

Propanoic acid, butyl ester

Other names:	BUTYL ESTER PROPIONIC ACID BUTYL PROPIONATE Butyl ester of propanoic acid Butyl propanoate N-BUTYL PROPANOATE NSC 8449 Propionic acid, butyl ester UN 1914 n-Butyl n-propionate n-Butyl propionate
Inchi:	InChI=1S/C7H14O2/c1-3-5-6-9-7(8)4-2/h3-6H2,1-2H3
InchiKey:	BTMVHUNTONAYDX-UHFFFAOYSA-N
Formula:	C7H14O2
SMILES:	CCCCOC(=O)CC
Mol. weight [g/mol]:	130.18
CAS:	590-01-2

Physical Properties

Property code	Value	Unit	Source
chl	-4200.30	kJ/mol	NIST Webbook
gf	-225.86	kJ/mol	Joback Method
hf	-432.61	kJ/mol	Joback Method
hfus	16.67	kJ/mol	Joback Method
hvap	39.10 ± 0.04	kJ/mol	NIST Webbook
log10ws	-1.62		Crippen Method
logp	1.740		Crippen Method
mcvol	116.930	ml/mol	McGowan Method
pc	2940.89	kPa	Joback Method
rinpol	891.00		NIST Webbook
rinpol	886.00		NIST Webbook
rinpol	891.00		NIST Webbook
rinpol	889.00		NIST Webbook
rinpol	910.00		NIST Webbook
rinpol	889.00		NIST Webbook
rinpol	910.00		NIST Webbook
rinpol	886.00		NIST Webbook
rinpol	900.00		NIST Webbook

rinpol	889.00	NIST Webbook
rinpol	894.00	NIST Webbook
rinpol	910.00	NIST Webbook
rinpol	889.00	NIST Webbook
rinpol	910.00	NIST Webbook
rinpol	873.60	NIST Webbook
rinpol	920.00	NIST Webbook
rinpol	908.00	NIST Webbook
rinpol	886.00	NIST Webbook
rinpol	899.00	NIST Webbook
rinpol	908.00	NIST Webbook
rinpol	908.00	NIST Webbook
rinpol	907.00	NIST Webbook
rinpol	911.00	NIST Webbook
rinpol	908.00	NIST Webbook
rinpol	888.00	NIST Webbook
rinpol	918.00	NIST Webbook
rinpol	910.00	NIST Webbook
rinpol	910.00	NIST Webbook
rinpol	909.00	NIST Webbook
rinpol	886.00	NIST Webbook
rinpol	901.00	NIST Webbook
rinpol	912.00	NIST Webbook
rinpol	900.00	NIST Webbook
rinpol	895.00	NIST Webbook
rinpol	890.00	NIST Webbook
rinpol	895.00	NIST Webbook
rinpol	853.00	NIST Webbook
rinpol	851.00	NIST Webbook
rinpol	891.40	NIST Webbook
rinpol	880.42	NIST Webbook
rinpol	901.48	NIST Webbook
rinpol	891.00	NIST Webbook
rinpol	884.00	NIST Webbook
rinpol	894.00	NIST Webbook
rinpol	892.00	NIST Webbook
rinpol	890.00	NIST Webbook
rinpol	890.00	NIST Webbook
rinpol	855.00	NIST Webbook
rinpol	859.00	NIST Webbook
rinpol	851.00	NIST Webbook
rinpol	886.00	NIST Webbook
rinpol	890.00	NIST Webbook
rinpol	896.00	NIST Webbook

ripol	912.00		NIST Webbook
ripol	1157.00		NIST Webbook
ripol	1148.00		NIST Webbook
ripol	1130.00		NIST Webbook
ripol	1123.00		NIST Webbook
ripol	1137.00		NIST Webbook
ripol	1159.00		NIST Webbook
ripol	1157.00		NIST Webbook
ripol	1148.00		NIST Webbook
ripol	1148.00		NIST Webbook
ripol	1143.00		NIST Webbook
ripol	1148.00		NIST Webbook
ripol	1148.00		NIST Webbook
ripol	1153.00		NIST Webbook
ripol	1127.00		NIST Webbook
ripol	1127.00		NIST Webbook
ripol	1123.00		NIST Webbook
ripol	1130.00		NIST Webbook
ripol	1145.00		NIST Webbook
ripol	1130.00		NIST Webbook
ripol	1139.00		NIST Webbook
ripol	1178.00		NIST Webbook
ripol	1138.00		NIST Webbook
ripol	1132.00		NIST Webbook
ripol	1120.00		NIST Webbook
ripol	1129.00		NIST Webbook
ripol	1135.00		NIST Webbook
ripol	1143.00		NIST Webbook
ripol	1151.00		NIST Webbook
ripol	1137.00		NIST Webbook
ripol	1138.00		NIST Webbook
ripol	1159.00		NIST Webbook
ripol	1129.00		NIST Webbook
ripol	1145.00		NIST Webbook
ripol	1139.00		NIST Webbook
tb	418.07	K	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
tb	418.25	K	Measurement and Correlation of Isobaric Vapor-Liquid Equilibrium for Binary Systems of Allyl Alcohol with Isobutyl Acetate, Butyl Acetate, and Butyl Propionate at 101.3 kPa

tb	418.35	K	Vapour-liquid equilibrium measurements and extractive distillation process design for separation of azeotropic mixture (dimethyl carbonate + ethanol)
tb	419.65	K	KDB
tc	594.60 ± 1.00	K	NIST Webbook
tf	240.81	K	Joback Method
vc	0.452	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	249.76	J/mol×K	465.25	Joback Method
cpg	299.73	J/mol×K	612.24	Joback Method
cpg	290.48	J/mol×K	582.84	Joback Method
cpg	280.85	J/mol×K	553.44	Joback Method
cpg	270.86	J/mol×K	524.04	Joback Method
cpg	260.50	J/mol×K	494.65	Joback Method
cpg	238.65	J/mol×K	435.85	Joback Method
dvisc	0.0006434	Paxs	338.33	Joback Method
dvisc	0.0004549	Paxs	370.84	Joback Method
dvisc	0.0003401	Paxs	403.34	Joback Method
dvisc	0.0002656	Paxs	435.85	Joback Method
dvisc	0.0031909	Paxs	240.81	Joback Method
dvisc	0.0016480	Paxs	273.32	Joback Method
dvisc	0.0009795	Paxs	305.82	Joback Method
hvapt	49.10	kJ/mol	361.00	NIST Webbook
hvapt	47.40	kJ/mol	335.00	NIST Webbook
pvap	46.65	kPa	391.78	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	157.26	kPa	434.75	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol

pvap	158.82	kPa	435.15	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	159.81	kPa	435.38	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	161.50	kPa	435.80	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	162.68	kPa	436.10	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	101.30	kPa	418.35	Vapour-liquid equilibrium measurements and extractive distillation process design for separation of azeotropic mixture (dimethyl carbonate + ethanol)
pvap	40.26	kPa	387.18	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	41.40	kPa	388.03	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol

pvap	42.60	kPa	389.10	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	44.02	kPa	390.14	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	45.33	kPa	391.06	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	155.77	kPa	434.38	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	48.02	kPa	392.85	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	49.46	kPa	393.76	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	50.55	kPa	394.42	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol

pvap	52.03	kPa	395.28	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	53.34	kPa	396.18	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	54.73	kPa	396.91	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	56.10	kPa	397.72	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	57.26	kPa	398.53	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	58.69	kPa	399.29	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	60.10	kPa	400.03	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol

pvap	61.25	kPa	400.72	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	62.70	kPa	401.38	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	64.23	kPa	402.18	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	65.35	kPa	402.86	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	66.67	kPa	403.54	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	67.83	kPa	404.16	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	69.61	kPa	404.90	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol

pvap	70.61	kPa	405.46	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	71.99	kPa	406.11	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	73.29	kPa	406.78	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	74.67	kPa	407.36	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	76.11	kPa	408.00	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	77.38	kPa	408.63	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	78.73	kPa	409.19	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol

pvap	80.02	kPa	409.80	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	81.65	kPa	410.38	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	82.73	kPa	410.93	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	83.95	kPa	411.48	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	85.51	kPa	412.00	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	152.56	kPa	433.56	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	87.99	kPa	413.02	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol

pvap	89.54	kPa	413.63	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	90.67	kPa	414.13	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	91.88	kPa	414.66	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	93.32	kPa	415.18	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	94.70	kPa	415.73	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	96.14	kPa	416.21	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	97.24	kPa	416.69	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol

pvap	98.74	kPa	417.14	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	100.02	kPa	417.68	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	101.32	kPa	418.07	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	102.59	kPa	418.58	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	104.03	kPa	419.08	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	105.43	kPa	419.61	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	106.86	kPa	420.08	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol

pvap	108.04	kPa	420.46	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	109.22	kPa	420.89	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	110.68	kPa	421.38	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	112.04	kPa	421.80	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	113.36	kPa	422.28	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	114.63	kPa	422.69	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	116.04	kPa	423.12	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol

pvap	117.36	kPa	423.56	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	118.81	kPa	423.97	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	120.03	kPa	424.39	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	121.33	kPa	424.78	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	122.73	kPa	425.20	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	124.01	kPa	425.60	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	125.41	kPa	426.04	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol

pvap	126.63	kPa	426.39	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	128.04	kPa	426.82	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	129.35	kPa	427.21	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	130.85	kPa	427.63	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	131.99	kPa	427.95	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	133.39	kPa	428.39	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	134.72	kPa	428.76	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol

pvap	136.00	kPa	429.12	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	137.44	kPa	429.52	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	138.73	kPa	429.87	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	140.03	kPa	430.23	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	141.24	kPa	430.57	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	142.76	kPa	430.99	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	143.91	kPa	431.29	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol

pvap	145.53	kPa	431.72	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	146.80	kPa	432.06	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	148.15	kPa	432.41	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	149.39	kPa	432.75	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	150.70	kPa	433.09	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	86.67	kPa	412.55	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
pvap	153.22	kPa	433.73	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol

pvap	164.04	kPa	436.43	Vapor-Liquid Equilibria at 101.32 kPa and Excess Properties of Binary Mixtures of Butyl Esters + tert-Butyl Alcohol
rfi	1.39920		298.15	Isobaric Vapor-Liquid Equilibria for Binary and Ternary Mixtures of Ethanol and 2-Propanol with 2-Butanone and Butyl Propionate at 101.3 kPa
rfi	1.39920		298.15	sobaric Vapor-Liquid Equilibria for Binary and Ternary Mixtures of Diisopropyl Ether, 2-Propyl Alcohol, and n-Butyl Propionate at 101.3 kPa
rfi	1.39920		298.15	Isobaric Vapor-Liquid Equilibria for Binary and Ternary Mixtures of Dipropyl Ether, 1-Propyl Alcohol, and Butyl Propionate
rfi	1.39900		298.15	Thermodynamic study of (alkyl esters + a,x-alkyl dihalides)III. HE m and V E m for 20 binary mixtures $\{x\text{C}_u-1\text{H}_{2u-1}\text{CO}_2\text{C}_4\text{H}_9 + (1-x)\text{a,x-ClCH}_2(\text{CH}_2)_v-2\text{CH}_2\text{Cl}\}$, where $u = 1$ to 4 , $a = 1$ and $v = x = 2$ to 6
rfi	1.38950		318.15	Thermodynamic properties of (an ester + and alkane). XVII. Experimental He and Ve values for (an alkyl propanoate + an alkane) at 318.15K

rfi

1.39920

298.15

Vapor liquid equilibria in the ternary system isobutyl alcohol + isobutyl acetate + butyl propionate and the binary systems isobutyl alcohol + butyl propionate, isobutyl acetate + butyl propionate at 101.3 kPa

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	418.20	K	101.00	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.49918e+01
Coeff. B	-3.75077e+03
Coeff. C	-5.74260e+01
Temperature range (K), min.	312.51
Temperature range (K), max.	444.89

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/T + C \cdot \ln(T) + D \cdot T^2$
Coeff. A	7.38703e+01
Coeff. B	-8.04380e+03
Coeff. C	-8.36634e+00
Coeff. D	2.81720e-06
Temperature range (K), min.	183.63
Temperature range (K), max.	594.00

Sources

Isobaric Vapor-Liquid Equilibria for Binary and Ternary Mixtures of Ethanol and Propyl Acetate with 2-Butanone and states for the quaternary system propyl acetate + butyl acetate + n-propyl alcohol + 2-butanone and VEM for Joback Method

Isobaric Vapor-Liquid Equilibria for Binary and Ternary Mixtures of Diisopropyl Ether with 1-Propanol and alpha, beta, gamma-dimethyl-101.3 kPa Vapour-liquid equilibria in the ternary system isobutyl alcohol + isobutyl acetate + diisopropyl ether + propyl acetate + butyl acetate + butyl propionate at 101.3 kPa: measurements and extractive distillation correlations

Isobaric Vapor-Liquid Equilibrium for Binary and Ternary Mixtures of Diisopropyl Ether with Isobutyl Acetate, Butyl Acetate, and Butyl Propionate at 101.3 kPa: Measurement and Correlation

Liquid-liquid equilibrium determination and thermodynamics modeling for Vapor-Liquid Equilibrium at 101.32 kPa and Excess Properties of Binary Mixtures of Diisopropyl Ether with Mixtures of Water + Ethanol with Isopropanol, Butyl Propionate, and Propyl Acetate

Isobaric Vapor-Liquid Equilibrium for Binary and Ternary Mixtures of Diisopropyl Ether; 1-Propyl Alcohol, and Butyl Propionate: KDB:

McGowan Method:

Joback Method:

<https://www.doi.org/10.1021/je900470r>

<https://www.doi.org/10.1016/j.fluid.2017.12.023>

<https://www.doi.org/10.1016/j.jct.2005.11.003>

https://www.chemeo.com/doc/models/crippen_log10ws

<https://www.doi.org/10.1021/je900042q>

<https://www.doi.org/10.1016/j.jct.2009.05.006>

<https://www.doi.org/10.1016/j.fluid.2005.09.015>

<https://www.doi.org/10.1016/j.jct.2004.12.014>

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Legend

chl:	Standard liquid enthalpy of combustion
cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
hvapt:	Enthalpy of vaporization at a given temperature
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
vpav:	Vapor pressure

rfi:	Refractive Index
rinpol:	Non-polar retention indices
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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