

1,4-Dioxane

Other names:	1,4-Diethylene dioxide
	1,4-Diethyleneoxide
	1,4-Dioxacyclohexane
	1,4-Dioxan
	1,4-Dioxin, tetrahydro-
	DIETHYLENE DIOXIDE
	DIETHYLENE ETHER
	Di(ethylene oxide)
	Diokan
	Dioksan
	Diossano-1,4
	Dioxaan-1,4
	Dioxan
	Dioxan-1,4
	Dioxane
	Dioxane-1,4
	Dioxanne
	Dioxyethylene ether
	Glycol ethylene ether
	Glycol ethylene ether 8
	NCI-C03689
	NE 220
	NSC 8728
	P-DIOXANE
	Rcra waste number U108
	Tetrahydro-1,4-dioxin
	Tetrahydro-p-dioxin
	UN 1165
	p-Dioxan
	p-Dioxin, tetrahydro-
Inchi:	InChI=1S/C4H8O2/c1-2-6-4-3-5-1/h1-4H2
InchiKey:	RYHBNJHYFVUHQT-UHFFFAOYSA-N
Formula:	C4H8O2
SMILES:	C1COCCO1
Mol. weight [g/mol]:	88.11
CAS:	123-91-1

Physical Properties

Property code	Value	Unit	Source
af	0.2810		KDB
affp	797.40	kJ/mol	NIST Webbook
aigt	453.15	K	KDB
basg	770.00	kJ/mol	NIST Webbook
chl	-2363.90 ± 0.50	kJ/mol	NIST Webbook
chl	-2346.20	kJ/mol	NIST Webbook
chl	-2362.23 ± 0.99	kJ/mol	NIST Webbook
chl	-2186.80	kJ/mol	NIST Webbook
dm	0.40	debye	KDB
dvisc	0.0011960	Paxs	Excess Molar Volumes and Viscosity Deviations of Binary Liquid Mixtures of 1,3-Dioxolane and 1,4-Dioxane with Butyl Acetate, Butyric Acid, Butylamine, and 2-Butanone at 298.15 K
fll	1.97	% in Air	KDB
flu	22.50	% in Air	KDB
fpc	296.48	K	KDB
fpo	285.37	K	KDB
gf	-180.90	kJ/mol	KDB
gyrad	3.1100		KDB
hf	-318.00 ± 2.00	kJ/mol	NIST Webbook
hf	-315.30 ± 0.80	kJ/mol	NIST Webbook
hf	-315.30	kJ/mol	KDB
hfl	-353.50 ± 0.80	kJ/mol	NIST Webbook
hfl	-355.13 ± 0.86	kJ/mol	NIST Webbook
hfus	12.84	kJ/mol	Joback Method
hvap	34.26	kJ/mol	Joback Method
ie	9.41	eV	NIST Webbook
ie	9.43	eV	NIST Webbook
ie	9.30 ± 0.10	eV	NIST Webbook
ie	9.19 ± 0.01	eV	NIST Webbook
ie	9.19 ± 0.01	eV	NIST Webbook
ie	9.13 ± 0.03	eV	NIST Webbook
ie	9.43	eV	NIST Webbook
ie	9.40	eV	NIST Webbook
log10ws	0.43		Crippen Method
logp	0.033		Crippen Method
mcvol	68.100	ml/mol	McGowan Method

pc	5471.55 ± 303.98	kPa	NIST Webbook
pc	5210.00	kPa	KDB
pc	5210.00 ± 68.94	kPa	NIST Webbook
pc	5000.00 ± 70.00	kPa	NIST Webbook
rhoc	360.35 ± 9.69	kg/m3	NIST Webbook
rinpol	690.00		NIST Webbook
rinpol	699.00		NIST Webbook
rinpol	687.00		NIST Webbook
rinpol	696.00		NIST Webbook
rinpol	696.00		NIST Webbook
rinpol	697.00		NIST Webbook
rinpol	680.00		NIST Webbook
rinpol	694.00		NIST Webbook
rinpol	694.00		NIST Webbook
rinpol	705.00		NIST Webbook
rinpol	690.00		NIST Webbook
rinpol	696.00		NIST Webbook
rinpol	690.00		NIST Webbook
rinpol	696.00		NIST Webbook
rinpol	706.00		NIST Webbook
rinpol	692.00		NIST Webbook
rinpol	686.00		NIST Webbook
rinpol	702.00		NIST Webbook
rinpol	651.00		NIST Webbook
rinpol	693.00		NIST Webbook
rinpol	697.00		NIST Webbook
rinpol	692.00		NIST Webbook
rinpol	690.00		NIST Webbook
rinpol	687.00		NIST Webbook
rinpol	694.00		NIST Webbook
rinpol	680.00		NIST Webbook
rinpol	660.30		NIST Webbook
rinpol	702.00		NIST Webbook
rinpol	687.00		NIST Webbook
rinpol	648.00		NIST Webbook
rinpol	721.00		NIST Webbook
rinpol	698.00		NIST Webbook
rinpol	705.00		NIST Webbook
rinpol	643.00		NIST Webbook
rinpol	718.00		NIST Webbook
rinpol	731.30		NIST Webbook
rinpol	671.00		NIST Webbook
rinpol	669.70		NIST Webbook
rinpol	690.00		NIST Webbook

rinpol	670.10		NIST Webbook
rinpol	696.00		NIST Webbook
rinpol	696.00		NIST Webbook
rinpol	690.00		NIST Webbook
rinpol	648.00		NIST Webbook
ripol	1083.00		NIST Webbook
ripol	1065.00		NIST Webbook
ripol	1066.00		NIST Webbook
ripol	1084.00		NIST Webbook
ripol	1065.00		NIST Webbook
ripol	1083.00		NIST Webbook
ripol	1093.00		NIST Webbook
ripol	1083.00		NIST Webbook
ripol	1097.00		NIST Webbook
ripol	1105.00		NIST Webbook
ripol	1085.00		NIST Webbook
ripol	1066.00		NIST Webbook
ripol	1065.00		NIST Webbook
ripol	1081.00		NIST Webbook
ripol	1100.00		NIST Webbook
ripol	1068.00		NIST Webbook
sg	299.91	J/molxK	NIST Webbook
sl	196.60	J/molxK	NIST Webbook
tb	374.47	K	Study of isobaric vapour liquid equilibrium of some cyclic ethers with 1-chloropropane: Experimental results and SAFT-VR modelling
tb	374.52	K	Vapor-Liquid Equilibrium and Volumetric Measurements for Binary Mixtures of 1,4-Dioxane with Isomeric Chlorobutanes
tb	374.60	K	KDB
tb	374.45	K	Measurement and correlation of binary vapor liquid equilibria of isomeric butanols with 1,4-dioxane
tc	588.00 ± 2.00	K	NIST Webbook
tc	585.15 ± 2.00	K	NIST Webbook
tc	588.15 ± 2.00	K	NIST Webbook
tc	587.00	K	KDB
tc	587.30 ± 1.00	K	NIST Webbook
tf	284.90	K	KDB

tf	284.48	K	Efficient determination of crystallisation and melting points at low cooling and heating rates with novel computer controlled equipment
tt	284.10 ± 0.20	K	NIST Webbook
vc	0.239 ± 0.008	m3/kmol	NIST Webbook
vc	0.239 ± 0.004	m3/kmol	NIST Webbook
vc	0.238	m3/kmol	KDB
zc	0.2540620		KDB
zra	0.27		KDB

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	118.28	J/molxK	369.04	Joback Method
cpg	176.66	J/molxK	578.47	Joback Method
cpg	168.26	J/molxK	543.56	Joback Method
cpg	159.34	J/molxK	508.66	Joback Method
cpg	149.90	J/molxK	473.75	Joback Method
cpg	139.92	J/molxK	438.85	Joback Method
cpg	129.39	J/molxK	403.94	Joback Method
cpl	149.49	J/molxK	298.15	NIST Webbook
cpl	155.30	J/molxK	313.15	Thermophysical properties of dimethyl sulfoxide + cyclic and linear ethers at 308.15K Application of an extended cell model
cpl	153.70	J/molxK	308.15	Thermophysical properties of dimethyl sulfoxide + cyclic and linear ethers at 308.15K Application of an extended cell model
cpl	152.10	J/molxK	303.15	Thermophysical properties of dimethyl sulfoxide + cyclic and linear ethers at 308.15K Application of an extended cell model

cpl	151.00	J/molxK	298.15	Thermophysical properties of dimethyl sulfoxide + cyclic and linear ethers at 308.15K Application of an extended cell model
cpl	150.00	J/molxK	293.15	Thermophysical properties of dimethyl sulfoxide + cyclic and linear ethers at 308.15K Application of an extended cell model
cpl	146.70	J/molxK	288.15	Thermophysical properties of dimethyl sulfoxide + cyclic and linear ethers at 308.15K Application of an extended cell model
cpl	158.40	J/molxK	323.15	Thermophysical properties of dimethyl sulfoxide + cyclic and linear ethers at 308.15K Application of an extended cell model
cpl	160.20	J/molxK	328.15	Thermophysical properties of dimethyl sulfoxide + cyclic and linear ethers at 308.15K Application of an extended cell model
cpl	160.40	J/molxK	333.15	Thermophysical properties of dimethyl sulfoxide + cyclic and linear ethers at 308.15K Application of an extended cell model
cpl	156.50	J/molxK	318.15	Thermophysical properties of dimethyl sulfoxide + cyclic and linear ethers at 308.15K Application of an extended cell model

cpl	149.65	J/molxK	298.15	NIST Webbook
cpl	150.57	J/molxK	298.15	NIST Webbook
cpl	150.65	J/molxK	298.15	NIST Webbook
cpl	150.77	J/molxK	298.15	NIST Webbook
cpl	149.73	J/molxK	298.15	NIST Webbook
cpl	149.00	J/molxK	298.00	NIST Webbook
cpl	147.90	J/molxK	298.15	NIST Webbook
cpl	149.00	J/molxK	298.15	NIST Webbook
cpl	140.20	J/molxK	298.00	NIST Webbook
cpl	155.60	J/molxK	298.00	NIST Webbook
cpl	147.90	J/molxK	298.00	NIST Webbook
cpl	152.97	J/molxK	298.20	NIST Webbook
cpl	146.00	J/molxK	291.00	NIST Webbook
cpl	154.80	J/molxK	296.00	NIST Webbook
dvisc	0.0010295	Paxs	308.15	Viscosities and Densities of Binary Mixtures of 1,4-Dioxane, Carbon Tetrachloride, and Butanol at 303.15 K, 308.15 K, and 313.15 K
dvisc	0.0010870	Paxs	303.15	Viscosity of binary mixtures of 1-ethyl-3-methylimidazolium tetrafluoroborate ionic liquid with four organic solvents
dvisc	0.0011800	Paxs	298.15	Viscosity of binary mixtures of 1-ethyl-3-methylimidazolium tetrafluoroborate ionic liquid with four organic solvents
dvisc	0.0012023	Paxs	298.15	Densities and viscosities of binary and ternary mixtures of cyclohexanone, 1,4-dioxane and isooctane from T = (288.15 to 313.15) K
dvisc	0.0008140	Paxs	323.15	Viscosity of binary mixtures of 1-ethyl-3-methylimidazolium tetrafluoroborate ionic liquid with four organic solvents

dvisc	0.0007180	Paxs	333.15	Viscosity of binary mixtures of 1-ethyl-3-methylimidazolium tetrafluoroborate ionic liquid with four organic solvents
dvisc	0.0013111	Paxs	293.15	Densities and viscosities of binary and ternary mixtures of cyclohexanone, 1,4-dioxane and isooctane from T = (288.15 to 313.15) K
dvisc	0.0006400	Paxs	343.15	Viscosity of binary mixtures of 1-ethyl-3-methylimidazolium tetrafluoroborate ionic liquid with four organic solvents
dvisc	0.0009340	Paxs	313.15	Viscosity of binary mixtures of 1-ethyl-3-methylimidazolium tetrafluoroborate ionic liquid with four organic solvents
dvisc	0.0005770	Paxs	353.15	Viscosity of binary mixtures of 1-ethyl-3-methylimidazolium tetrafluoroborate ionic liquid with four organic solvents
dvisc	0.0010985	Paxs	303.15	Viscosities and Densities of Binary Mixtures of 1,4-Dioxane, Carbon Tetrachloride, and Butanol at 303.15 K, 308.15 K, and 313.15 K
dvisc	0.0010983	Paxs	303.15	Viscosities and Densities of Binary Mixtures of 1,4-Dioxane, Carbon Tetrachloride, and Butanol at 303.15 K, 308.15 K, and 313.15 K

dvisc	0.0009575	Paxs	313.15	Viscosities and Densities of Binary Mixtures of 1,4-Dioxane, Carbon Tetrachloride, and Butanol at 303.15 K, 308.15 K, and 313.15 K
dvisc	0.0012236	Paxs	298.15	Densities, Viscosities, and Sound Speeds of Some Acetate Salts in Binary Mixtures of Tetrahydrofuran and Methanol at (303.15, 313.15, and 323.15) K
dvisc	0.0009268	Paxs	308.15	Densities, Viscosities, and Sound Speeds of Some Acetate Salts in Binary Mixtures of Tetrahydrofuran and Methanol at (303.15, 313.15, and 323.15) K
dvisc	0.0007991	Paxs	318.15	Densities, Viscosities, and Sound Speeds of Some Acetate Salts in Binary Mixtures of Tetrahydrofuran and Methanol at (303.15, 313.15, and 323.15) K
dvisc	0.0010219	Paxs	308.15	Densities and viscosities of binary and ternary mixtures of cyclohexanone, 1,4-dioxane and isooctane from T = (288.15 to 313.15) K
dvisc	0.0011780	Paxs	298.15	Studies on Thermodynamic and Transport Properties of Binary Mixtures of Acetonitrile with Some Cyclic Ethers at Different Temperatures by Volumetric, Viscometric, and Interferometric Techniques

dvisc	0.0009985	Paxs	308.15	Studies on Thermodynamic and Transport Properties of Binary Mixtures of Acetonitrile with Some Cyclic Ethers at Different Temperatures by Volumetric, Viscometric, and Interferometric Techniques
dvisc	0.0008909	Paxs	318.15	Studies on Thermodynamic and Transport Properties of Binary Mixtures of Acetonitrile with Some Cyclic Ethers at Different Temperatures by Volumetric, Viscometric, and Interferometric Techniques
dvisc	0.0015900	Paxs	283.15	Densities and Viscosities for Binary and Ternary Mixtures of 1, 4-Dioxane + 1-Hexanol + N,N-Dimethylaniline from T) (283.15 to 343.15) K
dvisc	0.0013120	Paxs	293.15	Densities and Viscosities for Binary and Ternary Mixtures of 1, 4-Dioxane + 1-Hexanol + N,N-Dimethylaniline from T) (283.15 to 343.15) K
dvisc	0.0011020	Paxs	303.15	Densities and Viscosities for Binary and Ternary Mixtures of 1, 4-Dioxane + 1-Hexanol + N,N-Dimethylaniline from T) (283.15 to 343.15) K
dvisc	0.0014400	Paxs	288.15	Viscosity Behavior of Some Oxygen Containing Compounds

dvisc	0.0009460	Paxs	313.15	Densities and Viscosities for Binary and Ternary Mixtures of 1, 4-Dioxane + 1-Hexanol + N,N-Dimethylaniline from T) (283.15 to 343.15) K
dvisc	0.0008250	Paxs	323.15	Densities and Viscosities for Binary and Ternary Mixtures of 1, 4-Dioxane + 1-Hexanol + N,N-Dimethylaniline from T) (283.15 to 343.15) K
dvisc	0.0012860	Paxs	293.15	Viscosity of binary mixtures of 1-ethyl-3-methylimidazolium tetrafluoroborate ionic liquid with four organic solvents
dvisc	0.0007210	Paxs	333.15	Densities and Viscosities for Binary and Ternary Mixtures of 1, 4-Dioxane + 1-Hexanol + N,N-Dimethylaniline from T) (283.15 to 343.15) K
dvisc	0.0014381	Paxs	288.15	Densities and viscosities of binary and ternary mixtures of cyclohexanone, 1,4-dioxane and isooctane from T = (288.15 to 313.15) K
dvisc	0.0010290	Paxs	308.15	Viscosity Behavior of Some Oxygen Containing Compounds
dvisc	0.0011850	Paxs	298.15	Viscosity Behavior of Some Oxygen Containing Compounds

dvisc	0.0011065	Paxs	303.15	Densities and viscosities of binary and ternary mixtures of cyclohexanone, 1,4-dioxane and isooctane from T = (288.15 to 313.15) K
dvisc	0.0009477	Paxs	313.15	Densities and viscosities of binary and ternary mixtures of cyclohexanone, 1,4-dioxane and isooctane from T = (288.15 to 313.15) K
dvisc	0.0006400	Paxs	343.15	Densities and Viscosities for Binary and Ternary Mixtures of 1, 4-Dioxane + 1-Hexanol + N,N-Dimethylaniline from T) (283.15 to 343.15) K
econd	0.00	S/m	323.15	Micellar Properties and Related Thermodynamic Parameters of the 14-6-14, 2Br-Gemini Surfactant in Water + Organic Solvent Mixed Media
econd	0.00	S/m	315.15	Micellar Properties and Related Thermodynamic Parameters of the 14-6-14, 2Br-Gemini Surfactant in Water + Organic Solvent Mixed Media
econd	0.00	S/m	303.15	Micellar Properties and Related Thermodynamic Parameters of the 14-6-14, 2Br-Gemini Surfactant in Water + Organic Solvent Mixed Media

econd	0.00	S/m	298.15	Micellar Properties and Related Thermodynamic Parameters of the 14-6-14, 2Br-Gemini Surfactant in Water + Organic Solvent Mixed Media
hfust	12.84	kJ/mol	284.10	NIST Webbook
hfust	11.88	kJ/mol	283.20	NIST Webbook
hfust	2.35	kJ/mol	272.90	NIST Webbook
hfust	12.84	kJ/mol	284.10	NIST Webbook
hsubt	35.60	kJ/mol	254.50	NIST Webbook
hvapt	35.80	kJ/mol	273.00	NIST Webbook
hvapt	34.16	kJ/mol	374.50	NIST Webbook
hvapt	36.50	kJ/mol	350.50	NIST Webbook
hvapt	37.30	kJ/mol	345.50	NIST Webbook
hvapt	37.00	kJ/mol	318.00	NIST Webbook
hvapt	38.00	kJ/mol	330.00	NIST Webbook
kvisc	0.0000009	m2/s	313.15	Experimental and predicted viscosities of binary mixtures of cyclic ethers with 1-chloropentane or 1-chlorohexane at 283.15, 298.15, and 313.15K
kvisc	0.0000011	m2/s	298.15	Experimental and predicted viscosities of binary mixtures of cyclic ethers with 1-chloropentane or 1-chlorohexane at 283.15, 298.15, and 313.15K
pvap	3.60	kPa	292.45	Vapor Pressure and Its Temperature Dependence of 28 Organic Compounds: Cyclic Amines, Cyclic Ethers, and Cyclic and Open Chain Secondary Alcohols

pvap	4.50	kPa	296.56	Vapor Pressure and Its Temperature Dependence of 28 Organic Compounds: Cyclic Amines, Cyclic Ethers, and Cyclic and Open Chain Secondary Alcohols
pvap	2.38	kPa	285.11	Vapor Pressure and Its Temperature Dependence of 28 Organic Compounds: Cyclic Amines, Cyclic Ethers, and Cyclic and Open Chain Secondary Alcohols
pvap	19.54	kPa	328.15	Isothermal (vapour + liquid) equilibrium of (cyclic ethers + chlorohexane) mixtures: Experimental results and SAFT modelling
pvap	4.90	kPa	298.15	Isothermal (vapour + liquid) equilibrium of (cyclic ethers + chlorohexane) mixtures: Experimental results and SAFT modelling
pvap	19.54	kPa	328.15	Isothermal vapour-liquid equilibrium for cyclic ethers with 1-chloropentane
pvap	10.17	kPa	313.15	Isothermal vapour-liquid equilibrium for cyclic ethers with 1-chloropentane
pvap	4.90	kPa	298.15	Isothermal vapour-liquid equilibrium for cyclic ethers with 1-chloropentane

pvap	4.50	kPa	296.57	Vapor Pressure and Its Temperature Dependence of 28 Organic Compounds: Cyclic Amines, Cyclic Ethers, and Cyclic and Open Chain Secondary Alcohols
pvap	6.21	kPa	302.92	Vapor Pressure and Its Temperature Dependence of 28 Organic Compounds: Cyclic Amines, Cyclic Ethers, and Cyclic and Open Chain Secondary Alcohols
pvap	7.58	kPa	306.93	Vapor Pressure and Its Temperature Dependence of 28 Organic Compounds: Cyclic Amines, Cyclic Ethers, and Cyclic and Open Chain Secondary Alcohols
pvap	7.57	kPa	306.94	Vapor Pressure and Its Temperature Dependence of 28 Organic Compounds: Cyclic Amines, Cyclic Ethers, and Cyclic and Open Chain Secondary Alcohols
pvap	9.19	kPa	311.04	Vapor Pressure and Its Temperature Dependence of 28 Organic Compounds: Cyclic Amines, Cyclic Ethers, and Cyclic and Open Chain Secondary Alcohols

pvap	10.29	kPa	313.38	Vapor Pressure and Its Temperature Dependence of 28 Organic Compounds: Cyclic Amines, Cyclic Ethers, and Cyclic and Open Chain Secondary Alcohols
pvap	10.31	kPa	313.38	Vapor Pressure and Its Temperature Dependence of 28 Organic Compounds: Cyclic Amines, Cyclic Ethers, and Cyclic and Open Chain Secondary Alcohols
pvap	4.97	kPa	298.15	Vapor Pressures for 1,4-Dioxane + Tetrabutylammonium Nitrate, Water + Tetrabutylammonium Nitrate, and 1,4-Dioxane + Water + Tetrabutylammonium Nitrate
pvap	8.12	kPa	308.15	Vapor Pressures for 1,4-Dioxane + Tetrabutylammonium Nitrate, Water + Tetrabutylammonium Nitrate, and 1,4-Dioxane + Water + Tetrabutylammonium Nitrate
pvap	5.34	kPa	299.81	Vapor Pressure and Its Temperature Dependence of 28 Organic Compounds: Cyclic Amines, Cyclic Ethers, and Cyclic and Open Chain Secondary Alcohols

pvap	2.92	kPa	288.66	Vapor Pressure and Its Temperature Dependence of 28 Organic Compounds: Cyclic Amines, Cyclic Ethers, and Cyclic and Open Chain Secondary Alcohols
pvap	2.70	kPa	288.15	Vapor Pressures for 1,4-Dioxane + Tetrabutylammonium Nitrate, Water + Tetrabutylammonium Nitrate, and 1,4-Dioxane + Water + Tetrabutylammonium Nitrate
rfi	1.41810		298.15	Density, Viscosity, Refractive Index, and Speed of Sound for Binary Mixtures of Anisole with 2-Chloroethanol, 1,4-Dioxane, Tetrachloroethylene, Tetrachloroethane, DMF, DMSO, and Diethyl Oxalate at (298.15, 303.15, and 308.15) K
rfi	1.42030		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	1.42200		293.10	Liquid-Liquid Equilibrium for the System Water + 1,4-Dioxane + 2,6-Dimethyloct-7-en-2-ol over the Temperature Range of (343.2 to 358.2) K

rfi	1.41170	318.15	Densities, Refractive Indices, and Excess Properties of Binary Mixtures of 1,4-Dioxane with Benzene, Toluene, o-Xylene, m-Xylene, p-Xylene, and Mesitylene at Temperatures from (288.15 to 318.15) K
rfi	1.41390	313.15	Densities, Refractive Indices, and Excess Properties of Binary Mixtures of 1,4-Dioxane with Benzene, Toluene, o-Xylene, m-Xylene, p-Xylene, and Mesitylene at Temperatures from (288.15 to 318.15) K
rfi	1.41610	308.15	Densities, Refractive Indices, and Excess Properties of Binary Mixtures of 1,4-Dioxane with Benzene, Toluene, o-Xylene, m-Xylene, p-Xylene, and Mesitylene at Temperatures from (288.15 to 318.15) K
rfi	1.41820	303.15	Densities, Refractive Indices, and Excess Properties of Binary Mixtures of 1,4-Dioxane with Benzene, Toluene, o-Xylene, m-Xylene, p-Xylene, and Mesitylene at Temperatures from (288.15 to 318.15) K

rfi	1.42030	298.15	Densities, Refractive Indices, and Excess Properties of Binary Mixtures of 1,4-Dioxane with Benzene, Toluene, o-Xylene, m-Xylene, p-Xylene, and Mesitylene at Temperatures from (288.15 to 318.15) K
rfi	1.42240	293.15	Densities, Refractive Indices, and Excess Properties of Binary Mixtures of 1,4-Dioxane with Benzene, Toluene, o-Xylene, m-Xylene, p-Xylene, and Mesitylene at Temperatures from (288.15 to 318.15) K
rfi	1.42450	288.15	Densities, Refractive Indices, and Excess Properties of Binary Mixtures of 1,4-Dioxane with Benzene, Toluene, o-Xylene, m-Xylene, p-Xylene, and Mesitylene at Temperatures from (288.15 to 318.15) K
rfi	1.41750	293.15	Solubilities of Phosphorus-Containing Compounds in Selected Solvents

rfi	1.41410	308.15	Density, Viscosity, Refractive Index, and Speed of Sound for Binary Mixtures of Anisole with 2-Chloroethanol, 1,4-Dioxane, Tetrachloroethylene, Tetrachloroethane, DMF, DMSO, and Diethyl Oxalate at (298.15, 303.15, and 308.15) K
rfi	1.41440	308.15	Density, Viscosity, Refractive Index, and Speed of Sound in the Binary Mixtures of 1,4-Dioxane + Ethyl Acetoacetate, + Diethyl Oxalate, + Diethyl Phthalate, or + Dioctyl Phthalate at 298.15, 303.15, and 308.15 K
rfi	1.41700	303.15	Density, Viscosity, Refractive Index, and Speed of Sound in the Binary Mixtures of 1,4-Dioxane + Ethyl Acetoacetate, + Diethyl Oxalate, + Diethyl Phthalate, or + Dioctyl Phthalate at 298.15, 303.15, and 308.15 K
rfi	1.41760	303.15	Density, Viscosity, Refractive Index, and Speed of Sound for Binary Mixtures of Anisole with 2-Chloroethanol, 1,4-Dioxane, Tetrachloroethylene, Tetrachloroethane, DMF, DMSO, and Diethyl Oxalate at (298.15, 303.15, and 308.15) K

rfi	1.42020	298.15	Density, Viscosity, Refractive Index, and Speed of Sound in the Binary Mixtures of 1,4-Dioxane + Ethyl Acetoacetate, + Diethyl Oxalate, + Diethyl Phthalate, or + Dioctyl Phthalate at 298.15, 303.15, and 308.15 K
rfi	1.42010	298.15	Density, Viscosity, Refractive Index, and Speed of Sound in the Binary Mixtures of 1,4-Dioxane + Ethyl Acetoacetate, + Diethyl Oxalate, + Diethyl Phthalate, or + Dioctyl Phthalate at 298.15, 303.15, and 308.15 K
rfi	1.41430	308.15	Density, Viscosity, Refractive Index, and Speed of Sound in the Binary Mixtures of 1,4-Dioxane + Ethanediol, + Hexane, + Tributylamine, or + Triethylamine at (298.15, 303.15, and 308.15) K
rfi	1.41700	303.15	Density, Viscosity, Refractive Index, and Speed of Sound in the Binary Mixtures of 1,4-Dioxane + Ethanediol, + Hexane, + Tributylamine, or + Triethylamine at (298.15, 303.15, and 308.15) K

rfi	1.42010	298.15	Density, Viscosity, Refractive Index, and Speed of Sound in the Binary Mixtures of 1,4-Dioxane + Ethanediol, + Hexane, + Tributylamine, or + Triethylamine at (298.15, 303.15, and 308.15) K
rfi	1.42030	298.15	Bubble Temperature Measurements on Binary Mixtures Formed by Cyclohexane at 94.7 kPa
rfi	1.40840	318.20	A thermodynamic study of solute solvent interactions through dielectric properties of the mixtures consisting of 1,4-butanediol, 1-octanol, and 1,4-dioxane at different temperatures
rfi	1.40920	318.20	A thermodynamic study of solute solvent interactions through dielectric properties of the mixtures consisting of 1,4-butanediol, 1-octanol, and 1,4-dioxane at different temperatures
rfi	1.41430	308.20	A thermodynamic study of solute solvent interactions through dielectric properties of the mixtures consisting of 1,4-butanediol, 1-octanol, and 1,4-dioxane at different temperatures

rfi	1.41440	308.20	A thermodynamic study of solute solvent interactions through dielectric properties of the mixtures consisting of 1,4-butanediol, 1-octanol, and 1,4-dioxane at different temperatures
rfi	1.42000	298.20	A thermodynamic study of solute solvent interactions through dielectric properties of the mixtures consisting of 1,4-butanediol, 1-octanol, and 1,4-dioxane at different temperatures
rfi	1.41264	313.15	Volumetric and refractive properties of binary mixtures containing 1,4-dioxane and chloroalkanes
rfi	1.41995	298.15	Volumetric and refractive properties of binary mixtures containing 1,4-dioxane and chloroalkanes
rfi	1.41810	303.15	Thermodynamic Properties of Water + Tetrahydrofuran and Water + 1,4-Dioxane Mixtures at (303.15, 313.15, and 323.15) K
rfi	1.42200	293.10	Liquid liquid phase equilibria of the ternary system of water/1,4-dioxane/dihydromyrcene

rfi	1.41450		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	1.41640		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
rhoI	1005.12	kg/m3	318.15	Experimental and theoretical excess molar properties of imidazolium based ionic liquids with molecular organic solvents I. 1-Hexyl-3-methylimidazolium tetrafluoroborate and 1-octyl-3-methylimidazolium tetrafluoroborate with cyclic ethers
rhoI	1022.30	kg/m3	303.15	Studies of viscosities of dilute solutions of alkylamine in non-electrolyte solvents. II. Haloalkanes and other polar solvents
rhoI	1033.59	kg/m3	293.15	Thermodynamic Studies of Molecular Interactions in Mixtures Containing Tetrahydropyran, 1,4-dioxane and Cyclic ketones

rhoI	1027.94	kg/m3	298.15	Thermodynamic Studies of Molecular Interactions in Mixtures Containing Tetrahydropyran, 1,4-dioxane and Cyclic ketones
rhoI	1022.28	kg/m3	303.15	Thermodynamic Studies of Molecular Interactions in Mixtures Containing Tetrahydropyran, 1,4-dioxane and Cyclic ketones
rhoI	1016.59	kg/m3	308.15	Thermodynamic Studies of Molecular Interactions in Mixtures Containing Tetrahydropyran, 1,4-dioxane and Cyclic ketones
rhoI	1027.87	kg/m3	298.15	Isothermal Vapor-Liquid Equilibria and Excess Gibbs Energies for Binary Mixtures of Cyclic Ethers with 1,2-Dichloroethane
rhoI	1039.12	kg/m3	288.15	Densities and Excess Molar Volumes for the Binary and Ternary Systems of (1,4-Dioxane, 1-Propanol or 2-Propanol, and 1,2-Dichloroethane) at T = (288.15 to 318.15) K. Experimental Measurements and Prigogine-Flory-Patterson Modeling

rhoI	1027.84	kg/m3	298.15	Densities and Excess Molar Volumes for the Binary and Ternary Systems of (1,4-Dioxane, 1-Propanol or 2-Propanol, and 1,2-Dichloroethane) at T = (288.15 to 318.15) K. Experimental Measurements and Prigogine-Flory-Patterson Modeling
rhoI	1016.57	kg/m3	308.15	Densities and Excess Molar Volumes for the Binary and Ternary Systems of (1,4-Dioxane, 1-Propanol or 2-Propanol, and 1,2-Dichloroethane) at T = (288.15 to 318.15) K. Experimental Measurements and Prigogine-Flory-Patterson Modeling
rhoI	1010.83	kg/m3	313.15	Experimental and theoretical excess molar properties of imidazolium based ionic liquids with molecular organic solvents I. 1-Hexyl-3-methylimidazolium tetrafluoroborate and 1-octyl-3-methylimidazolium tetrafluoroborate with cyclic ethers
rhoI	1027.99	kg/m3	298.15	Densities, Viscosities, and Speeds of Sound of Binary Mixtures of Heptan-1-ol with 1,4-Dioxane at Temperatures from (298.15 to 323.15) K and Atmospheric Pressure

rhoI	1022.33	kg/m3	303.15	Densities, Viscosities, and Speeds of Sound of Binary Mixtures of Heptan-1-ol with 1,4-Dioxane at Temperatures from (298.15 to 323.15) K and Atmospheric Pressure	
rhoI	1016.66	kg/m3	308.15	Densities, Viscosities, and Speeds of Sound of Binary Mixtures of Heptan-1-ol with 1,4-Dioxane at Temperatures from (298.15 to 323.15) K and Atmospheric Pressure	
rhoI	1010.98	kg/m3	313.15	Densities, Viscosities, and Speeds of Sound of Binary Mixtures of Heptan-1-ol with 1,4-Dioxane at Temperatures from (298.15 to 323.15) K and Atmospheric Pressure	
rhoI	1005.28	kg/m3	318.15	Densities, Viscosities, and Speeds of Sound of Binary Mixtures of Heptan-1-ol with 1,4-Dioxane at Temperatures from (298.15 to 323.15) K and Atmospheric Pressure	
rhoI	999.58	kg/m3	323.15	Densities, Viscosities, and Speeds of Sound of Binary Mixtures of Heptan-1-ol with 1,4-Dioxane at Temperatures from (298.15 to 323.15) K and Atmospheric Pressure	

rhoI	1016.52	kg/m3	308.15	Experimental and theoretical excess molar properties of imidazolium based ionic liquids with molecular organic solvents I. 1-Hexyl-3-methylimidazolium tetrafluoroborate and 1-octyl-3-methylimidazolium tetrafluoroborate with cyclic ethers
rhoI	1022.70	kg/m3	303.15	Densities, Viscosities, and Sound Speed of Binary Mixtures of Hexyl Acetate with Tetrahydrofuran, 1,4-Dioxane, Anisole, and Butyl Vinyl Ether
rhoI	1017.40	kg/m3	308.15	Densities, Viscosities, and Sound Speed of Binary Mixtures of Hexyl Acetate with Tetrahydrofuran, 1,4-Dioxane, Anisole, and Butyl Vinyl Ether
rhoI	1011.10	kg/m3	313.15	Densities, Viscosities, and Sound Speed of Binary Mixtures of Hexyl Acetate with Tetrahydrofuran, 1,4-Dioxane, Anisole, and Butyl Vinyl Ether
rhoI	1033.57	kg/m3	293.15	Density and Refractive Index of Binary Mixtures of Two 1-Alkyl-3-methylimidazolium Ionic Liquids with 1,4-Dioxane and Ethylene Glycol
rhoI	1027.92	kg/m3	298.15	Density and Refractive Index of Binary Mixtures of Two 1-Alkyl-3-methylimidazolium Ionic Liquids with 1,4-Dioxane and Ethylene Glycol

rhoI	1022.27	kg/m3	303.15	Density and Refractive Index of Binary Mixtures of Two 1-Alkyl-3-methylimidazolium Ionic Liquids with 1,4-Dioxane and Ethylene Glycol
rhoI	1010.91	kg/m3	313.15	Density and Refractive Index of Binary Mixtures of Two 1-Alkyl-3-methylimidazolium Ionic Liquids with 1,4-Dioxane and Ethylene Glycol
rhoI	999.49	kg/m3	323.15	Density and Refractive Index of Binary Mixtures of Two 1-Alkyl-3-methylimidazolium Ionic Liquids with 1,4-Dioxane and Ethylene Glycol
rhoI	987.97	kg/m3	333.15	Density and Refractive Index of Binary Mixtures of Two 1-Alkyl-3-methylimidazolium Ionic Liquids with 1,4-Dioxane and Ethylene Glycol
rhoI	976.37	kg/m3	343.15	Density and Refractive Index of Binary Mixtures of Two 1-Alkyl-3-methylimidazolium Ionic Liquids with 1,4-Dioxane and Ethylene Glycol
rhoI	964.63	kg/m3	353.15	Density and Refractive Index of Binary Mixtures of Two 1-Alkyl-3-methylimidazolium Ionic Liquids with 1,4-Dioxane and Ethylene Glycol
rhoI	1027.90	kg/m3	298.15	Densities, Speeds of Sound, Excess Molar Enthalpies, and Heat Capacities of o-Chlorotoluene and Cyclic Ether Mixtures

rhoI	1022.30	kg/m3	303.15	Densities, Speeds of Sound, Excess Molar Enthalpies, and Heat Capacities of o-Chlorotoluene and Cyclic Ether Mixtures	
rhoI	1016.60	kg/m3	308.15	Densities, Speeds of Sound, Excess Molar Enthalpies, and Heat Capacities of o-Chlorotoluene and Cyclic Ether Mixtures	
rhoI	1027.82	kg/m3	298.15	Surface Tension and Surface Properties of Binary Mixtures of 1,4-Dioxane or N,N-Dimethyl Formamide with n-Alkyl Acetates	
rhoI	1022.19	kg/m3	303.15	Experimental and theoretical excess molar properties of imidazolium based ionic liquids with molecular organic solvents I. 1-Hexyl-3- methylimidazolium tetrafluoroborate and 1-octyl-3-methylimidazolium tetrafluoroborate with cyclic ethers	
rhoI	1027.85	kg/m3	298.15	Experimental and theoretical excess molar properties of imidazolium based ionic liquids with molecular organic solvents I. 1-Hexyl-3- methylimidazolium tetrafluoroborate and 1-octyl-3-methylimidazolium tetrafluoroborate with cyclic ethers	

rhoI	1033.50	kg/m3	293.15	Experimental and theoretical excess molar properties of imidazolium based ionic liquids with molecular organic solvents I. 1-Hexyl-3-methylimidazolium tetrafluoroborate and 1-octyl-3-methylimidazolium tetrafluoroborate with cyclic ethers
rhoI	1021.84	kg/m3	303.15	Volumetric properties of binary mixtures of ethers and acetonitrile: Experimental results and application of the Prigogine Flory Patterson theory
rhoI	1027.51	kg/m3	298.15	Volumetric properties of binary mixtures of ethers and acetonitrile: Experimental results and application of the Prigogine Flory Patterson theory
rhoI	1033.16	kg/m3	293.15	Volumetric properties of binary mixtures of ethers and acetonitrile: Experimental results and application of the Prigogine Flory Patterson theory
rhoI	1038.78	kg/m3	288.15	Volumetric properties of binary mixtures of ethers and acetonitrile: Experimental results and application of the Prigogine Flory Patterson theory
rhoI	1027.87	kg/m3	298.15	Surface study of mixtures containing cyclic ethers and isomeric chlorobutanes

rhoI	1033.80	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	1027.88	kg/m3	298.15	(Vapour + liquid) equilibrium of binary mixtures (1,3-dioxolane or 1,4-dioxane + 2-methyl-1-propanol or 2-methyl-2-propanol) at isobaric conditions
rhoI	1022.40	kg/m3	303.15	Unravelling various types of non-covalent interactions of benzyl amine with ethers in n-hexane at 303.15 K by ultrasonic and DFT methods
rhoI	1005.24	kg/m3	318.15	Hydrogen bond interactions in the blends of 1,4-dioxane with some 1, 2-disubstituted ethanes at T = (298.15, 308.15 and 318.15) K
rhoI	1016.78	kg/m3	308.15	Hydrogen bond interactions in the blends of 1,4-dioxane with some 1, 2-disubstituted ethanes at T = (298.15, 308.15 and 318.15) K
rhoI	1027.79	kg/m3	298.15	Hydrogen bond interactions in the blends of 1,4-dioxane with some 1, 2-disubstituted ethanes at T = (298.15, 308.15 and 318.15) K
rhoI	1027.85	kg/m3	298.15	Experimental and predicted vapour liquid equilibrium of 1,4-dioxane with cycloalkanes and benzene

rhoI	1033.00	kg/m3	293.00	KDB	
rhoI	1028.20	kg/m3	298.15	Densities, Viscosities, and Sound Speed of Binary Mixtures of Hexyl Acetate with Tetrahydrofuran, 1,4-Dioxane, Anisole, and Butyl Vinyl Ether	
rhoI	1027.90	kg/m3	298.15	Vapour liquid equilibrium of cyclic ethers with 1-chlorohexane: Experimental results and UNIFAC predictions	
rhoI	1005.29	kg/m3	318.15	Densities and Excess Molar Volumes for the Binary and Ternary Systems of (1,4-Dioxane, 1-Propanol or 2-Propanol, and 1,2-Dichloroethane) at T = (288.15 to 318.15) K. Experimental Measurements and Prigogine-Flory-Patterson Modeling	
rhoI	999.40	kg/m3	323.15	Experimental and theoretical excess molar properties of imidazolium based ionic liquids with molecular organic solvents I. 1-Hexyl-3-methylimidazolium tetrafluoroborate and 1-octyl-3-methylimidazolium tetrafluoroborate with cyclic ethers	
sdco	0.00	m2/s	338.12	Viscous Calibration Liquids for Self-diffusion Measurements	
sdco	0.00	m2/s	288.31	Viscous Calibration Liquids for Self-diffusion Measurements	

sdco	0.00	m2/s	288.33	Viscous Calibration Liquids for Self-diffusion Measurements
sdco	0.00	m2/s	293.11	Viscous Calibration Liquids for Self-diffusion Measurements
sdco	0.00	m2/s	298.13	Viscous Calibration Liquids for Self-diffusion Measurements
sdco	0.00	m2/s	298.17	Viscous Calibration Liquids for Self-diffusion Measurements
sdco	0.00	m2/s	298.18	Viscous Calibration Liquids for Self-diffusion Measurements
sdco	0.00	m2/s	298.20	Viscous Calibration Liquids for Self-diffusion Measurements
sdco	0.00	m2/s	303.12	Viscous Calibration Liquids for Self-diffusion Measurements
sdco	0.00	m2/s	307.92	Viscous Calibration Liquids for Self-diffusion Measurements
sdco	0.00	m2/s	308.06	Viscous Calibration Liquids for Self-diffusion Measurements
sdco	0.00	m2/s	317.85	Viscous Calibration Liquids for Self-diffusion Measurements
sdco	0.00	m2/s	318.24	Viscous Calibration Liquids for Self-diffusion Measurements
sdco	0.00	m2/s	338.09	Viscous Calibration Liquids for Self-diffusion Measurements

sdco	0.00	m2/s	338.13	Viscous Calibration Liquids for Self-diffusion Measurements
sdco	0.00	m2/s	347.87	Viscous Calibration Liquids for Self-diffusion Measurements
sdco	0.00	m2/s	347.97	Viscous Calibration Liquids for Self-diffusion Measurements
sdco	0.00	m2/s	327.95	Viscous Calibration Liquids for Self-diffusion Measurements
sdco	0.00	m2/s	358.25	Viscous Calibration Liquids for Self-diffusion Measurements
sdco	0.00	m2/s	358.49	Viscous Calibration Liquids for Self-diffusion Measurements
sdco	0.00	m2/s	327.94	Viscous Calibration Liquids for Self-diffusion Measurements
sfust	45.19	J/molxK	284.10	NIST Webbook
sfust	8.79	J/molxK	272.90	NIST Webbook
sfust	41.90	J/molxK	283.20	NIST Webbook
speedsl	1346.30	m/s	298.15	Compressibility Studies of Binary Solutions Involving Water as a Solute in Nonaqueous Solvents at T) 298.15 K
speedsl	1278.80	m/s	313.15	Speeds of Sound and Isentropic Compressibilities for Binary Mixtures of a Cyclic Diether with a Cyclic Compound at Three Temperatures

speedsl	1344.80	m/s	298.15	Densities and speeds of sound for binary mixtures of (1,3-dioxolane or 1,4-dioxane) with (2-methyl-1-propanol or 2-methyl-2-propanol) at the temperatures 298.15 K and 313.15 K
speedsl	1279.80	m/s	313.15	Densities and speeds of sound for binary mixtures of (1,3-dioxolane or 1,4-dioxane) with (2-methyl-1-propanol or 2-methyl-2-propanol) at the temperatures 298.15 K and 313.15 K
speedsl	1343.60	m/s	298.15	Speeds of Sound and Isentropic Compressibilities for Binary Mixtures of a Cyclic Diether with a Cyclic Compound at Three Temperatures
speedsl	1301.20	m/s	308.15	Physicochemical study of intermolecular interactions in 1,4-dioxane + aromatic hydrocarbons binary mixtures at different temperatures by using ultrasonic and viscometric methods
speedsl	1367.20	m/s	293.15	Physicochemical study of intermolecular interactions in 1,4-dioxane + aromatic hydrocarbons binary mixtures at different temperatures by using ultrasonic and viscometric methods

speedsl	1279.70	m/s	313.15	Physicochemical study of intermolecular interactions in 1,4-dioxane + aromatic hydrocarbons binary mixtures at different temperatures by using ultrasonic and viscometric methods
speedsl	1258.60	m/s	318.15	Physicochemical study of intermolecular interactions in 1,4-dioxane + aromatic hydrocarbons binary mixtures at different temperatures by using ultrasonic and viscometric methods
speedsl	1409.60	m/s	283.15	Speeds of Sound and Isentropic Compressibilities for Binary Mixtures of a Cyclic Diether with a Cyclic Compound at Three Temperatures
speedsl	1357.70	m/s	295.15	Density, Speed of Sound, and Refractive Index Measurements for the Binary Mixture (1, 4-Dioxane + Isobutyric Acid) at T = (295.15, 298.15, 301.15, 304.15, 307.15, 310.15, and 313.15) K
speedsl	1344.80	m/s	298.15	Density, Speed of Sound, and Refractive Index Measurements for the Binary Mixture (1, 4-Dioxane + Isobutyric Acid) at T = (295.15, 298.15, 301.15, 304.15, 307.15, 310.15, and 313.15) K

speedsl	1331.90	m/s	301.15	Density, Speed of Sound, and Refractive Index Measurements for the Binary Mixture (1, 4-Dioxane + Isobutyric Acid) at T = (295.15, 298.15, 301.15, 304.15, 307.15, 310.15, and 313.15) K
speedsl	1319.00	m/s	304.15	Density, Speed of Sound, and Refractive Index Measurements for the Binary Mixture (1, 4-Dioxane + Isobutyric Acid) at T = (295.15, 298.15, 301.15, 304.15, 307.15, 310.15, and 313.15) K
speedsl	1306.20	m/s	307.15	Density, Speed of Sound, and Refractive Index Measurements for the Binary Mixture (1, 4-Dioxane + Isobutyric Acid) at T = (295.15, 298.15, 301.15, 304.15, 307.15, 310.15, and 313.15) K
speedsl	1293.30	m/s	310.15	Density, Speed of Sound, and Refractive Index Measurements for the Binary Mixture (1, 4-Dioxane + Isobutyric Acid) at T = (295.15, 298.15, 301.15, 304.15, 307.15, 310.15, and 313.15) K
speedsl	1280.40	m/s	313.15	Density, Speed of Sound, and Refractive Index Measurements for the Binary Mixture (1, 4-Dioxane + Isobutyric Acid) at T = (295.15, 298.15, 301.15, 304.15, 307.15, 310.15, and 313.15) K

speedsl	1344.70	m/s	298.15	Physicochemical study of intermolecular interactions in 1,4-dioxane + aromatic hydrocarbons binary mixtures at different temperatures by using ultrasonic and viscometric methods
speedsl	1323.10	m/s	303.15	Physicochemical study of intermolecular interactions in 1,4-dioxane + aromatic hydrocarbons binary mixtures at different temperatures by using ultrasonic and viscometric methods
srf	0.03	N/m	313.15	Thermophysical study of 1,4-dioxane with cycloalkane mixtures
srf	0.03	N/m	298.15	Thermophysical study of 1,4-dioxane with cycloalkane mixtures
srf	0.04	N/m	283.15	Thermophysical study of 1,4-dioxane with cycloalkane mixtures

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tfp	285.08	K	101.30	(Solid + liquid) phase equilibria of binary mixtures containing N-methyl-2-pyrrolidinone and ethers at atmospheric pressure

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.48111e+01
Coeff. B	-3.42606e+03
Coeff. C	-3.81740e+01
Temperature range (K), min.	274.07
Temperature range (K), max.	398.83

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/T + C*\ln(T) + D*T^2$
Coeff. A	7.69176e+01
Coeff. B	-7.07594e+03
Coeff. C	-9.15152e+00
Coeff. D	5.90158e-06
Temperature range (K), min.	275.00
Temperature range (K), max.	587.00

Datasets

Viscosity, Pa*s

Temperature, K - Liquid	Pressure, kPa - Liquid	Viscosity, Pa*s - Liquid
303.15	101.33	0.0010750
Reference		https://www.doi.org/10.1016/j.tca.2009.07.008

Temperature, K	Pressure, kPa	Viscosity, Pa*s
303.15	101.30	0.0010224
Reference		https://www.doi.org/10.1021/je034204h

Mass density, kg/m³

Pressure, kPa - Liquid	Temperature, K - Liquid	Mass density, kg/m3 - Liquid
85.90	298.15	1027.93
Reference	https://www.doi.org/10.1016/j.fluid.2013.05.001	

Sources

Temperature dependence of limiting activity coefficients and Henry's law solubilities of cyclohexanone and diethyl malonate in polymeric solvents. 1.4-dimethyl-5-methyl-2,4,6-trimethylphenyl-3H-pyrazol-3-one in various organic solvents from T = 278.15 to 313.15 K and predicted vapour liquid equilibrium pO₂-4-dioxane with cycloalkanes and benzene in infinite dilution and physicochemical properties for thermodynamic calculation of the solubility of 2-Cyanoacetamide in 14 pure solvents. Various types of pre-generated configurations of benzyl amine with ethers in 1-hexane at 303.15 K. Determination of DFT methods: 5-chloro-N-phenylphthalimide solubility in pure and binary solvents. Methylcyclohexane and 1-methylcyclohexane thermodynamics of Thiamphenicol in water and aqueous solutions of binary and ternary mixtures of (2,6-tetralone) K: Determination of the solubility of 2-propylthioxanthone in 10 pure organic solvents from coefficients at infinite dilution for solubility models and solvent effect for 1,4-dioxane in 11 pure solvents: Solubilities of some organic solutes in 1-ethyl-3-methylimidazolium acetate. Determination of the thermodynamic properties of binary mixtures of 5-chloro-N-phenylphthalimide and ionic liquid in the separation processes. 15) K and thermodynamic properties of separation based on activity correlation properties and thermodynamic properties of micellization of 1,4-dioxane in phase equilibrium of ether in 1,4-dioxane and water organic solvent mixtures. Determination of the solubility of polar solutes in binary 3-methyl-2-butanol and 1-propanol in binary mixtures. Determination of the solubility of 1,4-dioxane in 11 pure organic solvents from T = 278.15 to 313.15 K. Determination and modelling:

[illegible]

<https://www.doi.org/10.1021/je9003178>
<https://www.doi.org/10.1016/j.fluid.2012.03.010>
<https://www.doi.org/10.1021/acs.jced.7b00609>
<https://www.doi.org/10.1021/je050440b>
<https://www.doi.org/10.1016/j.fluid.2013.05.001>
<https://www.doi.org/10.1016/j.jct.2013.05.008>
<https://www.doi.org/10.1016/j.jct.2018.05.017>
<https://www.doi.org/10.1016/j.jct.2012.01.019>
<https://www.doi.org/10.1016/j.jct.2016.09.033>
<https://www.doi.org/10.1016/j.jct.2016.09.036>
<https://www.doi.org/10.1016/j.jct.2007.09.007>
<https://www.doi.org/10.1021/je700344f>
<https://www.doi.org/10.1016/j.jct.2017.05.013>
<https://www.doi.org/10.1016/j.jct.2015.05.022>
<https://www.doi.org/10.1021/acs.jced.9b00844>
<https://www.doi.org/10.1021/je5010627>
<https://www.doi.org/10.1021/acs.jced.7b01091>
<https://www.doi.org/10.1021/acs.jced.9b00693>
<https://www.doi.org/10.1016/j.jct.2017.11.017>
<http://webbook.nist.gov/cgi/cbook.cgi?ID=C123911&Units=SI>
<https://www.doi.org/10.1016/j.jct.2012.03.005>
<https://www.doi.org/10.1016/j.jct.2016.07.043>
<https://www.doi.org/10.1016/j.jct.2016.10.020>
<https://www.doi.org/10.1016/j.jct.2005.07.012>
<https://www.doi.org/10.1016/j.jct.2018.07.024>
<https://www.doi.org/10.1016/j.jct.2017.05.004>
<https://www.doi.org/10.1016/j.fluid.2018.09.024>
<https://www.doi.org/10.1021/je3010535>
<https://www.doi.org/10.1021/acs.jced.6b00576>
<https://www.doi.org/10.1016/j.tca.2006.05.010>
<https://www.doi.org/10.1021/je400813d>
<https://www.doi.org/10.1021/je049610v>
<https://www.doi.org/10.1016/j.jct.2011.04.018>
<https://www.doi.org/10.1016/j.jct.2018.01.003>
<https://www.doi.org/10.1016/j.jct.2008.03.017>
<https://www.doi.org/10.1021/acs.jced.8b01101>
<https://www.doi.org/10.1021/acs.jced.9b00385>
<https://www.doi.org/10.1016/j.jct.2019.06.025>
<https://www.doi.org/10.1021/je020185k>
<https://www.doi.org/10.1016/j.jct.2016.10.006>
<https://www.doi.org/10.1021/acs.jced.9b00320>
<https://www.doi.org/10.1021/je800475d>
<https://www.doi.org/10.1021/acs.jced.9b00229>

[illegible]

<https://www.doi.org/10.1021/je9010097>

<https://www.doi.org/10.1021/ie900370a>

<https://www.doi.org/10.1016/j.ijct.2018.08.028>

<https://www.doi.org/10.1021/ie0301489>

<https://www.doi.org/10.1021/ie7007022>

<https://www.doi.org/10.1016/j.ijct.2016.05.027>

<https://www.doi.org/10.1016/j.ijct.2006.08.007>

<https://www.doi.org/10.1016/j.ijct.2016.09.015>

<https://www.doi.org/10.1021/ie8005002>

<https://www.doi.org/10.1016/j.ijct.2016.11.014>

<https://www.doi.org/10.1021/je700640r>

<https://www.doi.org/10.1016/j.ijct.2017.01.016>

<https://www.doi.org/10.1016/j.fluid.2013.03.021>

<https://www.doi.org/10.1016/j.tca.2008.11.009>

<https://www.chemic.org/files/research/kdb/mol/mol1047.mol>

<https://www.doi.org/10.1021/acs.iced.9b00593>

<https://www.doi.org/10.1016/j.ijct.2019.04.001>

<https://www.eberic.org/research/kdb/hcnprop/showprop.php?cmid=1047>

<https://www.doi.org/10.1031/ie900894v>

<https://www.doi.org/10.1016/j.ict.2019.07.001>

<https://www.doi.org/10.1031/cas-icod.0b00650>

<https://www.doi.org/10.1016/j.ijet.2013.11.037>

<https://www.doi.org/10.1016/j.fluid.2018.06.013>

<https://www.doi.org/10.1016/j.ijat.2016.01.033>

<https://www.doi.org/10.1021/acs.jced.8b00130>

<https://www.doi.org/10.1016/j.fluid.2007.05.012>

<https://www.doi.org/10.1021/jc400322b>

<http://www.doi.org/10.1016/j.jst.2013.10.039>

<https://www.doi.org/10.1001/ja.101168>

<https://www.doi.org/10.1001/jco.2020.1232>

14. // 15. /40 1001/ 16. 151 00000

1995 // <https://doi.org/10.1001/archfam.10.1001/10-1005001>

<https://doi.org/10.1016/j.jmb.2017.07.007>

[illegible][illegible]

DOI: 10.1002/jbm.b.10097

[illegible]

DOI: 10.1002/for

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<https://www.scribd.com/document/381131387/10-1016-j.joule.2018.06.005>

<https://www.industry.gov.au/publications/industry-reports/industry-reports-2019>

<https://www.industry.gov.au/publications/industry-2020-2021-report>

<https://www.aenl.org/fellows/jjcaZsfellows.html>

<https://www.acln.org/for-the-press/journals/2019/01/01/2019-01-01-01>

[illegible]

<https://www.doi.org/10.1016/j.fluid.2007.11.002>

<https://www.doi.org/10.1021/ie500171d>

<https://www.doi.org/10.1016/j.fluid.2016.12.002>

<https://www.doi.org/10.1021/ie060113i>

<https://www.doi.org/10.1016/j.ijct.2004.03.014>

<https://www.doi.org/10.1021/je030196t>

<https://www.doi.org/10.1016/j.ijct.2018.09.008>

<https://www.doi.org/10.1021/acs.jced.8b01265>

<https://www.doi.org/10.1016/j.ijct.2005.09.004>

<https://www.doi.org/10.1016/j.ijct.2017.03.038><https://www.doi.org/10.1016/j.ijct.2017.12.012>

<https://www.doi.org/10.1021/ie301149f>

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

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

<https://www.doi.org/10.1021/ie500088z>

<https://www.doi.org/10.1021/acs.iced.9b00406>

<https://www.doi.org/10.1016/j.ijct.2018.03.010>

<https://www.doi.org/10.1031/ie500396b>

<https://www.doi.org/10.1016/j.ijct.2016.07.001>

<https://www.doi.org/10.1007/s10765-010-0860-3>

<https://www.doi.org/10.1016/j.ijet.2017.07.013>

<https://www.doi.org/10.1031/cas-icod.8b00730>

<https://www.doi.org/10.1016/j.ijat.2007.06.010>

<https://www.doi.org/10.1031/jc101073d>

<https://www.doi.org/10.1016/j.ijot.2007.01.004>

<https://www.doi.org/10.1031/acs.joc.2b00341>

<https://www.doi.org/10.1031/jc000304b>

<https://www.doi.org/10.1031/acs.joc.01010>

<https://www.doi.org/10.1001/ja.2024.120.1b>

<https://www.doi.org/10.1016/j.fluid.2016.05.005>

11. // 10.1001 // 101.00010

3.3] [Link to 10-1010's file: 10015-00-010](#)

<https://doi.org/10.1016/j.joi.2017.04.010>

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“...and I have been thinking about you ever since.”

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<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6910130/>

<https://www.washingtonpost.com/archive/local/2017/06/01/2017-06-01/>

<https://www.washingtonpost.com/archive/local/2017/06/06/2017-06-06/>

<https://www.nasa.gov/press/20160217/jsc2016-130eq>

<https://www.tandfonline.com/doi/full/10.1080/10717920.2019.1630000>

The dissolution behaviour and apparent thermodynamic analysis of mesopropylamine and correlation of the solubility of 5-Fluorouracil in Pure and Binary Solvents Activity Coefficients of Solutes Dissolved in Two Mesopropylamine Correlation of Solubility of Gatifloxacin in 12 Pure Solvents with Equilibrium Constant K: System Water + 1,4-Dioxane + 2-methylimidazole Metastable Polymorphic Temperature Range (103–98.2) Helvetic and refractive properties of binary mixtures containing 1,4-dioxane and chloroform at infinite dilution of organic solutes in Solubility and Phase Separation of 2-(N-Glucosyl)-ethanamide in Acid Aqueous Solution of binary mixtures based on gamma-valerolactone using Ionic Acid (Methylsulfonyl) as catalyst and evaluation of water degradation kinetics: Solvents from 20 °C to 60 °C Viscosity Deviations of Binary Liquid Mixtures of Ethylenediamine and Pyridine with Biphenylate Ions in Ionic Liquids for Determining Physicochemical Parameters Mixed Solvents at 273.15–313.15 K and Resonance Raman Spectroscopy for binary mixtures of 1,4-dioxane or 1-methoxypropane (2-methylazepanol Solubility in 2-prismalprisms at Subambient Temperatures and 313.15 K: (2E)-1-(3-Pyridyl)-3-(dimethylamino)-2-pyridine Thermodynamic Behaviour of Binary Surfactant-Triethanolamine Liquid, 15 National Institute of Standards and Technology Gas Relation of 2-Oxindole in 12 Pure Organic Solvents and Saturation Apparent Volume of Propranolol Hydrochloride in Some Binary Correlations for measuring the thermodynamic properties of solute transfer into pentyl acetamide 2-nitrotoluene in different media and in binary liquid-gas carbon dioxide (sulfoxide p water) and N,N-dimethylformamide (p water) containing the two hydrocarbons: Carbon dioxide (carbon dioxide and 1,4-dioxane, the other two main models) Correlation and Evaluation of 2-Chloro-6-Benzothiazole Properties of Mixtures Containing Ionic Liquid 3-and 6-excess Molar Volumes for the Binary and Ternary Systems of Dichloromethane and Transpiration, with 1,2-Dichloroethane at T = (288.15 ± 0.01) K by the perturbation method Molecular Dynamics Simulation of the Diffusion Assessment of CO₂ Solubility in Volatile Solvents at 298.15 K: Thermodynamic Functions for Solubility of 1-Hydroxybenzotriazole in Sixteen Solvents at Temperatures from Solubility Measurement and Correlation Presently Binary Mixtures of Solvents from Thermodynamic Modeling of 9-methyl-2-methyl-2-oxirane Twelve Solutions Involving Water as a Solute in Organic Solvents Relationship between Properties of Binary Mixtures of F.M. Bromine and Nitromethane excess enthalpy and solubilities of mixtures containing organic compounds further addition of organic solvents and water in solution with methanol 2-nitroaniline in four binary mixtures of solvents from J. Phys. Chem. B 106(12) Solubility Properties of Solvent Mixtures for the Binary mixture of nitrobenzene and Transport Properties of Binary Mixtures of 1,4-Dioxane with 2-Methylimidazole Thermodynamic parameters and volumetric measurements of excess properties of binary mixtures of solvents of different temperatures: Liquid in the Separation of 1,4-Dioxane from Its Azeotropic Aqueous Solution:

<https://www.doi.org/10.1016/j.jct.2019.06.007>
<https://www.doi.org/10.1021/acs.jced.8b00425>
<https://www.doi.org/10.1021/je500050p>
<https://www.doi.org/10.1021/acs.jced.8b00902>
<https://www.doi.org/10.1021/je900366m>
<https://www.doi.org/10.1021/je300711r>
<https://www.doi.org/10.1016/j.jct.2006.05.003>
<https://www.doi.org/10.1016/j.jct.2015.02.023>
<https://www.doi.org/10.1021/je200244p>
<https://www.doi.org/10.1016/j.jct.2018.09.003>
<https://www.doi.org/10.1021/acs.jced.9b00490>
<https://www.doi.org/10.1021/je0504109>
<https://www.doi.org/10.1021/je201129y>
<https://www.doi.org/10.1021/acs.jced.9b00286>
<https://www.doi.org/10.1016/j.jct.2004.07.015>
<https://www.doi.org/10.1021/je4010257>
<https://www.doi.org/10.1021/acs.jced.9b00047>
open-1-one
<https://www.doi.org/10.1021/acs.jced.8b00601>
<https://www.doi.org/10.1021/acs.jced.9b00308>
<https://www.doi.org/10.1021/acs.jced.5b00167>
<https://www.doi.org/10.1016/j.jct.2018.05.003>
<https://www.doi.org/10.1016/j.fluid.2017.12.035>
<https://www.doi.org/10.1021/je800218g>
<https://www.doi.org/10.1016/j.jct.2019.05.004>
<https://www.doi.org/10.1021/acs.jced.8b00931>
<https://www.doi.org/10.1021/je0602723>
<https://www.doi.org/10.1021/acs.jced.8b00067>
<https://www.doi.org/10.1021/je400659p>
<https://www.doi.org/10.1016/j.fluid.2005.02.016>
<https://www.doi.org/10.1021/je101161d>
<https://www.doi.org/10.1021/acs.jced.7b00316>
<https://www.doi.org/10.1021/je500286x>
<https://www.doi.org/10.1016/j.jct.2016.07.023>
<https://www.doi.org/10.1021/je0601098>
<https://www.doi.org/10.1021/je9002114>
<https://www.doi.org/10.1016/j.jct.2018.05.012>
<https://www.doi.org/10.1016/j.fluid.2016.02.004>
<https://www.doi.org/10.1016/j.jct.2017.02.008>
<https://www.doi.org/10.1021/je5010643>
<https://www.doi.org/10.1021/je060311a>
<https://www.doi.org/10.1021/acs.jced.9b00362>
<https://www.doi.org/10.1016/j.fluid.2006.03.020>
<https://www.doi.org/10.1021/acs.jced.7b00905>

Solid-liquid equilibrium and phase diagram for the ternary

Solubility of Enzyme II. Broughton

Range of Solvents (hexane) system:

Solubility of Benzoic Acid in Mixed

Solvents:

Isothermal Vapor-Liquid Equilibrium

Data for the Systems 1,4-Dioxane +

Acetic Acid, Ethyl Acetate, and Ethyl

Acetate in Various Mixtures, based on

Experimental Data and Coefficients

and Thermodynamic Properties of

Compounds in the Binary Mixing

of 1,4-Dioxane and Acetic Acid

Solubility of Amino Acids in Organic

Solvents at Different Temperatures:

Solubility and Phase Separation of

Amorphous and Crystalline Polymers

and Their Volumes and Viscosity

8. Thermodynamic Properties of

Compounds in the Binary Mixing

of 1,4-Dioxane and Acetic Acid

at Infinite Dilution for Organic Solutes

and Water in Mixtures and Activity

Coefficients at Infinite Dilution for

Determination of Water and Organic

Solutes in the Binary Mixing of

1,4-Dioxane and Acetic Acid

Compounds in the Binary Mixing

of 1,4-Dioxane and Acetic Acid

Compounds in Four New

Systems: Acetic, Malonic, and Malic

Acids in Various Solvents Using

Gas-Liquid Chromatography and

Physicochemical Properties for

Organic Solutes and Water in the

Binary Mixing of 1,4-Dioxane and

Acetic Acid: Thermodynamic

Properties of Organic Solutes and

Water in the Binary Mixing of

1,4-Dioxane and Acetic Acid

Compounds in the Binary Mixing

of 1,4-Dioxane and Acetic Acid

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<https://www.doi.org/10.1016/j.jct.2016.06.011>

<https://www.doi.org/10.1021/je1003934>

<https://www.doi.org/10.1021/je060408x>

<https://www.doi.org/10.1021/je0301287>

<https://www.doi.org/10.1016/j.jct.2019.01.013>

<https://www.doi.org/10.1016/j.fluid.2017.12.029>

<https://www.doi.org/10.1016/j.jct.2017.03.004>

<https://www.doi.org/10.1007/s10765-006-0063-0>

<https://www.doi.org/10.1016/j.tca.2009.07.008>

<https://www.doi.org/10.1016/j.jct.2011.05.036>

<https://www.doi.org/10.1021/je200145r>

<https://www.doi.org/10.1021/je900711h>

<https://www.doi.org/10.1016/j.jct.2013.07.004>

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

<https://www.doi.org/10.1021/acs.jced.8b00080>

<https://www.doi.org/10.1021/je060033f>

<https://www.thermo.com/research/kdb/hcprop/showprop.php?cmpid=1047>

<https://www.doi.org/10.1021/je200637v>

<https://www.doi.org/10.1016/j.fluid.2011.09.033>

<https://www.doi.org/10.1016/j.jct.2011.11.021>

<https://www.doi.org/10.1016/j.jct.2017.10.003>

<https://www.doi.org/10.1016/j.jct.2012.09.033>

<https://www.doi.org/10.1016/j.jct.2012.05.017>

<https://www.doi.org/10.1016/j.jct.2015.05.014>

<https://www.doi.org/10.1016/j.fluid.2017.06.001>

<https://www.doi.org/10.1016/j.jct.2013.10.026>

<https://www.doi.org/10.1016/j.fluid.2015.06.041>

<https://www.doi.org/10.1021/je700296x>

<https://www.doi.org/10.1021/je700426k>

<https://www.doi.org/10.1016/j.jct.2009.11.005>

<https://www.doi.org/10.1021/acs.jced.8b01014>

<https://www.doi.org/10.1016/j.jct.2016.10.019>

<https://www.doi.org/10.1016/j.fluid.2010.02.018>

<https://www.doi.org/10.1016/j.jct.2019.03.004>

<https://www.doi.org/10.1016/j.jct.2012.05.032>

<https://www.doi.org/10.1021/acs.jced.9b00661>

<https://www.doi.org/10.1016/j.jct.2006.10.003>

<https://www.doi.org/10.1021/je0503554>

<https://www.doi.org/10.1016/j.jct.2015.02.024>

<https://www.doi.org/10.1021/acs.jced.6b00230>

<https://www.doi.org/10.1016/j.jct.2017.01.006>

<https://www.doi.org/10.1016/j.jct.2012.08.022>

<https://www.doi.org/10.1021/je4001894>

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Legend

af:	Acentric Factor
affp:	Proton affinity
aigt:	Autoignition Temperature
basg:	Gas basicity
chl:	Standard liquid enthalpy of combustion
cpg:	Ideal gas heat capacity
cpl:	Liquid phase heat capacity
dm:	Dipole Moment
dvisc:	Dynamic viscosity
econd:	Electrical conductivity
fl:	Lower Flammability Limit
flu:	Upper Flammability Limit
fpc:	Flash Point (Closed Cup Method)
fpo:	Flash Point (Open Cup Method)
gf:	Standard Gibbs free energy of formation
gyrad:	Radius of Gyration
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
hsubt:	Enthalpy of sublimation at a given temperature
hvap:	Enthalpy of vaporization at standard conditions
hvapt:	Enthalpy of vaporization at a given temperature
ie:	Ionization energy
kvisc:	Kinematic viscosity
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
rhoc:	Critical density
rho:	Liquid Density
rinpol:	Non-polar retention indices
ripol:	Polar retention indices
sdco:	Self diffusion coefficient
sfust:	Entropy of fusion at a given temperature

sg:	Molar entropy at standard conditions
sl:	Liquid phase molar entropy at standard conditions
speedsl:	Speed of sound in fluid
srf:	Surface Tension
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
tfp:	Melting point
tt:	Triple Point Temperature
vc:	Critical Volume
zc:	Critical Compressibility
zra:	Rackett Parameter

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