Acetic acid, methyl ester

Other names:	Acetate de methyle
	CH3COOCH3
	DEVOTON
	Ethyl ester of monoacetic acid
	METHYL ACETIC ESTER
	METHYL ETHANOATE
	Methyl acetate
	Methyl ester of acetic acid
	Methylacetaat
	Methylacetat
	Methyle (acetate de)
	Methylester kiseliny octove
	Metile (acetato di)
	NSC 405071
	Tereton
	UN 1231
	ethanoic acid, methyl ester
Inchi:	InChI=1S/C3H6O2/c1-3(4)5-2/h1-2H3
InchiKey:	KXKVLQRXCPHEJC-UHFFFAOYSA-N
Formula:	C3H6O2
SMILES:	COC(C)=O
Mol. weight [g/mol]:	74.08
CAS:	79-20-9

Physical Properties

Property code	Value	Unit	Source
af	0.3260		KDB
affp	821.60	kJ/mol	NIST Webbook
aigt	774.82	K	KDB
basg	790.70	kJ/mol	NIST Webbook
chl	-1592.20 ± 0.67	kJ/mol	NIST Webbook
chl	-1583.00	kJ/mol	NIST Webbook
dm	1.70	debye	KDB

dvisc	0.0003711	Pa×s	Densities and Viscosities of Binary Liquid Mixtures of Trichloroethylene and Tetrachloroethylene with Some Polar and Nonpolar Solvents
dvisc	0.0004000	Pa×s	Densities and Viscosities of 1-Butyl-3-methylimidazolium Tetrafluoroborate + Molecular Solvent Binary Mixtures
dvisc	0.0003800	Pa×s	Densities and Viscosities of Ternary Mixtures of Cyclohexane + Cyclohexanone + Some Alkyl Acetates at 298.15 K
fll	3.10	% in Air	KDB
flu	16.00	% in Air	KDB
fpc	267.59	K	KDB
fpo	263.15	K	KDB
gf	-259.54	kJ/mol	Joback Method
gyrad	2.8620		KDB
hf	-410.00	kJ/mol	NIST Webbook
hf	-409.70	kJ/mol	KDB
hfl	-445.89	kJ/mol	NIST Webbook
hfus	6.31	kJ/mol	Joback Method
hvap	31.43	kJ/mol	Joback Method
ie	10.59	eV	NIST Webbook
ie	10.25 ± 0.02	eV	NIST Webbook
ie	11.00	eV	NIST Webbook
ie	10.50	eV	NIST Webbook
ie	10.33	eV	NIST Webbook
ie	10.25 ± 0.05	eV	NIST Webbook
ie	10.25	eV	NIST Webbook
ie	10.20	eV	NIST Webbook
ie	10.25	eV	NIST Webbook
ie	10.27 ± 0.02	eV	NIST Webbook
log10ws	0.46		Estimated Solubility Method
log10ws	0.52		Aqueous Solubility Prediction Method
logp	0.179		Crippen Method
mcvol	60.570	ml/mol	McGowan Method
nfpaf	%!d(float64=3)		KDB
nfpah	%!d(float64=1)		KDB
pc	4694.30 ± 40.00	kPa	NIST Webbook
pc	4750.00	kPa	KDB
pc	4750.00 ± 4.74	kPa	NIST Webbook
pc	5840.00 ± 607.95	kPa	NIST Webbook

pc	4694.00 ± 81.06	kPa	NIST Webbook
pc	4817.00 ± 101.32	kPa	NIST Webbook
rhoc	325.50 ± 3.70	kg/m3	NIST Webbook
rhoc	320.02 ± 5.93	kg/m3	NIST Webbook
rinpol	510.00		NIST Webbook
rinpol	530.00		NIST Webbook
rinpol	525.70		NIST Webbook
rinpol	522.40		NIST Webbook
rinpol	505.00		NIST Webbook
rinpol	505.00		NIST Webbook
rinpol	505.00		NIST Webbook
rinpol	509.00		NIST Webbook
rinpol	505.00		NIST Webbook
rinpol	529.00		NIST Webbook
rinpol	560.00		NIST Webbook
rinpol	525.90		NIST Webbook
rinpol	509.00		NIST Webbook
rinpol	509.00		NIST Webbook
rinpol	505.00		NIST Webbook
rinpol	506.00		NIST Webbook
rinpol	523.70		NIST Webbook
rinpol	531.00		NIST Webbook
rinpol	509.00		NIST Webbook
rinpol	522.00		NIST Webbook
rinpol	531.00		NIST Webbook
rinpol	517.20		NIST Webbook
rinpol	526.30		NIST Webbook
rinpol	506.00		NIST Webbook
rinpol	511.00		NIST Webbook
rinpol	511.00		NIST Webbook
rinpol	521.30		NIST Webbook
rinpol	516.70		NIST Webbook
rinpol	536.00		NIST Webbook
rinpol	515.00		NIST Webbook
rinpol	559.00		NIST Webbook
rinpol	512.00		NIST Webbook
rinpol	513.00		NIST Webbook
rinpol	513.00		NIST Webbook
rinpol	510.00		NIST Webbook
rinpol	511.00		NIST Webbook
rinpol	507.00		NIST Webbook
rinpol	512.00		NIST Webbook
rinpol	515.00		NIST Webbook
rinpol	524.00		NIST Webbook

rinpol	515.30	NIST Webbook
rinpol	525.00	NIST Webbook
rinpol	511.00	NIST Webbook
rinpol	515.00	NIST Webbook
rinpol	513.00	NIST Webbook
rinpol	519.00	NIST Webbook
rinpol	509.00	NIST Webbook
rinpol	531.00	NIST Webbook
rinpol	528.00	NIST Webbook
rinpol	509.00	NIST Webbook
rinpol	509.00	NIST Webbook
rinpol	525.00	NIST Webbook
rinpol	509.00	NIST Webbook
rinpol	559.00	NIST Webbook
rinpol	523.00	NIST Webbook
rinpol	513.00	NIST Webbook
rinpol	525.70	NIST Webbook
rinpol	530.00	NIST Webbook
rinpol	512.00	NIST Webbook
rinpol	510.00	NIST Webbook
rinpol	507.00	NIST Webbook
rinpol	512.00	NIST Webbook
rinpol	529.70	NIST Webbook
rinpol	524.00	NIST Webbook
rinpol	508.00	NIST Webbook
rinpol	508.00	NIST Webbook
rinpol	519.00	NIST Webbook
rinpol	513.00	NIST Webbook
rinpol	511.50	NIST Webbook
rinpol	513.80	NIST Webbook
rinpol	515.70	NIST Webbook
rinpol	521.30	NIST Webbook
rinpol	526.20	NIST Webbook
rinpol	521.00	NIST Webbook
rinpol	520.60	NIST Webbook
rinpol	522.17	NIST Webbook
rinpol	501.15	NIST Webbook
rinpol	513.00	NIST Webbook
rinpol	509.00	NIST Webbook
ripol	784.00	NIST Webbook
ripol	796.00	NIST Webbook
ripol	827.00	NIST Webbook
ripol	841.00	NIST Webbook
ripol	841.00	NIST Webbook

ripol	834.00	NIST Webbook
ripol	813.00	NIST Webbook
ripol	834.00	NIST Webbook
ripol	834.00	NIST Webbook
ripol	839.00	NIST Webbook
ripol	804.00	NIST Webbook
ripol	834.00	NIST Webbook
ripol	813.00	NIST Webbook
ripol	827.00	NIST Webbook
ripol	826.00	NIST Webbook
ripol	844.00	NIST Webbook
ripol	877.00	NIST Webbook
ripol	823.00	NIST Webbook
ripol	854.00	NIST Webbook
ripol	850.00	NIST Webbook
ripol	836.00	NIST Webbook
ripol	832.00	NIST Webbook
ripol	810.00	NIST Webbook
ripol	827.00	NIST Webbook
ripol	828.00	NIST Webbook
ripol	798.00	NIST Webbook
ripol	839.00	NIST Webbook
ripol	826.00	NIST Webbook
ripol	834.00	NIST Webbook
ripol	832.80	NIST Webbook
ripol	801.00	NIST Webbook
ripol	834.00	NIST Webbook
ripol	825.00	NIST Webbook
ripol	829.00	NIST Webbook
ripol	827.00	NIST Webbook
ripol	817.00	NIST Webbook
ripol	825.00	NIST Webbook
ripol	828.00	NIST Webbook
ripol	825.00	NIST Webbook
ripol	848.00	NIST Webbook
ripol	818.00	NIST Webbook
ripol	843.00	NIST Webbook
ripol	828.00	NIST Webbook
ripol	813.00	NIST Webbook
ripol	832.00	NIST Webbook
ripol	828.00	NIST Webbook
ripol	826.00	NIST Webbook
ripol	782.00	NIST Webbook
ripol	856.00	NIST Webbook

ripol	822.00		NIST Webbook
ripol	782.00		NIST Webbook
ripol	782.00		NIST Webbook
ripol	825.00		NIST Webbook
ripol	827.00		NIST Webbook
ripol	837.00		NIST Webbook
ripol	845.00		NIST Webbook
ripol	825.00		NIST Webbook
ripol	825.00		NIST Webbook
ripol	828.00		NIST Webbook
ripol	864.00		NIST Webbook
tb	329.85	K	Isobaric Vapor-Liquid Equilibria and Excess Properties for the Binary Systems of Methyl Esters + Heptane
tb	329.95	K	Experimental Measurements of Vapor Liquid Equilibrium Data for the Binary Systems of Methanol + 2-Butyl Acetate, 2-Butyl Alcohol + 2-Butyl Acetate, and Methyl Acetate + 2-Butyl Acetate at 101.33 kPa
tb	330.04	K	Volumetric property for carbon dioxide + methyl acetate system at 313.15K
tb	330.05	K	Multiphase equilibria for mixtures containing water, acetic acid, propionic acid, methyl acetate and methyl propionate
tb	330.95	K	Isobaric vapor-liquid equilibrium data for the binary system methyl acetate + isopropyl acetate and the quaternary system methyl acetate + methanol + isopropanol + isopropyl acetate at 101.3 kPa
tb	330.40	K	Isobaric vapor-liquid equilibria of the binary mixtures propylene glycol methyl ether + propylene glycol methyl ether acetate, methyl acetate + propylene glycol methyl ether and methanol + propylene glycol methyl ether acetate at 101.3 kPa

tb	330.02	K	Experimental isobaric vapor-liquid equilibrium for the binary and ternary systems with methanol, methyl acetate and dimethyl sulfoxide at 101.3 kPa
tb	329.97	K	Vapor-Liquid Equilibrium and Liquid-Liquid Equilibrium of Methyl Acetate + Methanol + 1-Ethyl-3-methylimidazolium Acetate
tb	330.05	K	Isobaric vapor-liquid equilibrium for methanol + methyl acetate with ionic liquids [OMMIM][Tf2N] and [OMIM][Tf2N] as entrainers at 101.3 kPa
tb	330.02	K	KDB
tb	330.20	K	Isobaric Vapor-Liquid Equilibrium Measurements for Separation of Azeotrope (Methanol + Methyl Acetate)
tc	506.55	K	KDB
tf	175.00	K	KDB
tf	175.15 ± 0.30	K	NIST Webbook
tf	175.10 ± 0.20	K	NIST Webbook
tt	174.90 ± 0.01	K	NIST Webbook
vc	0.228	m3/kmol	KDB
zc	0.2571400		KDB
zra	0.26		KDB

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	92.58	J/mol×K	335.00	NIST Webbook
cpg	95.46	J/mol×K	350.00	NIST Webbook
cpg	100.39	J/mol×K	375.00	NIST Webbook
cpg	105.31	J/mol×K	400.00	NIST Webbook
cpg	109.98	J/mol×K	425.00	NIST Webbook
cpg	114.63	J/mol×K	450.00	NIST Webbook
cpl	123.70	J/mol×K	297.00	NIST Webbook
cpl	140.56	J/mol×K	298.15	NIST Webbook
cpl	141.34	J/mol×K	298.15	NIST Webbook
cpl	140.20	J/mol×K	288.58	NIST Webbook
cpl	140.60	J/mol×K	298.15	NIST Webbook

dvisc	0.0003480	Pa×s	303.15	Dynamic Viscosities, Densities, and Speed of Sound and Derived Properties of the Binary Systems Acetic Acid with Water, Methanol, Ethanol, Ethyl Acetate and Methyl Acetate at T = (293.15, 298.15, and 303.15) K at Atmospheric Pressure	
dvisc	0.0003860	Pa×s	293.15	Dynamic Viscosities, Densities, and Speed of Sound and Derived Properties of the Binary Systems Acetic Acid with Water, Methanol, Ethanol, Ethyl Acetate and Methyl Acetate at T = (293.15, 298.15, and 303.15) K at Atmospheric Pressure	
dvisc	0.0003510	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	0.0003840	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	0.0003480	Pa×s	303.15	Density, dynamic viscosity, and derived properties of binary mixtures of methanol or ethanol with water, ethyl acetate, and methyl acetate at T = (293.15, 298.15, and 303.15) K
dvisc	0.0003670	Pa×s	298.15	Dynamic Viscosities, Densities, and Speed of Sound and Derived Properties of the Binary Systems Acetic Acid with Water, Methanol, Ethanol, Ethyl Acetate and Methyl Acetate at T = (293.15, 298.15, and 303.15) K at Atmospheric Pressure
dvisc	0.0003860	Pa×s	293.15	Density, dynamic viscosity, and derived properties of binary mixtures of methanol or ethanol with water, ethyl acetate, and methyl acetate at T = (293.15, 298.15, and 303.15) K

dvisc	0.0003670	Pa×s	298.15	Density, dynamic viscosity, and derived properties of binary mixtures of methanol or ethanol with water, ethyl acetate, and methyl acetate at T = (293.15, 298.15, and 303.15) K
hfust	7.49	kJ/mol	174.90	NIST Webbook
hfust	7.49	kJ/mol	174.90	NIST Webbook
hfust	7.49	kJ/mol	174.90	NIST Webbook
hvapt	30.20	kJ/mol	330.00	NIST Webbook
hvapt	34.50	kJ/mol	295.50	NIST Webbook
hvapt	30.50 ± 0.10	kJ/mol	328.00	NIST Webbook
hvapt	30.30 ± 0.10	kJ/mol	331.00	NIST Webbook
hvapt	32.50	kJ/mol	295.00	NIST Webbook
hvapt	31.60 ± 0.10	kJ/mol	313.00	NIST Webbook
hvapt	32.20 ± 0.10	kJ/mol	304.00	NIST Webbook
hvapt	29.50 ± 0.10	kJ/mol	343.00	NIST Webbook
hvapt	33.40	kJ/mol	301.50	NIST Webbook
hvapt	34.10	kJ/mol	305.50	NIST Webbook
hvapt	30.32	kJ/mol	330.10	NIST Webbook
hvapt	31.80	kJ/mol	323.00	NIST Webbook
pvap	53.81	kPa	313.15	Total Vapor Pressure Measurements for 2-Ethoxyethanol with Methyl Acetate, Ethyl Acetate, Propyl Acetate, and Ethyl Propionate at 313.15 K and for 2-Ethoxyethanol with Methyl Formate at 308.15 K
pvap	40.40	kPa	306.00	Isobaric Vapor-Liquid Equilibria for Methyl Acetate + Methanol + 1-Ethyl-3-methylimidazolium Trifluoromethanesulfonate at 100 kPa

pvap	43.89	kPa	308.00	Isobaric Vapor-Liquid Equilibria for Methyl Acetate + Methanol + 1-Ethyl-3-methylimidazolium Trifluoromethanesulfonate at 100 kPa
pvap	47.62	kPa	310.00	Isobaric Vapor-Liquid Equilibria for Methyl Acetate + Methanol + 1-Ethyl-3-methylimidazolium Trifluoromethanesulfonate at 100 kPa
pvap	51.60	kPa	312.00	Isobaric Vapor-Liquid Equilibria for Methyl Acetate + Methanol + 1-Ethyl-3-methylimidazolium Trifluoromethanesulfonate at 100 kPa
pvap	55.85	kPa	314.00	Isobaric Vapor-Liquid Equilibria for Methyl Acetate + Methanol + 1-Ethyl-3-methylimidazolium Trifluoromethanesulfonate at 100 kPa
pvap	60.38	kPa	316.00	Isobaric Vapor-Liquid Equilibria for Methyl Acetate + Methanol + 1-Ethyl-3-methylimidazolium Trifluoromethanesulfonate at 100 kPa
pvap	65.21	kPa	318.00	Isobaric Vapor-Liquid Equilibria for Methyl Acetate + Methanol + 1-Ethyl-3-methylimidazolium Trifluoromethanesulfonate at 100 kPa
pvap	70.34	kPa	320.00	Isobaric Vapor-Liquid Equilibria for Methyl Acetate + Methanol + 1-Ethyl-3-methylimidazolium Trifluoromethanesulfonate at 100 kPa

pvap	75.79	kPa	322.00	Isobaric Vapor-Liquid Equilibria for Methyl Acetate + Methanol + 1-Ethyl-3-methylimidazolium Trifluoromethanesulfonate at 100 kPa
pvap	81.58	kPa	324.00	Isobaric Vapor-Liquid Equilibria for Methyl Acetate + Methanol + 1-Ethyl-3-methylimidazolium Trifluoromethanesulfonate at 100 kPa
pvap	87.72	kPa	326.00	Isobaric Vapor-Liquid Equilibria for Methyl Acetate + Methanol + 1-Ethyl-3-methylimidazolium Trifluoromethanesulfonate at 100 kPa
pvap	94.23	kPa	328.00	Isobaric Vapor-Liquid Equilibria for Methyl Acetate + Methanol + 1-Ethyl-3-methylimidazolium Trifluoromethanesulfonate at 100 kPa
pvap	101.12	kPa	330.00	Isobaric Vapor-Liquid Equilibria for Methyl Acetate + Methanol + 1-Ethyl-3-methylimidazolium Trifluoromethanesulfonate at 100 kPa
pvap	108.41	kPa	332.00	Isobaric Vapor-Liquid Equilibria for Methyl Acetate + Methanol + 1-Ethyl-3-methylimidazolium Trifluoromethanesulfonate at 100 kPa
pvap	116.11	kPa	334.00	Isobaric Vapor-Liquid Equilibria for Methyl Acetate + Methanol + 1-Ethyl-3-methylimidazolium Trifluoromethanesulfonate at 100 kPa

pvap	600.00	kPa	393.01	Experimental Determination of Vapor Liquid Equilibria. Binary Systems of Methyl Acetate, Ethyl Acetate, and Propyl Acetate with 1-Propanol at 0.6 MPa
pvap	132.83	kPa	338.00	Isobaric Vapor-Liquid Equilibria for Methyl Acetate + Methanol + 1-Ethyl-3-methylimidazolium Trifluoromethanesulfonate at 100 kPa
pvap	1500.00	kPa	436.08	Measurement and modeling of high pressure VLE for methyl acetate or ethyl acetate with 2-butanol. Isobaric data at 1.5 MPa
pvap	124.25	kPa	336.00	Isobaric Vapor-Liquid Equilibria for Methyl Acetate + Methanol + 1-Ethyl-3-methylimidazolium Trifluoromethanesulfonate at 100 kPa
pvap	101.30	kPa	329.97	Vapor-Liquid Equilibrium and Liquid-Liquid Equilibrium of Methyl Acetate + Methanol + 1-Ethyl-3-methylimidazolium Acetate
pvap	101.33	kPa	329.95	Experimental Measurements of Vapor Liquid Equilibrium Data for the Binary Systems of Methanol + 2-Butyl Acetate, 2-Butyl Alcohol + 2-Butyl Acetate, and Methyl Acetate + 2-Butyl Acetate at 101.33 kPa

pvap	79.21	kPa	323.15	Isothermal vapour liquid equilibrium with chemical reaction in the quaternary water + methanol + acetic acid + methyl acetate system, and in five binary subsystems
pvap	37.14	kPa	304.00	Isobaric Vapor-Liquid Equilibria for Methyl Acetate + Methanol + 1-Ethyl-3-methylimidazolium Trifluoromethanesulfonate at 100 kPa
pvap	101.30	kPa	330.05	Multiphase equilibria for mixtures containing water, acetic acid, propionic acid, methyl acetate and methyl propionate
rfi	1.35893		298.15	Densities, speeds of sound, and refractive indices of the ternary mixtures (toluene + methyl acetate + butyl acetate) and (toluene + methyl acetate + methyl heptanoate) at 298.15 K
rfi	1.35670		303.15	Densities, speeds of sound, isentropic compressibilities, refractive indexes, and viscosities of tetrahydrofuran with haloalkane or alkyl ethanoate at T = 303.15 K

rfi	1.35880	298.15	A Study on Alkane + Ester + Ester Systems. Physicochemical Behavior of Binaries and Ternaries of Octane or Iso-octane with Methyl Esters (Ethanoate, Butanoate, Pentanoate)
rfi	1.35872	298.15	Vapor-Liquid Equilibrium Data for Binary Mixtures of Dimethyl Carbonate with Methyl Acetate, Ethyl Acetate, n-Propyl Acetate, Isopropyl Acetate, n-Butyl Acetate, and Isoamyl Acetate at 93.13 kPa
rfi	1.36146	298.15	Isobaric Vapor-Liquid Equilibrium Data for Binary Systems of Anisole with Methyl Acetate, Ethyl Acetate, n-Propyl Acetate, and Isopropyl Acetate at 93.9 kPa
rfi	1.35870	298.15	Isobaric Vapor-Liquid Equilibria of Binary Mixtures of Diethyl Carbonate with Methyl Acetate, n-Propyl Acetate, or Amyl Acetate at 100.17 kPa
rfi	1.35875	298.15	Measurement of VLE Data by Using an Experimental Installation with Automatic Control: Modeling of Binary Systems of Methyl Acetate or Ethyl Acetate with n-Heptane or 2,2,4-Trimethylpentane at Both 0.1 and 1.5 MPa

rfi	1.34860	318.15	Excess Properties and Isobaric Vapor-Liquid Equilibria for Binary Mixtures of Methyl Esters + tert-Butanol
rfi	1.35850	298.15	Thermodynamic study of (alkyl esters + alpha,omega-alkyl dihalides) IV: Hex and Vex for 25 binary mixtures {xC(u-1)H(2u-1)CO2CH3 + (1-x)alpha,omega-BrCH2(CH2)(v-2)CH2Br}, where u = 1 to 5, alpha = 1 and v = omega = 2 to 6
rfi	1.35893	298.15	Isobaric Vapor-Liquid Equilibria for the Binary Systems Benzene + Methyl Ethanoate, Benzene + Butyl Ethanoate, and Benzene + Methyl Heptanoate at 101.31kPa
rfi	1.36414	288.15	Density, Speed of Sound, and Refractive Index of 1-Ethyl-3-methylimidazolium Trifluoromethanesulfonate with Acetone, Methyl Acetate, and Ethyl Acetate at Temperatures from (278.15 to 328.15) K
rfi	1.35881	298.15	Density, Speed of Sound, and Refractive Index of 1-Ethyl-3-methylimidazolium Trifluoromethanesulfonate with Acetone, Methyl Acetate, and Ethyl Acetate at Temperatures from (278.15 to 328.15) K

rfi	1.35367	308.15	Density, Speed of Sound, and Refractive Index of 1-Ethyl-3-methylimidazolium Trifluoromethanesulfonate with Acetone, Methyl Acetate, and Ethyl Acetate at Temperatures from (278.15 to 328.15) K
rfi	1.34823	318.15	Density, Speed of Sound, and Refractive Index of 1-Ethyl-3-methylimidazolium Trifluoromethanesulfonate with Acetone, Methyl Acetate, and Ethyl Acetate at Temperatures from (278.15 to 328.15) K
rfi	1.35881	298.15	Properties of ionic liquid HMIMPF6 with carbonates, ketones and alkyl acetates
rfi	1.34900	318.15	Thermodynamic properties of (an ester + an alkane). XVI. Experimental HEm and V Em values and a new correlation method for (an alkyl ethanoate + an n-alkane) at 318.15 K
rfi	1.35865	298.15	Density, Refractive Index, Speed of Sound at 298.15 K, and Vapor-Liquid Equilibria at 101.3 kPa for Binary Mixtures of Ethyl Acetate + Ethyl Lactate and Methyl Acetate + Ethyl Lactate
rfi	1.35890	298.15	Vapor-liquid equilibrium measurements of dimethylsulfide, +ethanol, +dimethylether, +methylacetate with a static total pressure method

rfi	1.35906		298.15	Excess molar volumes and excess molar enthalpies for binary mixtures of 1,2-dichloropropane with methyl ethanoate, methyl propanoate, and methyl butanoate at T = 298.15K
rfi	1.35850		298.15	Molecular interactions in (2,4,6-trimethyl-1,3,5-trioxane + n-alkyl acetates) at T=(298.15, 303.15, and 308.15) K
rfi	1.36500		288.15	Density, refraction index and vapor-liquid equilibria of N-methyl-2-hydroxyethylammonium butyrate plus (methyl acetate or ethyl acetate or propyl acetate) at several temperatures
rhol	927.30	kg/m3	298.15	Experimental Determination of Densities and Isobaric Vapor Liquid Equilibria of Methyl Acetate and Ethyl Acetate with Alcohols (C3 and C4) at 0.3 MPa
rhol	907.90	kg/m3	313.15	Ternary Excess Molar Volumes of {Methyltrioctylammonium Bis[(trifluoromethyl)sulfonyl]imide + Methanol + Methyl Acetate or Ethyl Acetate} Systems at (298.15, 303.15, and 313.15) K
rhol	920.50	kg/m3	303.15	Ternary Excess Molar Volumes of {Methyltrioctylammonium Bis[(trifluoromethyl)sulfonyl]imide + Methanol + Methyl Acetate or Ethyl Acetate} Systems at (298.15, 303.15, and 313.15) K

rhol	927.10	kg/m3	298.15	Ternary Excess Molar Volumes of {Methyltrioctylammonium Bis[(trifluoromethyl)sulfonyl]imide + Methanol + Methyl Acetate or Ethyl Acetate} Systems at (298.15, 303.15, and 313.15) K
rhol	927.70	kg/m3	298.15	Liquid Liquid Equilibrium for Ternary System Methanol + Methyl Acetate + 1,3-Dimethylimidazolium Dimethylphosphate at Several Temperatures and Atmospheric Pressure
rhol	908.49	kg/m3	313.15	Volumetric and FT-IR Studies of the Binary Liquid Mixtures of Tributylamine and Alkyl Ester (C1-C5)
rhol	915.16	kg/m3	308.15	Volumetric and FT-IR Studies of the Binary Liquid Mixtures of Tributylamine and Alkyl Ester (C1-C5)
rhol	921.85	kg/m3	303.15	Volumetric and FT-IR Studies of the Binary Liquid Mixtures of Tributylamine and Alkyl Ester (C1-C5)
rhol	928.46	kg/m3	298.15	Volumetric and FT-IR Studies of the Binary Liquid Mixtures of Tributylamine and Alkyl Ester (C1-C5)
rhol	935.01	kg/m3	293.15	Volumetric and FT-IR Studies of the Binary Liquid Mixtures of Tributylamine and Alkyl Ester (C1-C5)

rhol	927.10	kg/m3	298.15	Vapor-liquid equilibria of binary and ternary mixtures containing ethyl lactate and effect of ethyl lactate as entrainer
rhol	927.30	kg/m3	298.15	Isobaric vapor-liquid equilibrium for methyl acetate + methanol system containing different ionic liquids at 101.3 kPa
rhol	934.00	kg/m3	293.00	KDB
rhol	926.90	kg/m3	298.15	Densities and interfacial tensions for fatty acid methyl esters (from methyl formate to methyl heptanoate) + water demixed mixtures at atmospheric pressure conditions
rhol	927.50	kg/m3	298.15	Isobaric vapor-liquid equilibrium of the binary system sec-butyl acetate + para-xylene and the quaternary system methyl acetate + para-xylene + sec-butyl acetate + acetic acid at 101.3 kPa
speedsl	1200.38	m/s	288.15	Densities and Speeds of Sound of Binary Liquid Mixtures of Some n-Alkoxypropanols with Methyl Acetate, Ethyl Acetate, and n-Butyl Acetate at T = (288.15, 293.15, 298.15, 303.15, and 308.15) K

speedsl	1178.95	m/s	293.15	Densities and Speeds of Sound of Binary Liquid Mixtures of Some n-Alkoxypropanols with Methyl Acetate, Ethyl Acetate, and n-Butyl Acetate at T = (288.15, 293.15, 298.15, 303.15, and 308.15) K
speedsl	1155.93	m/s	298.15	Densities and Speeds of Sound of Binary Liquid Mixtures of Some n-Alkoxypropanols with Methyl Acetate, Ethyl Acetate, and n-Butyl Acetate at T = (288.15, 293.15, 298.15, 303.15, and 308.15) K
speedsl	1132.98	m/s	303.15	Densities and Speeds of Sound of Binary Liquid Mixtures of Some n-Alkoxypropanols with Methyl Acetate, Ethyl Acetate, and n-Butyl Acetate at T = (288.15, 293.15, 298.15, 303.15, and 308.15) K
speedsl	1110.02	m/s	308.15	Densities and Speeds of Sound of Binary Liquid Mixtures of Some n-Alkoxypropanols with Methyl Acetate, Ethyl Acetate, and n-Butyl Acetate at T = (288.15, 293.15, 298.15, 303.15, and 308.15) K
srf	0.02	N/m	298.15	Surface Tension Data of Aqueous Binary Mixtures of Methyl, Ethyl, Propyl, and Butyl Acetates at 298.15 K

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.47592e+01
Coeff. B	-2.94089e+03
Coeff. C	-3.99950e+01
Temperature range (K), min.	243.21
Temperature range (K), max.	506.55

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/T + C*ln(T) + D*T^2
Coeff. A	7.85873e+01
Coeff. B	-6.36277e+03
Coeff. C	-9.58632e+00
Coeff. D	8.25370e-06
Temperature range (K), min.	175.15
Temperature range (K), max.	506.80

Sources

Solubility of Agomelatine Crystal Form I and Form II in Pure Solvents and (Isopropanol + Water) Mixtures:	https://www.doi.org/10.1021/acs.jced.5b00586
Infinite dilution activity coefficients of volatile organic compounds in two ionic liquids composed of the tris(pentafluoroethyl)trifluorophosphate ([FAP]) anion and a functionalized cation:	https://www.doi.org/10.1016/j.jct.2013.05.035
Determination of Henry's Law Constants Using Internal Standards with Benchmark Values:	https://www.doi.org/10.1021/je3010535
Activity Coefficients at Infinite Dilution of Various Solutes in Tetrapropylammonium Bromide + 1,6-Hexanediol Deep Eutectic Solvent:	https://www.doi.org/10.1021/acs.jced.8b00600
KDB Vapor Pressure Data:	https://www.cheric.org/research/kdb/hcprop/showprop.php?cmpid=1054
Activity coefficients at infinite dilution of organic solutes in the ionic liquid 1-ethyl-3-methylimidazolium methanesulfonate:	https://www.doi.org/10.1016/j.fluid.2010.10.008
Solubility Measurement and Thermodynamic Modeling of N-(4-Methylphenyl)-Z-3-chloro-2-(phenylthio)propenamide in 12 Pure Solvents at Temperatures Ranging from 278.15 to 318.15 K:	https://www.doi.org/10.1021/acs.jced.7b01011
Separation of binary mixtures based on limiting activity coefficients data using [illegible] ammonium-based ionic liquid and modelling of thermodynamic functions:	https://www.doi.org/10.1016/j.fluid.2017.12.029
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Isobaric vapor-liquid equilibrium for methyl acetate + methanol system containing different ionic liquids at 101.3 kPa:	https://www.doi.org/10.1016/j.fluid.2015.07.045
Isothermal vapour liquid equilibrium with chemical reaction in the quaternary water + methanol + acetic acid + methyl acetate system, and in five binary subsystems:	https://www.doi.org/10.1016/j.fluid.2006.06.005
Measurement and modeling of high pressure VLE for methyl acetate or ethyl acetate with 1-butanol. Isobaric data at 1.5 MPa:	https://www.doi.org/10.1021/acs.jced.5b00773
Multiphase equilibria for mixtures containing water, acetic acid, propionic acid, methyl acetate and methyl propionate:	https://www.doi.org/10.1016/j.fluid.2008.07.004
Solubility Determination, Modeling, and Thermodynamic Dissolution Properties of Benzenesulfonamide in 16 Neat Solvents from 273.15 to 324.45 K:	https://www.doi.org/10.1021/acs.jced.9b00360
Solution thermodynamics of simvastatin in pure solvents and binary solvent mixtures:	https://www.doi.org/10.1016/j.fluid.2015.07.055

Experimental VLE data of Methyl Acetate or Ethyl Acetate with 2-Butanol at 0.3 and 0.6MPa: Quality assessment and predictions.:	https://www.doi.org/10.1021/je5003225
Studies on liquid-liquid interactions of some ternary mixtures by density, viscosity, ultrasonic speed and refractive index measurements:	https://www.doi.org/10.1016/j.tca.2009.07.011
Thermodynamic study of molecular interaction selectivity in separation processes based on limiting activity coefficients:	https://www.doi.org/10.1016/j.jct.2018.02.014
Separation of binary mixtures hexane/hex-1-ene, cyclohexane/cyclohexene and ethylbenzene/styrene based on gamma infinity data measurements:	https://www.doi.org/10.1016/j.jct.2017.11.017
Measurements of activity coefficients at infinite dilution for organic solutes and water in the ionic liquid 1-hexyl-3-methylimidazolium tetracyanoborate:	https://www.doi.org/10.1016/j.jct.2011.11.025
Effect of bivalent cation inorganic salts on isobaric vapor–liquid equilibrium of methyl acetate–methanol system:	https://www.doi.org/10.1016/j.fluid.2014.07.005
Densities and Viscosities of 1-Butyl-3-methylimidazolium Tetrafluoroborate + Molecular Solvent Binary Mixtures:	https://www.doi.org/10.1021/je8001128
A Study on Alkane + Ester + Ester Systems: Physicochemical Behavior of Binaries and Ternaries of Octane or iso-octane with Methyl Esters (Ethanoate, Butanoate, Pentanoate):	https://www.doi.org/10.1021/acs.jced.5b00813
Measurement and Correlation of the Solubility of 2-Cyanoacetamide in 14 Pure Solvents and the Mixing Properties of Solutions:	https://www.doi.org/10.1021/acs.jced.8b01205
Excess Properties and Isobaric Vapor Liquid Equilibria for Binary Mixtures of Methyl Esters + tert-Butanol:	https://www.doi.org/10.1021/je034290l
Effects of temperature and concentration on interactions in (methanol + ethyl acetate) and (ethanol + methyl acetate or ethyl acetate) systems: insights from apparent molar volume and apparent molar isentropic compressibility study:	https://www.doi.org/10.1016/j.tca.2013.12.016
Solubility of 1H-1,2,4-Triazole in Ethanol, 1-Propanol, 2-Propanol, 1,2-Propanediol, Ethyl Formate, Methyl Acetate, Ethyl Acetate, and Butyl Acetate at (283 to 363) K:	https://www.doi.org/10.1021/je060452c
Solubility Measurement and Correlation of Probenecid in 12 Pure Organic Solvents and Thermodynamic Properties of Mixing of Solutions:	https://www.doi.org/10.1021/acs.jced.8b00863
Thermodynamics and activity coefficients at infinite dilution for organic solutes and water in the ionic liquid 1-butyl-1-methylmorpholinium tricyanomethanide:	https://www.doi.org/10.1016/j.jct.2013.08.030
A 1-alkylcyanopyridinium-based ionic liquid in the separation processes:	https://www.doi.org/10.1016/j.jct.2016.01.017
Vapor-liquid equilibria of binary and ternary mixtures containing ethyl lactate and effect of ethyl lactate as entrainer:	https://www.doi.org/10.1016/j.fluid.2015.12.029
Volumetric and FT-IR Studies of the Binary Liquid Mixtures of Tributylamine and Alkyl Ester (C1-C5):	https://www.doi.org/10.1021/acs.jced.8b01120
Activity coefficients at infinite dilution and physicochemical properties for organic solutes and water in the ionic liquid 4-(3-hydroxypropyl)-4-methylmorpholinium bis(trifluoromethylsulfonyl)imide:	https://www.doi.org/10.1016/j.jct.2015.02.024
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:	https://www.doi.org/10.1021/je0340248
Thermodynamics and limiting activity coefficients measurements for organic solutes and water in the ionic liquid 1-dodecyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide:	https://www.doi.org/10.1016/j.jct.2016.08.008
Solubility Measurement and Thermodynamic Modeling of Benzoic Acid in Monosolvents and Binary Mixtures:	https://www.doi.org/10.1021/acs.jced.8b00025
Activity coefficients at infinite dilution and physicochemical properties for organic solutes and water in the ionic liquid 1-(2-methoxyethyl)-1-methylpiperidinium bis(trifluoromethylsulfonyl)-amide:	https://www.doi.org/10.1016/j.jct.2012.01.019
Measurement and Correlation of the Solubility of Vanillic Acid in Eight Pure and Water + Ethanol Mixed Solvents at Temperatures from (293.15 to 323.15) K:	https://www.doi.org/10.1021/acs.jced.5b00619
Activity coefficients at infinite dilution and physicochemical properties for organic solutes and water in the ionic liquid 1-(2-hydroxyethyl)-3-methylimidazolium trifluorotris(perfluoroethyl)phosphate:	https://www.doi.org/10.1016/j.jct.2013.05.008
Solubilities of phosphoric acid, P,P0-1,4-phenylene P,P,P0,P0-tetraphenyl ester in the organic solvents:	https://www.doi.org/10.1016/j.fluid.2014.12.034
Density, Speed of Sound, and Refractive Index of 1-Ethyl-3-methylimidazolium Trifluoromethanesulfonate with Acetone, Methyl Acetate, and Ethyl Acetate at Temperatures from (278.15 to 328.15) K:	https://www.doi.org/10.1021/je9005618
Thermodynamic study of (alkyl esters + alpha,omega-alkyl dihalides) IV: Hex and Vex for 24 binary mixtures {xCH3(CH2)(u-1)COOCH3 + (1-x)alpha,omega-BrCH2(CH2)(v-2)CH2Br}, where u = 1 to 4, alpha = 1 and v = omega = 2 to 6:	https://www.doi.org/10.1016/j.jct.2006.05.004
Isobaric Vapor Liquid Equilibria of Binary Mixtures of Diethyl Carbonate + Methyl Acetate, Ethyl Acetate, and Propyl Acetate:	https://www.doi.org/10.1021/acs.jced.9b00068
Excess Properties for the Binary Systems Methyl Esters + Heptane:	https://www.doi.org/10.1021/je030117d
Differential Scanning Calorimetry Data and Solubility of Rosmarinic Acid in Different Pure Solvents and in Binary Mixtures (Methyl Acetate + Water) and (Ethyl Acetate + Water) from 293.2 to 313.2 K:	https://www.doi.org/10.1021/acs.jced.6b00008
Solubility of 3-Nitrophthalic Acid in Different Solvents between 278 K and 353 K:	https://www.doi.org/10.1021/je0604737
The use of ionic liquids for separation of binary hydrocarbons mixtures based on gamma infinity data measurements:	https://www.doi.org/10.1016/j.jct.2018.07.024
Solubility of Veratric Acid in Eight Monosolvents and Ethanol + 1-Butanol at Various Temperatures:	https://www.doi.org/10.1021/je400029t
Ternary Excess Molar Volumes of {Methyltrioctylammonium Bis[(trifluoromethyl)sulfonyl]imide + Methanol + Methyl Acetate or Ethyl Acetate} Systems at (298.15, 303.15, and 313.15) K:	https://www.doi.org/10.1021/je900906j
Liquid-Liquid Equilibria of Methyl Acetate + Methanol + Octane or Nonane:	https://www.doi.org/10.1021/je0342365
Total Vapor Pressure Measurements for 2-Ethoxyethanol with Methyl Acetate, Ethyl Acetate, Propyl Acetate, and Ethyl Propionate at 313.15 K and for 2-Ethoxyethanol with Methyl Formate at 308.15 K:	https://www.doi.org/10.1021/je0255628
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
Dynamic Viscosities, Densities, and Speed of Sound and Derived Properties of the Binary Systems Acetic Acid with Water, Methanol, Ethanol, Ethyl Acetate and Methyl Acetate at T = (293.15, 298.15, and 303.15) K at Atmospheric Pressure:	https://www.doi.org/10.1021/je0342825
Measurements of activity coefficients at infinite dilution for organic solutes and water in the ionic liquid 1-butyl-1-methylpyrrolidinium tricyanomethanide:	https://www.doi.org/10.1016/j.jct.2013.07.004
Article, Isobaric Vapor-Liquid Equilibrium for Methanol + Methyl Acetate + 1-Butyl-3-methylimidazolium Hexafluorophosphate at 101.3 kPa:	https://www.doi.org/10.1021/je2000588
Solubility of Amorphous Clopidogrel Hydrogen Sulfate in Different Pure Solvents:	https://www.doi.org/10.1021/acs.jced.5b00306
Activity coefficients at infinite dilution and physicochemical properties for organic solutes and water in the ionic liquid 1-(2-methoxyethyl)-1-methylpyrrolidinium trifluorotris(perfluoroethyl)phosphate:	https://www.doi.org/10.1016/j.jct.2013.01.007
Solubility of Captopril in 2-Propanol, Acetone, Acetonitrile, Methyl Acetate, Ethyl Acetate, and Butyl Acetate:	https://www.doi.org/10.1021/je900401z

Determination and Correlation of Solubility and Thermodynamic	https://www.doi.org/10.1021/acs.jced.7b00665
Vapor-liquid equilibria of ternary systems with	https://www.doi.org/10.1016/j.fluid.2011.05.016
Thermodynamics and activity	https://www.doi.org/10.1016/j.jct.2014.04.024
Solubility of Lead Sulfate in	https://www.doi.org/10.1021/acs.jced.9b00854
Thermodynamic Analysis of	https://www.doi.org/10.1016/j.tca.2004.08.001
Solvent Systems, Refractive Indexes,	http://pubs.acs.org/doi/suppl/10.1021/ci034243x/suppl_file/ci034243xsi20040112_053635.txt
Surface Tension Data of Aqueous	https://www.doi.org/10.1021/je900962v
Solubility and Data Correlation of	https://www.doi.org/10.1021/acs.jced.9b00703
Density of ionic liquid HMIMPF6 with	https://www.doi.org/10.1016/j.jct.2005.07.020
Solubility of Lovastatin in Ethyl	https://www.doi.org/10.1021/je800120p
Measurement and Correlation of	https://www.doi.org/10.1021/acs.jced.8b00663
Solubility and Thermodynamic	https://www.doi.org/10.1021/je100077z
Solubility and (Liquid + Liquid) Equilibrium of Ternary	https://www.doi.org/10.1021/acs.jced.7b00244
Solubility of 1-Methyl-4-nitropyrazole in	https://www.doi.org/10.1016/j.fluid.2018.05.023
Molecular Interactions in	https://www.doi.org/10.1016/j.jct.2006.03.014
Densities and Viscosities of Binary	https://www.doi.org/10.1021/je034203p
Liquid Mixtures of Trichloroethylene	https://www.doi.org/10.1016/j.fluid.2004.12.005
Polar and Nonpolar Solvents:	https://www.doi.org/10.1016/j.jct.2012.09.017
Solubilities of Three Flavonoids in	https://www.doi.org/10.1021/acs.jced.6b00552
Determination of Ternary Liquid	https://www.doi.org/10.1021/acs.jced.6b00852
Equilibrium of Methyl Acetate +	https://www.doi.org/10.1021/je900711h
Measurement and Correlation of	https://www.doi.org/10.1021/acs.jced.8b00578
Solubility of 3-Hydroxy-2-naphthoic	https://www.doi.org/10.1021/acs.jced.8b00888
Measurement and Correlation of	https://www.doi.org/10.1021/je500012b
Solubility and Dissolution	https://www.doi.org/10.1021/je200822w
Volumetric property of carbon dioxide	https://www.doi.org/10.1016/j.fluid.2007.01.033
Isobaric vapor-liquid equilibrium of the	https://www.doi.org/10.1016/j.fluid.2015.05.032
Vapor-liquid equilibrium measurements	https://www.doi.org/10.1016/j.fluid.2013.06.044
Correlation and thermal properties for	https://www.doi.org/10.1016/j.jct.2018.02.010
Isobaric total pressure method	https://www.doi.org/10.1021/je500519y
Density and Speed of Sound of	https://www.doi.org/10.1021/je300789a
Liquid–Liquid Equilibria of Mixtures	https://www.doi.org/10.1021/je700397g
Determination of Solubility and	https://www.doi.org/10.1021/acs.jced.8b00196
Thermodynamic Properties of	https://www.doi.org/10.1021/acs.jced.7b00704
Solid–Liquid Equilibrium Data for	https://www.doi.org/10.1016/j.fluid.2015.03.036
Density, Refractive Index, Speed of	https://www.doi.org/10.1021/je060052p
Measurements of activity coefficient at	https://www.doi.org/10.1016/j.fluid.2018.01.019
Solid–liquid phase equilibrium and	https://www.doi.org/10.1016/j.jct.2016.07.050
Measurement of VLE Data by Using an	https://www.doi.org/10.1021/acs.jced.9b00668
Automatic Control Modeling of Binary	https://www.doi.org/10.1016/j.jct.2007.05.004
Thermophysical properties of	https://www.doi.org/10.1016/j.fluid.2018.06.003
Solubility and thermodynamic	https://www.doi.org/10.1021/je049875+
The Yaws Handbook of Vapor	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure

Isobaric Vapor-Liquid Equilibria for the Binary Systems Benzene + Methyl Ethanoate, Benzene + Butyl Ethanoate, and Benzene + Methyl Heptanoate at 101.31 kPa:	https://www.doi.org/10.1021/je800915d
Density, refraction index and vapor-liquid equilibria of N-methyl-2-hydroxyethylammonium butyrate plus (methyl acetate or ethyl acetate or propyl acetate) at several temperatures:	https://www.doi.org/10.1016/j.jct.2013.02.022
New ionic liquid [P4,4,4,4][NTf2] in bio-butanol extraction on investigation of limiting activity coefficients:	https://www.doi.org/10.1016/j.fluid.2018.07.028
Isobaric vapor-liquid equilibrium for methanol + methyl acetate with ionic liquids [OMMIM][Tf2N] and [OMIM][Tf2N] as entrainers at 101.3 kPa:	https://www.doi.org/10.1016/j.fluid.2018.05.031
Experimental Determination of Vapor Liquid Equilibria. Binary Systems of Methyl Acetate, Ethyl Acetate, and Propyl Acetate with 1-Propanol at 0.6 MPa:	https://www.doi.org/10.1021/je400622g
Vapor-Liquid Equilibrium and Liquid-Liquid Equilibrium of Methyl Acetate + Methanol + 1-Ethyl-3-methylimidazolium Acetate:	https://www.doi.org/10.1021/je100932m
Measurement and Correlation of the Solubility of Aminocaproic Acid in Some Pure and Binary Solvents:	https://www.doi.org/10.1021/acs.jced.9b00543
Solution Thermodynamics of Benzotriazole in Different Pure Solvents:	https://www.doi.org/10.1021/acs.jced.7b01085
Solubility measurement, model evaluation and thermodynamic analysis of rivaroxaban polymorphs in organic solvents:	https://www.doi.org/10.1016/j.jct.2016.09.036
Liquid liquid equilibria of 1,3-dimethylimidazolium methyl sulfate with ketones, dialkyl carbonates and acetates:	https://www.doi.org/10.1016/j.fluid.2007.02.027
(Liquid + liquid) equilibria of (water + 1-propanol + solvent) at T = 298.2K:	https://www.doi.org/10.1016/j.fluid.2005.11.024
Isobaric vapor-liquid equilibria of the binary mixtures propylene glycol methyl ether + propylene glycol methyl ether acetate, methyl acetate + propylene glycol methyl ether and methanol + propylene glycol methyl ether acetate at 101.3 kPa:	https://www.doi.org/10.1016/j.fluid.2014.01.022
Activity coefficients at infinite dilution, physicochemical and thermodynamic properties for organic solutes and water in the ionic liquid ethyl-dimethyl-(2-methoxyethyl)ammonium trifluorotris-(perfluoroethyl)phosphate:	https://www.doi.org/10.1016/j.jct.2015.05.022
Activity coefficients at infinite dilution and physicochemical properties for organic solutes and water in the ionic liquid 4-(2-methoxyethyl)-4-methylmorpholinium trifluorotris(perfluoroethyl)phosphate:	https://www.doi.org/10.1016/j.jct.2012.05.017
Solubilities of Phosphoramidic Acid, N-(phenylmethyl)-, Diphenyl Ester in	https://www.doi.org/10.1021/acs.jced.5b00007
Isobaric Vapor-Liquid Equilibrium Data for Binary Systems of Anisole with Methyl Acetate, Ethyl Acetate, n-Propyl Acetate, and Isopropyl Acetate at 93.9 kPa:	https://www.doi.org/10.1021/acs.jced.8b00063
Measurement and Correlation of the Solubility of p-Coumaric Acid in Nine Pure and Water + Ethanol Mixed Solvents at Temperatures from 293.15 to 333.15 K:	https://www.doi.org/10.1021/acs.jced.6b00361
Solubility Determination of Nicotinamide and Its Application for the Cocrystallization with Benzoic Acid:	https://www.doi.org/10.1021/acs.jced.8b00560
KDB:	https://www.cheric.org/files/research/kdb/mol/mol1054.mol
Separation of water/butan-1-ol based on activity coefficients at infinite dilution in 1,3-didecyl-2-methylimidazolium dicyanamide ionic liquid:	https://www.doi.org/10.1016/j.jct.2017.10.003
Solid-liquid phase equilibrium and dissolution properties of ethyl vanillin in pure solvents:	https://www.doi.org/10.1016/j.jct.2016.10.029
Solubility and limiting activity coefficient of simvastatin in different organic solvents:	https://www.doi.org/10.1016/j.fluid.2009.03.006
Determination and Modeling of Solubility of 4-Aminobenzamide in Different Pure Solvents:	https://www.doi.org/10.1021/acs.jced.8b01144
Solubility Measurement and Thermodynamic Modeling for o-Toluenesulfonamide in 16 Solvents from T = 273.15 to 323.85 K:	https://www.doi.org/10.1021/acs.jced.9b00445
High selective water/butan-1-ol separation on investigation of limiting activity coefficients with [P8,8,8,8][NTf2] ionic liquid:	https://www.doi.org/10.1016/j.fluid.2017.06.001
Measurement and Correlation of Solubility on Reactive Crystallization of Methyl D-(-)-4-Hydroxy-phenylglycinate:	https://www.doi.org/10.1021/acs.jced.6b00415
Critical Assessment of CO2 Solubility in Volatile Solvents at 298.15 K:	https://www.doi.org/10.1021/je101161d
Activity coefficients at infinite dilution and physicochemical properties for organic solutes and water in the ionic liquid 1-(2-methoxyethyl)-1-methylpyrrolidinium bis(trifluoromethylsulfonyl)-amide:	https://www.doi.org/10.1016/j.jct.2012.03.015
Solid-Liquid Phase Equilibrium of Phosphoramidic acid, N,N'-1,2-ethanediylbis-P,P,P',P'-tetraphenyl Ester in Selected Solvents:	https://www.doi.org/10.1021/je5010565
Liquid-Liquid Equilibrium for Ternary System Methanol + Methyl Acetate + 1,3-Dimethylimidazolium Dimethylphosphate at Several Temperatures and Atmospheric Pressure:	https://www.doi.org/10.1021/je500672d
Physical and excess properties of (methyl acetate + methanol + 1-ethyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide) and its binary mixtures at T = 298.15 K and atmospheric pressure:	https://www.doi.org/10.1016/j.jct.2009.06.007
Thermodynamics and selectivity of separation based on activity coefficients at infinite dilution of various solutes in 1-allyl-3-methylimidazolium bis{(trifluoromethyl)sulfonyl}imide ionic liquid:	https://www.doi.org/10.1016/j.jct.2016.06.028
Ammonium ionic liquids in extraction of bio-butan-1-ol from water phase using activity coefficients at infinite dilution:	https://www.doi.org/10.1016/j.fluid.2018.09.024
Thermodynamic Study of Solubility for Imatinib Mesylate in Nine Monosolvents and Two Binary Solvent Mixtures from 278.15 to 318.15 K:	https://www.doi.org/10.1021/acs.jced.8b00551
Solubilities of 3-Chlorophthalic Anhydride and 4-Chlorophthalic Anhydride in Different Pure Solvents:	https://www.doi.org/10.1021/acs.jced.5b00526
Solubility and mixing thermodynamic properties of (2,4,6-trimethylbenzoyl) diphenylphosphine oxide in pure and binary solvents:	https://www.doi.org/10.1016/j.fluid.2018.01.015
Experimental isobaric vapor-liquid equilibrium for the binary and ternary systems with methanol, methyl acetate and dimethyl sulfoxide at 101.3 kPa:	https://www.doi.org/10.1016/j.fluid.2015.08.014
Liquid-liquid equilibria for mixtures of {methyl acetate + methanol + n-alkane (C10-C12)} at several temperatures and 1 atm:	https://www.doi.org/10.1016/j.jct.2003.11.009
Thermodynamics of 4'-bromomethyl-2-cyanobiphenyl in different solvents:	https://www.doi.org/10.1016/j.jct.2014.12.002
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
Solubility Measurement and Phase Equilibrium Modeling of 2-Aminobenzamide in 15 Pure Solvents:	https://www.doi.org/10.1021/acs.jced.9b00350
Thermodynamic properties of (an ester + an alkane). XVI. Experimental HEm and VEm values and a new correlation method for (an alkyl ethanoate + an n-alkane) at 318.15 K:	https://www.doi.org/10.1016/j.jct.2003.11.008
Isobaric Vapor-Liquid Equilibria for Methyl Acetate + Methanol + 1-Ethyl-3-methylimidazolium Trifluoromethanesulfonate at 100 kPa:	https://www.doi.org/10.1021/je600518s

Separation of methyl acetate + methanol azeotropic mixture using ionic liquids as entrainers:	https://www.doi.org/10.1016/j.fluid.2015.04.018
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C79209&Units=SI
Measurement and correlation of solubility of D-camphor-10-sulfonic acid in pure solvents:	https://www.doi.org/10.1016/j.fluid.2015.04.014
Isobaric Vapor-Liquid Equilibrium Measurements for Separation of Azeotrope (Methanol + Methyl Acetate):	https://www.doi.org/10.1021/acs.jced.8b00807
Ternary liquid-liquid equilibria for systems containing (dimethyl carbonate or methyl acetate + methanol + 1-methylimidazole hydrogen sulfate) at 288.15 K and 318.15 K:	https://www.doi.org/10.1016/j.jct.2018.02.012
Excess Molar Enthalpies of Methyl Acetate and (1-Propanol, 2-Propanol, 1-Butanol, 2-Butanol, and 2-Methyl-1-propanol) at T = (288.15 and 308.15) K and P = (5.0 and 10.0) MPa:	https://www.doi.org/10.1021/je050175u
Solubilities of Helium in Fourteen Organic Solvents at Different Temperatures:	https://www.doi.org/10.1021/je700069g
Solid-Liquid Equilibrium of Rebaudioside A in Pure and Binary Mixed Solvents at T = (288.15 to 328.15) K:	https://www.doi.org/10.1021/acs.jced.8b00780
Activity coefficients at infinite dilution and physicochemical properties for organic solutes and water in the ionic liquid trihexyl(tetradecyl)phosphonium tricyanomethanide:	https://www.doi.org/10.1016/j.jct.2018.01.003
Solid-Liquid Phase Equilibrium of N,N'-Piperazinebis(neopentylglycol)phosphoramidate in Selected Solvents from T = (293.15 to 333.15) K:	https://www.doi.org/10.1021/acs.jced.7b00206
Solubility of Valsartan in Different Organic Solvents and Ethanol + Water Binary Mixtures from (278.15 to 313.15) K:	https://www.doi.org/10.1021/je8007815
Activity coefficients at infinite dilution and physicochemical properties for organic solutes and water in the ionic liquid 4-(2-methoxyethyl)-4-methylmorpholinium bis(trifluoromethylsulfonyl)-amide:	https://www.doi.org/10.1016/j.jct.2011.11.021
Solubility Determination and Correlation of Glibenclamide in 11 Monosolvents and (Acetone + Acetonitrile) Binary Solvents from 283.15 K to 323.15 K:	https://www.doi.org/10.1021/acs.jced.8b00717
Aqueous Solubility Prediction Method:	http://onschallenge.wikispaces.com/file/view/AqueousDataset002.xlsx/351826032/AqueousDa
Excess molar volumes and excess molar enthalpies for binary mixtures of 1,2-dichloropropane with methyl ethanoate, methyl propanoate, and methyl butanoate at T = 298.15K:	https://www.doi.org/10.1016/j.fluid.2011.01.005
Activity coefficients at infinite dilution of organic solvents and water in 1-butyl-3-methylimidazolium dicyanamide. A literature review of hexane/hex-1-ene separation:	https://www.doi.org/10.1016/j.fluid.2016.02.004
Densities, speeds of sound, and refractive indices of the ternary mixtures (toluene + methyl acetate + butyl acetate) and (toluene + methyl acetate + methyl heptanoate) at 298.15 K:	https://www.doi.org/10.1016/j.jct.2006.07.013
Measurement and correlation of the solubilities of tetra(5,5-dimethyl-1,3-dioxaphosphorinanyl-2-oxy) neopentane in different pure solvents:	https://www.doi.org/10.1016/j.fluid.2014.01.043
Experimental measurements of vapor-liquid equilibria at low pressure: Systems containing alcohols, esters and organic acids:	https://www.doi.org/10.1016/j.fluid.2009.10.002
Experimental Determination of Interactions of volatile organic compounds with the ionic liquid 1-ethyl-3-methylimidazolium tetracyanoborate:	https://www.doi.org/10.1007/s10765-013-1483-2
Densities and Isobaric Vapor Liquid Equilibria of Methyl Acetate and Ethyl Acetate with Alcohols (C3 and C4) at 0.3 MPa:	https://www.doi.org/10.1016/j.jct.2011.09.028
Measurement and Correlation of Solubility of Resorcinol Bis(cyclic 2,2-dimethyl-1,3-propanediol phosphate) in Selected Solvents from T = (293.15 to 333.15) K:	https://www.doi.org/10.1021/acs.jced.7b00695
Isobaric vapor-liquid equilibrium data for the binary system methyl acetate + isopropyl acetate and the quaternary system methyl acetate + methanol + isopropanol + isopropyl acetate at 101.3 kPa:	https://www.doi.org/10.1016/j.fluid.2013.01.024
Ternary excess molar volumes of {methyltrioctylammonium bis(trifluoromethylsulfonyl)imide + ethanol + methyl acetate, or ethyl acetate} systems at T = (298.15, 308.15, and 318.15) K:	https://www.doi.org/10.1016/j.jct.2010.01.007
Densities and Viscosities of Ternary Mixtures of Cyclohexane + Cyclohexene + Some Alkyl Acetates at 298.15 K:	https://www.doi.org/10.1021/je8007217
Experimental Measurements of Vapor-Liquid Equilibrium Data for the Binary Systems of Methanol + 2-Butyl Acetate, 2-Butyl Alcohol + 2-Butyl Acetate, and Methyl Acetate + 2-Butyl Acetate at 101.33 kPa:	https://www.doi.org/10.1021/je400226q
Activity coefficients at infinite dilution for organic solutes and water in 1-ethyl-1-methylpyrrolidinium lactate:	https://www.doi.org/10.1016/j.jct.2015.05.014
Separation of binary mixtures hexane/hex-1-ene, cyclohexane/cyclohexene and ethylbenzene/styrene based on limiting activity coefficients:	https://www.doi.org/10.1016/j.jct.2017.03.004
Solubility of 1,3,2-dioxaphosphorinane,5,5-dimethyl-2-(2,4,6-tribromophenoxy)-2-oxide in selected solvents:	https://www.doi.org/10.1016/j.fluid.2013.09.023
Activity coefficients at infinite dilution and physicochemical properties for organic solutes and water in the ionic liquid 1-(2-methoxyethyl)-1-methylpiperidinium trifluorotris(perfluoroethyl)phosphate:	https://www.doi.org/10.1016/j.jct.2012.08.016

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
fll:	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
hvap:	Enthalpy of vaporization at standard conditions
hvapt:	Enthalpy of vaporization at a given temperature
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
nfpaf:	NFPA Fire Rating
nfpah:	NFPA Health Rating
pc:	Critical Pressure
pvap:	Vapor pressure
rfi:	Refractive Index
rhoc:	Critical density
rhol:	Liquid Density
rinpol:	Non-polar retention indices
ripol:	Polar retention indices
speedsl:	Speed of sound in fluid
srf:	Surface Tension
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
tt:	Triple Point Temperature
vc:	Critical Volume
zc:	Critical Compressibility
zra:	Rackett Parameter