

Di-n-propyl ether

Other names:	(n-C ₃ H ₇) ₂ O 1,1'-OXYBIS PROPANE 1,1'-Oxybis[propane] 1-propoxypropane 4-Oxaheptane Dipropyl ether Dipropyl oxide Ether, di-n-propyl- Propane, 1,1'-oxybis- Propyl ether UN 2384 n-Propyl ether
Inchi:	InChI=1S/C6H14O/c1-3-5-7-6-4-2/h3-6H2,1-2H3
InchiKey:	POLCUAVZOMRGSN-UHFFFAOYSA-N
Formula:	C ₆ H ₁₄ O
SMILES:	CCCOCCC
Mol. weight [g/mol]:	102.17
CAS:	111-43-3

Physical Properties

Property code	Value	Unit	Source
af	0.3690		KDB
affp	837.90	kJ/mol	NIST Webbook
basg	810.50	kJ/mol	NIST Webbook
chl	-4033.10 ± 0.79	kJ/mol	NIST Webbook
chl	-4028.90 ± 2.10	kJ/mol	NIST Webbook
dm	1.20	debye	KDB
gf	-105.60	kJ/mol	KDB
hf	-299.00	kJ/mol	NIST Webbook
hf	-293.10	kJ/mol	KDB
hf	-293.00 ± 2.00	kJ/mol	NIST Webbook
hfl	-333.10 ± 2.10	kJ/mol	NIST Webbook
hfl	-328.80 ± 0.88	kJ/mol	NIST Webbook
hfus	12.48	kJ/mol	Joback Method
hvap	36.50 ± 1.30	kJ/mol	NIST Webbook
hvap	35.70 ± 0.10	kJ/mol	NIST Webbook
hvap	35.68	kJ/mol	NIST Webbook

hvap	35.79	kJ/mol	NIST Webbook
ie	9.30 ± 0.03	eV	NIST Webbook
ie	9.49	eV	NIST Webbook
ie	9.53	eV	NIST Webbook
ie	9.27 ± 0.05	eV	NIST Webbook
ie	9.32 ± 0.01	eV	NIST Webbook
log10ws	-1.62		Aqueous Solubility Prediction Method
log10ws	-1.62		Estimated Solubility Method
logp	1.823		Crippen Method
mcvol	101.270	ml/mol	McGowan Method
pc	3028.00	kPa	KDB
pc	3028.00 ± 6.00	kPa	NIST Webbook
rinpole	680.00		NIST Webbook
rinpole	659.00		NIST Webbook
rinpole	664.00		NIST Webbook
rinpole	661.00		NIST Webbook
rinpole	687.00		NIST Webbook
rinpole	676.00		NIST Webbook
rinpole	664.00		NIST Webbook
rinpole	660.00		NIST Webbook
rinpole	656.00		NIST Webbook
rinpole	691.00		NIST Webbook
rinpole	687.00		NIST Webbook
rinpole	664.00		NIST Webbook
rinpole	664.00		NIST Webbook
rinpole	680.00		NIST Webbook
rinpole	657.00		NIST Webbook
rinpole	656.80		NIST Webbook
rinpole	656.00		NIST Webbook
rinpole	661.00		NIST Webbook
rinpole	680.00		NIST Webbook
rinpole	666.00		NIST Webbook
rinpole	656.00		NIST Webbook
ripole	768.00		NIST Webbook
ripole	770.00		NIST Webbook
ripole	769.00		NIST Webbook
ripole	769.00		NIST Webbook
ripole	794.00		NIST Webbook
ripole	770.00		NIST Webbook
ripole	777.00		NIST Webbook
ripole	777.00		NIST Webbook
ripole	766.00		NIST Webbook
ripole	774.00		NIST Webbook

ripol	773.00		NIST Webbook
ripol	770.00		NIST Webbook
ripol	773.00		NIST Webbook
ripol	775.00		NIST Webbook
ripol	782.00		NIST Webbook
ripol	775.00		NIST Webbook
sg	422.50	J/molxK	NIST Webbook
sl	323.90	J/molxK	NIST Webbook
tb	364.15 ± 0.50	K	NIST Webbook
tb	362.87	K	Vapor Liquid Equilibria Measurements for Di-n-Propyl Ether and Butyl Ethyl Ether with n-Heptane
tb	363.23	K	(Liquid + liquid) equilibria of (water + propionic acid + dipropyl ether or diisopropyl ether) at T = 298.2 K
tb	363.23	K	KDB
tb	363.30 ± 0.50	K	NIST Webbook
tb	363.90 ± 1.00	K	NIST Webbook
tb	363.16	K	Phase Equilibria Involved in Extractive Distillation of Dipropyl Ether + 1-Propyl Alcohol Using N,N-Dimethylformamide as Entrainer
tb	363.26 ± 0.10	K	NIST Webbook
tb	363.10	K	NIST Webbook
tb	364.20	K	NIST Webbook
tb	362.20	K	NIST Webbook
tb	363.16	K	Isobaric Vapor-Liquid Equilibria for Binary and Ternary Mixtures of Dipropyl Ether, 1-Propyl Alcohol, and Butyl Propionate
tb	363.16	K	Phase equilibria involved in extractive distillation of dipropyl ether + 1-propyl alcohol using 2-ethoxyethanol as entrainer
tb	363.16	K	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa

tb	363.16	K	Vapor liquid equilibria in the ternary system dipropyl ether + 1-propanol + 1-pentanol and the binary systems dipropyl ether + 1-pentanol, 1-propanol + 1-pentanol at 101.3 kPa
tb	363.16	K	Isobaric (vapour + liquid + liquid) equilibrium data for (di-n-propyl ether + n-propyl alcohol + water) and (diisopropyl ether + isopropyl alcohol + water) systems at 100 kPa
tc	530.60 ± 0.30	K	NIST Webbook
tc	530.60	K	NIST Webbook
tc	530.60	K	KDB
tf	147.00	K	KDB
tf	149.95 ± 0.40	K	NIST Webbook
tt	149.40 ± 0.10	K	NIST Webbook
tt	158.36 ± 0.06	K	NIST Webbook
tt	158.36	K	KDB
vc	0.390	m ³ /kmol	KDB
zc	0.2673370		KDB

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	182.95	J/mol×K	360.00	NIST Webbook
cpg	190.77	J/mol×K	380.01	NIST Webbook
cpg	221.05	J/mol×K	460.01	NIST Webbook
cpg	209.91	J/mol×K	430.05	NIST Webbook
cpg	198.45	J/mol×K	399.98	NIST Webbook
cpl	221.60	J/mol×K	298.15	NIST Webbook
cpl	221.45	J/mol×K	298.15	NIST Webbook
dvisc	0.0003850	Paxs	299.27	Joback Method
dvisc	0.0005575	Paxs	269.36	Joback Method
dvisc	0.0035470	Paxs	179.61	Joback Method
dvisc	0.0016051	Paxs	209.53	Joback Method
dvisc	0.0008855	Paxs	239.44	Joback Method
dvisc	0.0002210	Paxs	359.10	Joback Method
dvisc	0.0002844	Paxs	329.19	Joback Method
hfust	10.77	kJ/mol	158.40	NIST Webbook
hvapt	35.10	kJ/mol	331.00	NIST Webbook
hvapt	35.60	kJ/mol	340.50	NIST Webbook

hvapt	32.40	kJ/mol	497.50	NIST Webbook
hvapt	32.20	kJ/mol	426.00	NIST Webbook
hvapt	34.80	kJ/mol	323.00	NIST Webbook
hvapt	34.60	kJ/mol	341.50	NIST Webbook
hvapt	31.31	kJ/mol	363.10	NIST Webbook
hvapt	34.43	kJ/mol	363.20	KDB
hvapt	31.40	kJ/mol	363.00	NIST Webbook
hvapt	34.50	kJ/mol	359.50	NIST Webbook
hvapt	31.27	kJ/mol	363.22	NIST Webbook
pvap	72.36	kPa	352.11	Vapor Liquid Equilibria Measurements for Di-n-Propyl Ether and Butyl Ethyl Ether with n-Heptane
pvap	101.30 ± 0.10	kPa	363.16	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa
pvap	20.00 ± 0.10	kPa	317.33	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa
pvap	101.30 ± 0.10	kPa	363.16	Phase Equilibria Involved in Extractive Distillation of Dipropyl Ether + 1-Propyl Alcohol Using N,N-Dimethylformamide as Entrainer
pvap	94.65 ± 0.10	kPa	360.93	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa

pvap	96.32	kPa	361.18	Vapor Liquid Equilibria Measurements for Di-n-Propyl Ether and Butyl Ethyl Ether with n-Heptane
pvap	89.30	kPa	358.73	Vapor Liquid Equilibria Measurements for Di-n-Propyl Ether and Butyl Ethyl Ether with n-Heptane
pvap	84.25	kPa	356.85	Vapor Liquid Equilibria Measurements for Di-n-Propyl Ether and Butyl Ethyl Ether with n-Heptane
pvap	78.97	kPa	354.82	Vapor Liquid Equilibria Measurements for Di-n-Propyl Ether and Butyl Ethyl Ether with n-Heptane
pvap	89.75 ± 0.10	kPa	359.21	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa
pvap	62.30	kPa	347.55	Vapor Liquid Equilibria Measurements for Di-n-Propyl Ether and Butyl Ethyl Ether with n-Heptane
pvap	57.75	kPa	345.34	Vapor Liquid Equilibria Measurements for Di-n-Propyl Ether and Butyl Ethyl Ether with n-Heptane
pvap	49.98	kPa	341.15	Vapor Liquid Equilibria Measurements for Di-n-Propyl Ether and Butyl Ethyl Ether with n-Heptane

pvap	42.54	kPa	336.55	Vapor Liquid Equilibria Measurements for Di-n-Propyl Ether and Butyl Ethyl Ether with n-Heptane
pvap	84.80 ± 0.10	kPa	357.37	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa
pvap	29.35	kPa	326.73	Vapor Liquid Equilibria Measurements for Di-n-Propyl Ether and Butyl Ethyl Ether with n-Heptane
pvap	60.00	kPa	346.63	Vapor Liquid Equilibria Measurements for Di-n-Propyl Ether and Butyl Ethyl Ether with n-Heptane
pvap	60.00	kPa	346.55	Vapor Liquid Equilibria Measurements for Di-n-Propyl Ether and Butyl Ethyl Ether with n-Heptane
pvap	101.30 ± 0.10	kPa	363.16	Vapor liquid equilibria in the ternary system dipropyl ether + 1-propanol + 1-pentanol and the binary systems dipropyl ether + 1-pentanol, 1-propanol + 1-pentanol at 101.3 kPa
pvap	101.30 ± 0.10	kPa	363.16	Phase equilibria involved in extractive distillation of dipropyl ether + 1-propyl alcohol using 2-ethoxyethanol as entrainer

pvap	101.30 ± 0.10	kPa	363.16	Isobaric Vapor-Liquid Equilibria for Binary and Ternary Mixtures of Dipropyl Ether, 1-Propyl Alcohol, and Butyl Propionate
pvap	79.91 ± 0.10	kPa	355.48	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa
pvap	74.84 ± 0.10	kPa	353.45	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa
pvap	69.90 ± 0.10	kPa	351.36	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa
pvap	36.71	kPa	332.57	Vapor Liquid Equilibria Measurements for Di-n-Propyl Ether and Butyl Ethyl Ether with n-Heptane
pvap	60.85 ± 0.10	kPa	347.19	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa

pvap	56.95 ± 0.10	kPa	345.22	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa
pvap	52.91 ± 0.10	kPa	343.07	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa
pvap	49.70 ± 0.10	kPa	341.27	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa
pvap	46.85 ± 0.10	kPa	339.62	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa
pvap	43.95 ± 0.10	kPa	337.80	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa
pvap	40.90 ± 0.10	kPa	335.79	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa

pvap	37.95 ± 0.10	kPa	333.76	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa
pvap	34.95 ± 0.10	kPa	331.52	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa
pvap	31.95 ± 0.10	kPa	329.15	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa
pvap	28.97 ± 0.10	kPa	326.58	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa
pvap	22.93 ± 0.10	kPa	320.69	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa
pvap	20.97 ± 0.10	kPa	318.45	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa

pvap	18.97 ± 0.10	kPa	315.97	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa
pvap	16.91 ± 0.10	kPa	313.39	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa
pvap	14.95 ± 0.10	kPa	310.41	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa
pvap	12.43 ± 0.10	kPa	306.36	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa
pvap	10.47 ± 0.10	kPa	302.60	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa
pvap	25.95 ± 0.10	kPa	323.79	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa

pvap	101.30	kPa	362.87	Vapor Liquid Equilibria Measurements for Di-n-Propyl Ether and Butyl Ethyl Ether with n-Heptane
pvap	64.87 ± 0.10	kPa	349.07	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa
rfi	1.37840		298.15	Vapor liquid equilibria in the ternary system dipropyl ether + 1-propanol + 1-pentanol and the binary systems dipropyl ether + 1-pentanol, 1-propanol + 1-pentanol at 101.3 kPa
rfi	1.37840		298.15	Isobaric (vapour + liquid + liquid) equilibrium data for (di-n-propyl ether + n-propyl alcohol + water) and (diisopropyl ether + isopropyl alcohol + water) systems at 100 kPa
rfi	1.38130		293.15	(Liquid + liquid) equilibria of (water + propionic acid + dipropyl ether or diisopropyl ether) at T = 298.2 K
rfi	1.37840 ± 0.00020		298.15	Phase Equilibria Involved in Extractive Distillation of Dipropyl Ether + 1-Propyl Alcohol Using N,N-Dimethylformamide as Entrainer

rfi	1.37840 ± 0.00200		298.15	Liquid liquid equilibria of the systems dipropyl ether + n-propanol + water and dipropyl ether + n-propanol + ethylene glycol at different temperatures
rfi	1.37840 ± 0.00020		298.15	Isobaric Vapor-Liquid Equilibria for Binary and Ternary Mixtures of Dipropyl Ether, 1-Propyl Alcohol, and Butyl Propionate
rfi	1.37840 ± 0.00020		298.15	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa
rfi	1.37840 ± 0.00020		298.15	Phase equilibria involved in extractive distillation of dipropyl ether + 1-propyl alcohol using 2-ethoxyethanol as entrainer
rhol	741.00	kg/m3	20000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rhol	722.77	kg/m3	100.00	Experimental and modeled volumetric behavior of linear and branched ethers
rhol	717.70	kg/m3	100.00	Experimental and modeled volumetric behavior of linear and branched ethers
rhol	712.59	kg/m3	100.00	Experimental and modeled volumetric behavior of linear and branched ethers

rho1	707.45	kg/m3	100.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	762.38	kg/m3	5000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	757.69	kg/m3	5000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	752.98	kg/m3	5000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	748.24	kg/m3	5000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	743.49	kg/m3	5000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	738.69	kg/m3	5000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	733.90	kg/m3	5000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	729.04	kg/m3	5000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	724.25	kg/m3	5000.00	Experimental and modeled volumetric behavior of linear and branched ethers

rho1	719.28	kg/m3	5000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	714.57	kg/m3	5000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	767.05	kg/m3	10000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	762.50	kg/m3	10000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	757.94	kg/m3	10000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	753.37	kg/m3	10000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	748.78	kg/m3	10000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	744.18	kg/m3	10000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	739.57	kg/m3	10000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	735.01	kg/m3	10000.00	Experimental and modeled volumetric behavior of linear and branched ethers

rho1	730.31	kg/m3	10000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	725.68	kg/m3	10000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	721.03	kg/m3	10000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	771.45	kg/m3	15000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	767.01	kg/m3	15000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	762.58	kg/m3	15000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	758.15	kg/m3	15000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	753.68	kg/m3	15000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	749.22	kg/m3	15000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	744.77	kg/m3	15000.00	Experimental and modeled volumetric behavior of linear and branched ethers

rho1	740.33	kg/m3	15000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	735.84	kg/m3	15000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	731.37	kg/m3	15000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	726.88	kg/m3	15000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	775.62	kg/m3	20000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	771.21	kg/m3	20000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	766.89	kg/m3	20000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	762.57	kg/m3	20000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	758.26	kg/m3	20000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	753.95	kg/m3	20000.00	Experimental and modeled volumetric behavior of linear and branched ethers

rho1	749.62	kg/m3	20000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	745.32	kg/m3	20000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	727.80	kg/m3	100.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	736.67	kg/m3	20000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	732.34	kg/m3	20000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	779.52	kg/m3	25000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	775.22	kg/m3	25000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	771.01	kg/m3	25000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	766.81	kg/m3	25000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	762.61	kg/m3	25000.00	Experimental and modeled volumetric behavior of linear and branched ethers

rho1	758.41	kg/m3	25000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	754.20	kg/m3	25000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	750.04	kg/m3	25000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	745.84	kg/m3	25000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	741.66	kg/m3	25000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	737.47	kg/m3	25000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	783.28	kg/m3	30000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	779.05	kg/m3	30000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	774.94	kg/m3	30000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	770.85	kg/m3	30000.00	Experimental and modeled volumetric behavior of linear and branched ethers

rho1	766.76	kg/m3	30000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	762.65	kg/m3	30000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	758.55	kg/m3	30000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	754.51	kg/m3	30000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	750.43	kg/m3	30000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	746.37	kg/m3	30000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	742.30	kg/m3	30000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	786.90	kg/m3	35000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	782.73	kg/m3	35000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	778.69	kg/m3	35000.00	Experimental and modeled volumetric behavior of linear and branched ethers

rho1	774.71	kg/m3	35000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	770.70	kg/m3	35000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	766.70	kg/m3	35000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	762.71	kg/m3	35000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	758.76	kg/m3	35000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	754.79	kg/m3	35000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	750.85	kg/m3	35000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	746.89	kg/m3	35000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	790.38	kg/m3	40000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	786.26	kg/m3	40000.00	Experimental and modeled volumetric behavior of linear and branched ethers

rho1	782.30	kg/m3	40000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	778.42	kg/m3	40000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	774.48	kg/m3	40000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	770.60	kg/m3	40000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	766.68	kg/m3	40000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	762.84	kg/m3	40000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	758.96	kg/m3	40000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	755.10	kg/m3	40000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	751.24	kg/m3	40000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	793.67	kg/m3	45000.00	Experimental and modeled volumetric behavior of linear and branched ethers

rho1	789.68	kg/m3	45000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	785.81	kg/m3	45000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	781.98	kg/m3	45000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	778.13	kg/m3	45000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	774.31	kg/m3	45000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	770.47	kg/m3	45000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	766.72	kg/m3	45000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	762.93	kg/m3	45000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	759.16	kg/m3	45000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	755.35	kg/m3	45000.00	Experimental and modeled volumetric behavior of linear and branched ethers

rho1	796.87	kg/m3	50000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	792.99	kg/m3	50000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	789.18	kg/m3	50000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	785.42	kg/m3	50000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	781.64	kg/m3	50000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	777.92	kg/m3	50000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	774.17	kg/m3	50000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	770.47	kg/m3	50000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	766.76	kg/m3	50000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	763.06	kg/m3	50000.00	Experimental and modeled volumetric behavior of linear and branched ethers

rho1	759.32	kg/m3	50000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	800.02	kg/m3	55000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	796.16	kg/m3	55000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	792.44	kg/m3	55000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	788.74	kg/m3	55000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	785.01	kg/m3	55000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	781.37	kg/m3	55000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	777.67	kg/m3	55000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	774.07	kg/m3	55000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	770.41	kg/m3	55000.00	Experimental and modeled volumetric behavior of linear and branched ethers

rho1	766.79	kg/m3	55000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	763.16	kg/m3	55000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	802.99	kg/m3	60000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	799.26	kg/m3	60000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	795.56	kg/m3	60000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	791.97	kg/m3	60000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	788.28	kg/m3	60000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	784.70	kg/m3	60000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	781.06	kg/m3	60000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	777.53	kg/m3	60000.00	Experimental and modeled volumetric behavior of linear and branched ethers

rho1	773.95	kg/m3	60000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	770.38	kg/m3	60000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	766.84	kg/m3	60000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	805.87	kg/m3	65000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	802.29	kg/m3	65000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	798.64	kg/m3	65000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	732.80	kg/m3	100.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	791.45	kg/m3	65000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	787.86	kg/m3	65000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho1	784.29	kg/m3	65000.00	Experimental and modeled volumetric behavior of linear and branched ethers

rho	780.73	kg/m ³	65000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho	777.21	kg/m ³	65000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho	773.71	kg/m ³	65000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho	770.23	kg/m ³	65000.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho	741.94	kg/m ³	298.15	Volumetric properties of (N,N-dimethylformamide + aliphatic diethers) at Temperatures ranging from (298.15 to 358.15) K
rho	727.87	kg/m ³	313.15	Volumetric properties of (N,N-dimethylformamide + aliphatic diethers) at Temperatures ranging from (298.15 to 358.15) K
rho	713.73	kg/m ³	328.15	Volumetric properties of (N,N-dimethylformamide + aliphatic diethers) at Temperatures ranging from (298.15 to 358.15) K
rho	699.61	kg/m ³	343.15	Volumetric properties of (N,N-dimethylformamide + aliphatic diethers) at Temperatures ranging from (298.15 to 358.15) K

rho	684.92	kg/m ³	358.15	Volumetric properties of (N,N-dimethylformamide + aliphatic diethers) at Temperatures ranging from (298.15 to 358.15) K
rho	736.10	kg/m ³	293.15	(Liquid + liquid) equilibria of (water + propionic acid + dipropyl ether or diisopropyl ether) at T = 298.2 K
rho	741.81	kg/m ³	298.15	Isobaric (vapour + liquid + liquid) equilibrium data for (di-n-propyl ether + n-propyl alcohol + water) and (diisopropyl ether + isopropyl alcohol + water) systems at 100 kPa
rho	741.98	kg/m ³	298.15	Excess molar enthalpies of ternary mixtures (dibutyl ether or dipropyl ether + 2,2-dimethylbutane + 2,3-dimethylbutane) at the temperature 298.15 K
rho	736.00	kg/m ³	293.00	KDB
rho	741.81 ± 0.01	kg/m ³	298.15	Vapor liquid equilibria in the ternary system dipropyl ether + 1-propanol + 1-pentanol and the binary systems dipropyl ether + 1-pentanol, 1-propanol + 1-pentanol at 101.3 kPa
rho	741.81 ± 0.01	kg/m ³	298.15	Phase equilibria involved in extractive distillation of dipropyl ether + 1-propyl alcohol using 2-ethoxyethanol as entrainer

rho	741.81 ± 0.01	kg/m ³	298.15	Isobaric Vapor-Liquid Equilibria for Binary and Ternary Mixtures of Dipropyl Ether, 1-Propyl Alcohol, and Butyl Propionate
rho	737.77	kg/m ³	100.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho	742.71	kg/m ³	100.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho	747.63	kg/m ³	100.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho	752.52	kg/m ³	100.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho	757.39	kg/m ³	100.00	Experimental and modeled volumetric behavior of linear and branched ethers
rho	742.00	kg/m ³	298.15	Excess Molar Enthalpies of Dipropyl Ether + Dibutyl Ether + (1-Hexene or Tetrahydrofuran) at 298.15 K
rho	741.81 ± 0.01	kg/m ³	298.15	Phase Equilibria Involved in Extractive Distillation of Dipropyl Ether + 1-Propyl Alcohol Using N,N-Dimethylformamide as Entrainer

rho_l	741.81 ± 0.01	kg/m ³	298.15	Liquid liquid equilibria of the systems dipropyl ether + n-propanol + water and dipropyl ether + n-propanol + ethylene glycol at different temperatures
rho_l	741.81 ± 0.01	kg/m ³	298.15	Isobaric vapor-liquid equilibria for the binary systems 1-propyl alcohol + dipropyl ether and 1-butyl alcohol + dibutyl ether at 20 and 101.3 kPa
rho_l	795.06	kg/m ³	65000.00	Experimental and modeled volumetric behavior of linear and branched ethers
srf	0.02	N/m	298.20	KDB
svapt	86.10	J/molxK	363.22	NIST Webbook

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Excess Molar Enthalpies of Dipropyl Ether + n-Propanol + Water at Different Temperatures:	https://www.doi.org/10.1016/j.jct.2011.04.006
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Phase equilibria involved in extractive distillation of dipropyl ether + 1-propyl alcohol using ethoxyethanol as entrainer: Isobaric Vapor-Liquid Equilibria for Binary and Ternary Mixtures of Dipropyl Ether, 1-Propyl Alcohol, and Butyl Propionate:

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Legend

af:	Acentric Factor
affp:	Proton affinity
basg:	Gas basicity
chl:	Standard liquid enthalpy of combustion
cp_g:	Ideal gas heat capacity
cpl:	Liquid phase heat capacity
dm:	Dipole Moment
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfl:	Liquid phase enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
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:	Log ₁₀ of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
pvap:	Vapor pressure
r_{fi}:	Refractive Index
ρ_{ol}:	Liquid Density
rinpol:	Non-polar retention indices
ripol:	Polar retention indices
sg:	Molar entropy at standard conditions
sl:	Liquid phase molar entropy at standard conditions
srf:	Surface Tension
svapt:	Entropy of vaporization at a given temperature
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
tt:	Triple Point Temperature
vc:	Critical Volume
zc:	Critical Compressibility

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