[illegible]

3-Ethyl-5-methyl-(4RS)-2-((2-aminoethoxy)monobenzene-6-yl)aminoethanol (Amphothalol, 2,2'-bis(2-aminoethyl) and glycerol from 1,2-epoxy-1,2-diol + water mixtures at Excess volumes and excess heat capacities for alkanediol + water systems in the temperature interval properties of acetonitrile + alkanediols liquid mixtures and densities, Speeds of Sound and Relative Permittivities Measurements and Transformation of 3-ethyl-5-methyl-2-((2-aminoethyl)aminoethoxy)benzylidene-1,2-epoxy-1,2-diol into Butane-2,urea,3-, 5-olubility 293.15 to 333.15K: 2-Methyl-1,5-naphthoquinone in Water + Methanol, Ethanol, 1-Formamide in aqueous alcohol or formamide and Glycerin, Respectively) from (293.15 to 337.92) K:

<https://www.doi.org/10.1021/je100803e>
<https://www.doi.org/10.1016/j.fluid.2014.12.040>
<https://www.doi.org/10.1016/j.fluid.2014.11.012>
<https://www.doi.org/10.1016/j.fluid.2013.09.020>
<https://www.doi.org/10.1016/j.jct.2005.08.015>
<https://www.doi.org/10.1021/je500457p>
nyl)hydrazinecarbothioamide
<https://www.doi.org/10.1016/j.jct.2016.07.005>
<https://www.doi.org/10.1016/j.jct.2016.05.003>
<http://webbook.nist.gov/cgi/cbook.cgi?ID=C57556&Units=SI>
<https://www.doi.org/10.1016/j.fluid.2012.12.017>
<https://www.doi.org/10.1021/je301265w>
<https://www.doi.org/10.1021/je800824h>

chl:	Standard liquid enthalpy of combustion
cpg:	Ideal gas heat capacity
cpl:	Liquid phase heat capacity
dm:	Dipole Moment
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
hvap:	Enthalpy of vaporization at standard conditions
hvapt:	Enthalpy of vaporization at a given temperature
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
nfpaf:	NFPA Fire Rating
nfpah:	NFPA Health Rating
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
tcondl:	Liquid thermal conductivity

tf:	Normal melting (fusion) point
vc:	Critical Volume
vols:	Specific Volume
zc:	Critical Compressibility

Latest version available from:

<https://www.cheméo.com/cid/23-447-0/Propylene-Glycol.pdf>

Generated by Cheméo on 2025-12-23 06:44:51.773148215 +0000 UTC m=+6220489.303188869.

Cheméo (<https://www.cheméo.com>) is the biggest free database of chemical and physical data for the process industry.