Nonane

Other names: Shellsol 140

UN 1920 n-C9H20 n-Nonane

Inchi: InChl=1S/C9H20/c1-3-5-7-9-8-6-4-2/h3-9H2,1-2H3

InchiKey: BKIMMITUMNQMOS-UHFFFAOYSA-N

Formula: C9H20

SMILES: CCCCCCCC

Mol. weight [g/mol]: 128.26 CAS: 111-84-2

Physical Properties

Property code	Value	Unit	Source
af	0.4450		KDB
aigt	478.15	K	KDB
ар	346.850	K	KDB
chl	-6124.90 ± 1.10	kJ/mol	NIST Webbook
chl	-6125.21 ± 0.54	kJ/mol	NIST Webbook
chl	-6119.80	kJ/mol	NIST Webbook
fII	0.87	% in Air	KDB
flu	2.90	% in Air	KDB
fpo	304.26	K	KDB
gf	24.83	kJ/mol	KDB
hcg	6125.17	kJ/mol	KDB
hcn	5685.052	kJ/mol	KDB
hf	-228.30	kJ/mol	NIST Webbook
hf	-229.20	kJ/mol	KDB
hfl	-274.70 ± 1.00	kJ/mol	NIST Webbook
hfus	19.07	kJ/mol	Joback Method
hvap	35.63	kJ/mol	Joback Method
ie	9.71 ± 0.10	eV	NIST Webbook
ie	9.87	eV	NIST Webbook
ie	9.71 ± 0.10	eV	NIST Webbook
ie	9.63 ± 0.15	eV	NIST Webbook
ie	10.19	eV	NIST Webbook
log10ws	-5.88		Aqueous Solubility Prediction Method

log10ws	-5.88		Estimated Solubility Method
logp	3.757		Crippen Method
mcvol	137.670	ml/mol	McGowan Method
nfpaf	%!d(float64=3)		KDB
рс	2280.00 ± 20.00	kPa	NIST Webbook
рс	2270.00 ± 30.00	kPa	NIST Webbook
рс	2291.10 ± 0.22	kPa	NIST Webbook
рс	2305.60 ± 0.23	kPa	NIST Webbook
рс	2288.00 ± 10.00	kPa	NIST Webbook
рс	2357.30 ± 0.23	kPa	NIST Webbook
рс	2294.00 ± 6.89	kPa	NIST Webbook
рс	2299.00 ± 5.00	kPa	NIST Webbook
рс	2290.00	kPa	KDB
рс	2290.00 ± 50.00	kPa	NIST Webbook
рс	2290.40 ± 0.22	kPa	NIST Webbook
rhoc	230.86 ± 6.41	kg/m3	NIST Webbook
rhoc	235.99 ± 10.00	kg/m3	NIST Webbook
rhoc	230.86 ± 6.41	kg/m3	NIST Webbook
rinpol	138.27		NIST Webbook
rinpol	144.03		NIST Webbook
rinpol	138.27		NIST Webbook
sg	506.50 ± 1.00	J/mol×K	NIST Webbook
sl	392.90	J/mol×K	NIST Webbook
sl	393.67	J/mol×K	NIST Webbook
tb	423.75 ± 0.50	K	NIST Webbook
tb	423.90 ± 0.30	K	NIST Webbook
tb	423.94 ± 0.03	K	NIST Webbook
tb	423.05 ± 1.00	K	NIST Webbook
tb	421.65 ± 1.50	K	NIST Webbook
tb	423.95 ± 0.30	K	NIST Webbook
tb	423.94 ± 0.01	K	NIST Webbook
tb	424.00 ± 0.15	K	NIST Webbook
tb	424.00 ± 2.00	K	NIST Webbook
tb	423.65 ± 2.00	K	NIST Webbook
tb	424.00 ± 0.20	K	NIST Webbook
tb	423.95 ± 0.30	K	NIST Webbook
tb	423.85 ± 0.60	K	NIST Webbook
tb	423.85 ± 0.30	K	NIST Webbook
tb	423.96 ± 0.20	K	NIST Webbook
tb	423.40 ± 0.70	K	NIST Webbook
tb	423.85 ± 0.30	K	NIST Webbook
tb	423.70 ± 0.50	K	NIST Webbook
tb	423.86 ± 0.50	K	NIST Webbook
tb	423.86 ± 0.15	K	NIST Webbook

tb	423.88 ± 0.10	K	NIST Webbook
tb	423.86 ± 0.15	K	NIST Webbook
tb	423.87 ± 0.10	K	NIST Webbook
tb	421.15 ± 3.00	K	NIST Webbook
tb	423.90 ± 2.00	K	NIST Webbook
tb	423.87 ± 0.10	K	NIST Webbook
tb	422.65 ± 1.00	K	NIST Webbook
tb	423.92 ± 0.15	K	NIST Webbook
tb	422.95 ± 0.50	K	NIST Webbook
tb	423.80 ± 0.20	K	NIST Webbook
tb	423.65 ± 0.25	K	NIST Webbook
tb	423.95 ± 0.15	K	NIST Webbook
tb	422.65 ± 0.70	K	NIST Webbook
tb	423.45 ± 0.25	K	NIST Webbook
tb	423.85 ± 0.20	K	NIST Webbook
tb	423.80 ± 0.20	K	NIST Webbook
tb	423.80 ± 0.60	K	NIST Webbook
tb	423.45 ± 0.17	K	NIST Webbook
tb	423.45 ± 0.40	K	NIST Webbook
tb	423.91 ± 0.15	K	NIST Webbook
tb	423.75 ± 0.30	K	NIST Webbook
tb	423.20 ± 2.00	K	NIST Webbook
tb	423.54 ± 0.50	K	NIST Webbook
tb	424.15 ± 0.20	K	NIST Webbook
tb	423.88 ± 0.50	K	NIST Webbook
tb	423.82 ± 0.25	K	NIST Webbook
tb	424.00	K	NIST Webbook
tb	424.00	K	NIST Webbook
tb	423.94	K	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)
tb	423.97	К	Isobaric Vapor-Liquid Equilibria of the Ternary System Methylbutyl Ketone + Nonane + Cyclohexanol
tb	423.66	К	Densities and Excess Molar Properties of Dimethyl Carbonate with Alkanes (C6 to C10) and VLE of Dimethyl Carbonate with Alkanes (C9 to C10) at 101.3 kPa

tb	423.94	К	Solutions of alkyl methanoates and alkanes: Simultaneous modeling of phase equilibria and mixing properties. Estimation of behavior by UNIFAC with recalculation of parameters
tb	423.80	К	Isobaric vapor-liquid equilibrium for binary systemsof toluene + o-xylene, benzene + o-xylene, nonane + benzene and nonane + heptane at 101.3 kPa
tb	423.80	К	Isobaric vapor-liquid equilibrium for the binary mixtures of nonane with cyclohexane, toluene, m-xylene, or p-xylene at 101.3 kPa
tb	423.97	K	KDB
tb	423.96 ± 0.30	K	NIST Webbook
tb	423.95 ± 0.10	K	NIST Webbook
tb	423.90 ± 0.50	K	NIST Webbook
tc	594.52	К	Determination of the Critical Properties of C6 C10 n-Alkanes and Their Binary Systems Using a Flow Apparatus
tc	594.60	K	KDB
tc	594.52	К	Experimental determination of critical data of multi-component mixtures containing potential gasoline additives 2-butanol by a flow-type apparatus
tc	594.50	К	Measurement of Critical Properties for Binary and Ternary Mixtures Containing n-Butanol and n-Alkane
tf	219.77	K	Aqueous Solubility Prediction Method
tf	219.60	K	KDB
tt	219.65	K	KDB
VC	0.555	m3/kmol	NIST Webbook
VC	0.555	m3/kmol	KDB
ZC	0.2570790		KDB
zra	0.25		KDB

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source	
cpg	272.67	J/mol×K	405.32	Joback Method	
cpg	313.49	J/mol×K	486.85	Joback Method	
cpg	349.98	J/mol×K	568.37	Joback Method	
cpg	338.28	J/mol×K	541.20	Joback Method	
cpg	286.78	J/mol×K	432.50	Joback Method	
cpg	326.12	J/mol×K	514.02	Joback Method	
cpg	300.38	J/mol×K	459.67	Joback Method	
cpl	288.80	J/mol×K	308.15	Thermodynamic behaviour of the binary systems dimethyl carbonate + n-octane or n-nonane	
cpl	284.34	J/mol×K	298.15	NIST Webbook	
cpl	292.18	J/mol×K	318.15	NIST Webbook	
cpl	283.80	J/mol×K	298.15	NIST Webbook	
cpl	284.23	J/mol×K	298.15	Thermodynamic behaviour of the binary systems dimethyl carbonate + n-octane or n-nonane	
cpl	280.13	J/mol×K	288.15	Thermodynamic behaviour of the binary systems dimethyl carbonate + n-octane or n-nonane	
cpl	293.20	J/mol×K	323.00	NIST Webbook	
cpl	284.00	J/mol×K	298.15	NIST Webbook	
cpl	322.20	J/mol×K	350.00	NIST Webbook	
cpl	284.39	J/mol×K	298.15	NIST Webbook	
cpl	284.01	J/mol×K	298.15	NIST Webbook	
cpl	280.70	J/mol×K	297.90	NIST Webbook	
cpl	281.20	J/mol×K	299.10	NIST Webbook	
cpl	284.76	J/mol×K	298.15	NIST Webbook	
dvisc	0.0003460	Paxs	358.15	Densities and Viscosities of MTBE + Nonane or Decane at p = 0.1 MPa from (273.15 to 363.15) K	

dvisc	0.0006640	Paxs	298.15	Densities and Viscosities of Ternary Mixtures of Heptane, Octane, Nonane, and Hexyl Benzene from 293.15 K to 313.15 K	
dvisc	0.0006217	Paxs	303.15	Densities and Viscosities of Ternary Mixtures of Heptane, Octane, Nonane, and Hexyl Benzene from 293.15 K to 313.15 K	
dvisc	0.0005849	Paxs	308.15	Densities and Viscosities of Ternary Mixtures of Heptane, Octane, Nonane, and Hexyl Benzene from 293.15 K to 313.15 K	
dvisc	0.0005500	Paxs	313.15	Densities and Viscosities of Ternary Mixtures of Heptane, Octane, Nonane, and Hexyl Benzene from 293.15 K to 313.15 K	
dvisc	0.0009720	Paxs	273.15	Densities and Viscosities of MTBE + Nonane or Decane at p = 0.1 MPa from (273.15 to 363.15) K	
dvisc	0.0008280	Paxs	283.15	Densities and Viscosities of MTBE + Nonane or Decane at p = 0.1 MPa from (273.15 to 363.15) K	
dvisc	0.0007091	Paxs	293.15	Densities and Viscosities of Ternary Mixtures of Heptane, Octane, Nonane, and Hexyl Benzene from 293.15 K to 313.15 K	

dvisc	0.0007680	Paxs	288.15	Densities and Viscosities of MTBE + Nonane or Decane at p = 0.1 MPa from (273.15 to 363.15) K	
dvisc	0.0007160	Paxs	293.15	Densities and Viscosities of MTBE + Nonane or Decane at p = 0.1 MPa from (273.15 to 363.15) K	
dvisc	0.0006690	Paxs	298.15	Densities and Viscosities of MTBE + Nonane or Decane at p = 0.1 MPa from (273.15 to 363.15) K	
dvisc	0.0006280	Paxs	303.15	Densities and Viscosities of MTBE + Nonane or Decane at p = 0.1 MPa from (273.15 to 363.15) K	
dvisc	0.0005900	Paxs	308.15	Densities and Viscosities of MTBE + Nonane or Decane at p = 0.1 MPa from (273.15 to 363.15) K	
dvisc	0.0005550	Paxs	313.15	Densities and Viscosities of MTBE + Nonane or Decane at p = 0.1 MPa from (273.15 to 363.15) K	
dvisc	0.0008960	Paxs	278.15	Densities and Viscosities of MTBE + Nonane or Decane at p = 0.1 MPa from (273.15 to 363.15) K	
dvisc	0.0005220	Paxs	318.15	Densities and Viscosities of MTBE + Nonane or Decane at p = 0.1 MPa from (273.15 to 363.15) K	
dvisc	0.0004930	Paxs	323.15	Densities and Viscosities of MTBE + Nonane or Decane at p = 0.1 MPa from (273.15 to 363.15) K	

dvisc	0.0004660	Paxs	328.15	Densities and Viscosities of MTBE + Nonane or Decane at p = 0.1 MPa from (273.15 to 363.15) K	
dvisc	0.0004420	Pa×s	333.15	Densities and Viscosities of MTBE + Nonane or Decane at p = 0.1 MPa from (273.15 to 363.15) K	
dvisc	0.0004200	Pa×s	338.15	Densities and Viscosities of MTBE + Nonane or Decane at p = 0.1 MPa from (273.15 to 363.15) K	
dvisc	0.0003990	Paxs	343.15	Densities and Viscosities of MTBE + Nonane or Decane at p = 0.1 MPa from (273.15 to 363.15) K	
dvisc	0.0003800	Pa×s	348.15	Densities and Viscosities of MTBE + Nonane or Decane at p = 0.1 MPa from (273.15 to 363.15) K	
dvisc	0.0003620	Paxs	353.15	Densities and Viscosities of MTBE + Nonane or Decane at p = 0.1 MPa from (273.15 to 363.15) K	
hfust	15.48	kJ/mol	219.70	NIST Webbook	
hfust	15.00	kJ/mol	219.50	NIST Webbook	
hsubt	74.60	kJ/mol	219.00	NIST Webbook	
hvapt	36.91	kJ/mol	423.80	KDB	
hvapt	44.30	kJ/mol	328.00	NIST Webbook	
hvapt	42.10	kJ/mol	358.00	NIST Webbook	
hvapt	43.20	kJ/mol	343.00	NIST Webbook	
hvapt	43.90	kJ/mol	367.50	NIST Webbook	
hvapt	42.70	kJ/mol	385.00	NIST Webbook	
hvapt	48.30	kJ/mol	263.50	NIST Webbook	
hvapt	46.00	kJ/mol	314.00	NIST Webbook	
hvapt	46.70	kJ/mol	299.00	NIST Webbook	
hvapt	36.91	kJ/mol	424.00	NIST Webbook	

pvap	89.41	kPa	419.28	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	113.88	kPa	428.40	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	116.44	kPa	429.26	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	119.35	kPa	430.22	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	122.04	kPa	431.09	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	124.99	kPa	432.04	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	

pvap	127.82	kPa	432.94	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	130.52	kPa	433.74	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	133.60	kPa	434.68	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	136.62	kPa	435.58	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	139.12	kPa	436.31	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	141.90	kPa	437.11	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	

pvap	144.81	kPa	437.95	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	147.42	kPa	438.67	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	150.23	kPa	439.45	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	152.67	kPa	440.11	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	86.85	kPa	418.24	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	157.53	kPa	441.41	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	

pvap	159.98	kPa	442.05	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	162.80	kPa	442.77	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	165.61	kPa	443.49	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	168.53	kPa	444.23	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	171.39	kPa	444.93	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	173.63	kPa	445.49	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	

pvap	176.52	kPa	446.19	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	178.85	kPa	446.75	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	181.82	kPa	447.44	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	184.55	kPa	448.07	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	186.86	kPa	448.61	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	84.44	kPa	417.22	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	

pvap	192.00	kPa	449.81	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	195.54	kPa	450.56	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	40.00	kPa	391.78	Vapor Liquid Equilibria Measurements for the Nine n-Alkane/Ketone Pairs Comprising 2-, 3-, and 4-Heptanone with n-Octane, n-Nonane, and n-Decane	
pvap	40.00	kPa	391.87	Vapor Liquid Equilibria Measurements for the Nine n-Alkane/Ketone Pairs Comprising 2-, 3-, and 4-Heptanone with n-Octane, n-Nonane, and n-Decane	
pvap	40.00	kPa	391.90	Vapor Liquid Equilibria Measurements for the Nine n-Alkane/Ketone Pairs Comprising 2-, 3-, and 4-Heptanone with n-Octane, n-Nonane, and n-Decane	
pvap	81.41	kPa	415.90	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	

pvap	79.03	kPa	414.83	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	76.48	kPa	413.68	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	74.01	kPa	412.52	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	71.53	kPa	411.32	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	69.09	kPa	410.11	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	66.76	kPa	408.93	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	

pvap	64.58	kPa	407.78	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	15.58	kPa	365.30	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	59.01	kPa	404.73	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	56.55	kPa	403.31	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	54.42	kPa	402.01	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	52.12	kPa	400.61	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	

pvap	49.15	kPa	398.71	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	46.56	kPa	396.96	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	44.15	kPa	395.26	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	41.74	kPa	393.48	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	61.77	kPa	406.27	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	39.52	kPa	391.80	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	

pvap	36.62	kPa	389.45	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	33.80	kPa	387.02	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	31.22	kPa	384.65	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	111.54	kPa	427.60	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	108.99	kPa	426.71	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	106.50	kPa	425.83	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	

pvap	104.00	kPa	424.92	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	101.32	kPa	423.94	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	100.44	kPa	423.61	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	99.35	kPa	423.20	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	155.08	kPa	440.76	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	98.40	kPa	422.83	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	

pvap	95.25	kPa	421.62	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	28.78	kPa	382.25	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	26.35	kPa	379.71	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	20.58	kPa	372.81	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	18.07	kPa	369.25	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	19.81	kPa	371.37	Vapor-Liquid Equilibrium Studies for Systems Containing n-Butylisocyanate at Temperatures between 323.15 K and 371.15 K	

pvap	9.00	kPa	351.53	Vapor-Liquid Equilibrium Studies for Systems Containing n-Butylisocyanate at Temperatures between 323.15 K and 371.15 K	
pvap	4.99	kPa	338.33	Vapor-Liquid Equilibrium Studies for Systems Containing n-Butylisocyanate at Temperatures between 323.15 K and 371.15 K	
pvap	2.34	kPa	322.59	Vapor-Liquid Equilibrium Studies for Systems Containing n-Butylisocyanate at Temperatures between 323.15 K and 371.15 K	
pvap	40.00	kPa	392.17	Low-Pressure VLE Measurements and Thermodynamic Modeling, with PSRK and NRTL, of Binary 1-Alcohol + n-Alkane Systems	
pvap	92.43	kPa	420.50	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	49.24	kPa	399.76	Low-Pressure VLE Measurements and Thermodynamic Modeling, with PSRK and NRTL, of Binary 1-Alcohol + n-Alkane Systems	

pvap	58.04	kPa	404.65	Low-Pressure VLE Measurements and Thermodynamic Modeling, with PSRK and NRTL, of Binary 1-Alcohol + n-Alkane Systems	
pvap	66.68	kPa	409.14	Low-Pressure VLE Measurements and Thermodynamic Modeling, with PSRK and NRTL, of Binary 1-Alcohol + n-Alkane Systems	
pvap	75.48	kPa	413.23	Low-Pressure VLE Measurements and Thermodynamic Modeling, with PSRK and NRTL, of Binary 1-Alcohol + n-Alkane Systems	
pvap	84.18	kPa	417.05	Low-Pressure VLE Measurements and Thermodynamic Modeling, with PSRK and NRTL, of Binary 1-Alcohol + n-Alkane Systems	
pvap	93.72	kPa	420.83	Low-Pressure VLE Measurements and Thermodynamic Modeling, with PSRK and NRTL, of Binary 1-Alcohol + n-Alkane Systems	

pvap	101.70	kPa	423.88	Low-Pressure VLE Measurements and Thermodynamic Modeling, with PSRK and NRTL, of Binary 1-Alcohol + n-Alkane Systems	
pvap	101.30	kPa	423.80	Isobaric vapor-liquid equilibrium for the binary mixtures of nonane with cyclohexane, toluene, m-xylene, or p-xylene at 101.3 kPa	
pvap	10.28	kPa	353.15	Vapor liquid equilibria and density measurement for binary mixtures of toluene, benzene, o-xylene, m-xylene, sulfolane and nonane at 333.15K and 353.15K	
pvap	3.97	kPa	333.15	Vapor liquid equilibria and density measurement for binary mixtures of toluene, benzene, o-xylene, m-xylene, sulfolane and nonane at 333.15K and 353.15K	
pvap	9.65	kPa		Measurement of vapor.liquid equilibria (VLE) and excess enthalpies (HE) of binary systems with lkyl-3-methylimidazol fluoromethylsulfonyl) and prediction of these properties and A using modified UNIFAC (Dortmund)	

pvap	39.96	kPa	392.77	Low-Pressure VLE Measurements and Thermodynamic Modeling, with PSRK and NRTL, of Binary 1-Alcohol + n-Alkane Systems	
pvap	189.75	kPa	449.27	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
pvap	23.49	kPa	376.46	Measurements of the Excess Properties and Vapor-Liquid Equilibria at 101.32 kPa for Mixtures of Ethyl Ethanoate + Alkanes (from C5 to C10)	
rfi	1.40550		293.13	Isobaric Vapor-Liquid Equilibria of the Ternary System Pentan-1-ol + Pentyl Acetate + Nonane	
rfi	1.40326		298.15	Liquid-Liquid Equilibria of the Ternary Systems of Alkane + Aromatic + 1-Ethylpyridinium Ethylsulfate Ionic Liquid at T = (283.15 and 298.15) K	
rfi	1.40326		298.15 1-E	Separation of Benzene from Linear Alkanes (C6-C9) Using Ethyl-3-Methylimidazo Ethylsulfate at T = 298.15 K	lium
rfi	1.40550		293.15	Isobaric Vapor-Liquid Equilibria of the Ternary System Dibutyl Ether + 1-Pentanol + Nonane	

rfi	1.40550	293.15	Activity	
	1.40000	233.13	Coefficients at Infinite Dilution of Cylcohexylamine + Octane, Toluene, Ethylbenzene, or Aniline and Excess Molar Volumes in Binary Mixtures of Cyclohexylamine + Heptane, Octane, Nonane, Decane, Undecane, Aniline, or Water	
rfi	1.40550	293.15	Isobaric Vapor-Liquid Equilibria of the Ternary System Methylbutyl Ketone + 1-Pentanol + Nonane	
rfi	1.40580	293.15	Activity Coefficients at Infinite Dilution and Excess Molar Volumes in Binary Mixtures Containing Normal Alkanes (Nonane, Decane, Undecane, or Dodecane) and Cresols (2-Methylphenol) or 3-Methylphenol)	
rfi	1.40570	293.15	Infinite Dilution Activity Coefficients of Hydrocarbons in Triethylene Glycol and Tetraethylene Glycol	
rfi	1.40560	293.15	P-rho-T Data and Modeling for Propan-1-ol + n-Octane or n-Nonane or n-Decane from 313.15 K to 363.15 K and 1 MPa to 20 MPa	

rfi	1.40740	293.15 Vapor-Liquid Equilibrium Measurements of Ethanol and n-Nonane or n-Decane Binary Mixtures with Large Relative Volatility
rfi	1.40326	298.15 Extraction of toluene from aliphatic compounds using an ionic liquid as solvent: Influence of the alkane on the (liquid + liquid) equilibrium
rfi	1.39730	308.15 Excess properties of the binary mixtures of methylcyclohexane + alkanes (C6 to C12) at T = 298.15 K to T = 308.15 K
rfi	1.39980	303.15 Excess properties of the binary mixtures of methylcyclohexane + alkanes (C6 to C12) at T = 298.15 K to T = 308.15 K
rfi	1.40210	298.15 Excess properties of the binary mixtures of methylcyclohexane + alkanes (C6 to C12) at T = 298.15 K to T = 308.15 K
rfi	1.40020	303.15 Physical properties of {anisole + n-alkanes} at temperatures between (293.15 and 303.15) K
rfi	1.40680	293.15 Densities, Viscosities, and Refractive Indices of Binary Mixtures of 1,2,3,4-Tetrahydronaphthalene with Some n-Alkanes at T = (293.15 to 313.15) K

rfi	1.40400	293.15 Physical properties of {anisole + n-alkanes} at temperatures between (293.15 and 303.15) K
rfi	1.39390	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	1.40311	298.15 KDB
rfi	1.40220	303.15 Densities, Viscosities, and Refractive Indices of Binary Mixtures of 1,2,3,4-Tetrahydronaphthalene with Some n-Alkanes at T = (293.15 to 313.15) K
rfi	1.40310	298.15 Multiproperty Correlation of Experimental Data of the Binaries Propyl Ethanoate + Alkanes (Pentane to Decane). New Experimental Information for Vapor Liquid Equilibrium and Mixing Properties
rfi	1.39380	318.15 Multiproperty Correlation of Experimental Data of the Binaries Propyl Ethanoate + Alkanes (Pentane to Decane). New Experimental Information for Vapor Liquid Equilibrium and Mixing Properties

rfi	1.40320		298.15	Improvements in the Experimentation and the Representation of Thermodynamic Properties (iso-p VLE and yE) of Alkyl Propanoate + Alkane Binaries	
rfi	1.40550		293.15	Isobaric Vapor Liquid Equilibria of the Ternary System 1-Pentanol + Nonane Anisole	
rfi	1.40320		298.15	Measurements and Correlations of the Isobaric Vapor Liquid Equilibria of Binary Mixtures and Excess Properties for Mixtures Containing an Alkyl (Methyl, Ethyl) Butanoate with an Alkane (Heptane, Nonane) at 101.3 kPa	
rfi	1.40270		298.15	Physical properties of {anisole + n-alkanes} at temperatures between (293.15 and 303.15) K	
rhol	698.40	kg/m3	318.15	Excess Molar Volume along with Viscosity, Flash Point, and Refractive Index for Binary Mixtures of cis-Decalin or trans-Decalin with C9 to C11 n-Alkanes	
rhol	718.00	kg/m3	293.00	KDB	
rhol	714.06	kg/m3	298.15	Thermodynamics of Mixtures Containing a Strongly Polar Compound. 9. Liquid-Liquid Equilibria for epsilon-Caprolactam + Selected Alkanes	1

rhol	702.26	kg/m3	313.15	Excess Molar Volumes and Viscosities of Binary Systems of Butylcyclohexane with n-Alkanes (C7 to C14) at T = 293.15 K to 313.15 K	
rhol	706.19	kg/m3	308.15	Excess Molar Volumes and Viscosities of Binary Systems of Butylcyclohexane with n-Alkanes (C7 to C14) at T = 293.15 K to 313.15 K	
rhol	710.10	kg/m3	303.15	Excess Molar Volumes and Viscosities of Binary Systems of Butylcyclohexane with n-Alkanes (C7 to C14) at T = 293.15 K to 313.15 K	
rhol	714.00	kg/m3	298.15	Excess Molar Volumes and Viscosities of Binary Systems of Butylcyclohexane with n-Alkanes (C7 to C14) at T = 293.15 K to 313.15 K	
rhol	717.88	kg/m3	293.15	Excess Molar Volumes and Viscosities of Binary Systems of Butylcyclohexane with n-Alkanes (C7 to C14) at T = 293.15 K to 313.15 K	
rhol	714.06	kg/m3	298.15	Thermodynamics of mixtures containing amines VI. Liquid liquid equilibria for mixtures of o-toluidine + selected alkanes	

rhol	718.42	kg/m3	293.15 1-b	Liquid liquid equilibrium of ternary systems outyl-3-methylimidazoli hexafluorophosphate + aromatic + aliphatic	um
rhol	717.88	kg/m3	293.15	An Isothermal vapour-liquid equilibrium data for the binary systems of CHF3 with (n-nonane, n-decane, or n-undecane) and C2F6 with (n-nonane or n-decane)	
rhol	716.60	kg/m3	294.15	An Isothermal vapour-liquid equilibrium data for the binary systems of CHF3 with (n-nonane, n-decane, or n-undecane) and C2F6 with (n-nonane or n-decane)	
rhol	715.82	kg/m3	295.15	An Isothermal vapour-liquid equilibrium data for the binary systems of CHF3 with (n-nonane, n-decane, or n-undecane) and C2F6 with (n-nonane or n-decane)	
rhol	715.04	kg/m3	296.15	An Isothermal vapour-liquid equilibrium data for the binary systems of CHF3 with (n-nonane, n-decane, or n-undecane) and C2F6 with (n-nonane or n-decane)	
rhol	714.27	kg/m3	297.15	An Isothermal vapour-liquid equilibrium data for the binary systems of CHF3 with (n-nonane, n-decane, or n-undecane) and C2F6 with (n-nonane or n-decane)	

rhol	713.69	kg/m3	298.15	An Isothermal vapour-liquid equilibrium data for the binary systems of CHF3 with (n-nonane, n-decane, or n-undecane) and C2F6 with (n-nonane or n-decane)	
rhol	713.99	kg/m3	298.15	Evaluation of ionic liquids as solvent for aromatic extraction: Experimental, correlation and COSMO-RS predictions	
rhol	725.58	kg/m3	283.15	Density, viscosity and excess molar volume of binary mixtures of tri-n-octylamine + diluents (n-heptane, n-octane, n-nonane, and n-decane) at various temperatures	
rhol	717.86	kg/m3	293.15	Density, viscosity and excess molar volume of binary mixtures of tri-n-octylamine + diluents (n-heptane, n-octane, n-nonane, and n-decane) at various temperatures	
rhol	710.06	kg/m3	303.15	Density, viscosity and excess molar volume of binary mixtures of tri-n-octylamine + diluents (n-heptane, n-octane, n-nonane, and n-decane) at various temperatures	

rhol	713.95	kg/m3	298.15	Density, viscosity and excess molar volume of binary mixtures of tri-n-octylamine + diluents (n-heptane, n-octane, n-nonane, and n-decane) at various temperatures	
rhol	713.90	kg/m3	298.15	(Liquid + liquid) equilibrium at T = 298.15 K for ternary mixtures of alkane + aromatic compounds + imidazolium-based ionic liquids	
rhol	714.00	kg/m3	298.15	Excess molar enthalpies for binary mixtures of cyclopentanone, cyclohexanone, or cycloheptanone with n-nonane at T = 298.15 K and atmospheric pressure	
rhol	714.05	kg/m3	298.15	Liquid-liquid equilibria for (2-hydroxy benzaldehyde + n-alkane) mixtures. Intermolecular and proximity effects in systems containing hydroxyl and aldehyde groups	
rhol	721.64	kg/m3	288.15	Densities and Viscosities of Corn Oil + n-Alkanes Blends from (288.15 to 343.15) K at 0.1 MPa	
rhol	717.78	kg/m3	293.15	Densities and Viscosities of Corn Oil + n-Alkanes Blends from (288.15 to 343.15) K at 0.1 MPa	

rhol	713.91	kg/m3	298.15	Densities and Viscosities of Corn Oil + n-Alkanes Blends from (288.15 to 343.15) K at 0.1 MPa	
rhol	710.03	kg/m3	303.15	Densities and Viscosities of Corn Oil + n-Alkanes Blends from (288.15 to 343.15) K at 0.1 MPa	
rhol	694.43	kg/m3	323.15	Excess Molar Volume along with Viscosity, Flash Point, and Refractive Index for Binary Mixtures of cis-Decalin or trans-Decalin with C9 to C11 n-Alkanes	
rhol	702.20	kg/m3	313.15	Densities and Viscosities of Corn Oil + n-Alkanes Blends from (288.15 to 343.15) K at 0.1 MPa	
rhol	698.26	kg/m3	318.15	Densities and Viscosities of Corn Oil + n-Alkanes Blends from (288.15 to 343.15) K at 0.1 MPa	
rhol	694.30	kg/m3	323.15	Densities and Viscosities of Corn Oil + n-Alkanes Blends from (288.15 to 343.15) K at 0.1 MPa	
rhol	690.33	kg/m3	328.15	Densities and Viscosities of Corn Oil + n-Alkanes Blends from (288.15 to 343.15) K at 0.1 MPa	
rhol	686.34	kg/m3	333.15	Densities and Viscosities of Corn Oil + n-Alkanes Blends from (288.15 to 343.15) K at 0.1 MPa	

rhol	682.31	kg/m3	338.15	Densities and Viscosities of Corn Oil + n-Alkanes Blends from (288.15 to 343.15) K at 0.1 MPa	
rhol	678.26	kg/m3	343.15	Densities and Viscosities of Corn Oil + n-Alkanes Blends from (288.15 to 343.15) K at 0.1 MPa	
rhol	714.06	kg/m3	298.15	Thermodynamics of Mixtures Containing a Strongly Polar Compound. 8. Liquid-Liquid Equilibria for N,N-Dialkylamide + Selected N-Alkanes	
rhol	724.54	kg/m3	285.15	Measurements of Density and Heat Capacity for Binary Mixtures {x Benzonitrile + (1 -x) (Octane or Nonane)}	
rhol	722.22	kg/m3	288.15	Measurements of Density and Heat Capacity for Binary Mixtures {x Benzonitrile + (1 -x) (Octane or Nonane)}	
rhol	718.35	kg/m3	293.15	Measurements of Density and Heat Capacity for Binary Mixtures {x Benzonitrile + (1 -x) (Octane or Nonane)}	
rhol	714.46	kg/m3	298.15	Measurements of Density and Heat Capacity for Binary Mixtures {x Benzonitrile + (1 -x) (Octane or Nonane)}	
rhol	710.55	kg/m3	303.15	Measurements of Density and Heat Capacity for Binary Mixtures {x Benzonitrile + (1 -x) (Octane or Nonane)}	

rhol	706.63	kg/m3	308.15	Measurements of Density and Heat Capacity for Binary Mixtures {x Benzonitrile + (1 -x) (Octane or Nonane)}	
rhol	702.70	kg/m3	313.15	Measurements of Density and Heat Capacity for Binary Mixtures {x Benzonitrile + (1 -x) (Octane or Nonane)}	
rhol	713.94	kg/m3	298.20	Apparent and Partial Molar Volumes at Infinite Dilution and Solid Liquid Equilibria of Dibenzothiophene + Alkane Systems	
rhol	732.83	kg/m3	273.15	Experimental Liquid Densities of n-Pentane, n-Octane, and n-Nonane and Their Binary Mixtures from (273.15 to 363.15) K at 0.1 MPa	
rhol	729.01	kg/m3	278.15	Experimental Liquid Densities of n-Pentane, n-Octane, and n-Nonane and Their Binary Mixtures from (273.15 to 363.15) K at 0.1 MPa	
rhol	725.16	kg/m3	283.15	Experimental Liquid Densities of n-Pentane, n-Octane, and n-Nonane and Their Binary Mixtures from (273.15 to 363.15) K at 0.1 MPa	
rhol	721.32	kg/m3	288.15	Experimental Liquid Densities of n-Pentane, n-Octane, and n-Nonane and Their Binary Mixtures from (273.15 to 363.15) K at 0.1 MPa	

rhol	717.45	kg/m3	293.15	Experimental Liquid Densities of n-Pentane, n-Octane, and n-Nonane and Their Binary Mixtures from (273.15 to 363.15) K at 0.1 MPa	
rhol	713.58	kg/m3	298.15	Experimental Liquid Densities of n-Pentane, n-Octane, and n-Nonane and Their Binary Mixtures from (273.15 to 363.15) K at 0.1 MPa	
rhol	709.69	kg/m3	303.15	Experimental Liquid Densities of n-Pentane, n-Octane, and n-Nonane and Their Binary Mixtures from (273.15 to 363.15) K at 0.1 MPa	
rhol	705.78	kg/m3	308.15	Experimental Liquid Densities of n-Pentane, n-Octane, and n-Nonane and Their Binary Mixtures from (273.15 to 363.15) K at 0.1 MPa	
rhol	701.86	kg/m3	313.15	Experimental Liquid Densities of n-Pentane, n-Octane, and n-Nonane and Their Binary Mixtures from (273.15 to 363.15) K at 0.1 MPa	
rhol	697.91	kg/m3	318.15	Experimental Liquid Densities of n-Pentane, n-Octane, and n-Nonane and Their Binary Mixtures from (273.15 to 363.15) K at 0.1 MPa	

rhol	693.95	kg/m3	323.15	Experimental Liquid Densities of n-Pentane, n-Octane, and n-Nonane and Their Binary Mixtures from (273.15 to 363.15) K at 0.1 MPa	
rhol	689.97	kg/m3	328.15	Experimental Liquid Densities of n-Pentane, n-Octane, and n-Nonane and Their Binary Mixtures from (273.15 to 363.15) K at 0.1 MPa	
rhol	685.97	kg/m3	333.15	Experimental Liquid Densities of n-Pentane, n-Octane, and n-Nonane and Their Binary Mixtures from (273.15 to 363.15) K at 0.1 MPa	
rhol	681.94	kg/m3	338.15	Experimental Liquid Densities of n-Pentane, n-Octane, and n-Nonane and Their Binary Mixtures from (273.15 to 363.15) K at 0.1 MPa	
rhol	677.88	kg/m3	343.15	Experimental Liquid Densities of n-Pentane, n-Octane, and n-Nonane and Their Binary Mixtures from (273.15 to 363.15) K at 0.1 MPa	
rhol	673.91	kg/m3	348.15	Experimental Liquid Densities of n-Pentane, n-Octane, and n-Nonane and Their Binary Mixtures from (273.15 to 363.15) K at 0.1 MPa	

rhol	669.71	kg/m3	353.15	Experimental Liquid Densities of n-Pentane, n-Octane, and n-Nonane and Their Binary Mixtures from (273.15 to 363.15) K at 0.1 MPa	
rhol	665.58	kg/m3	358.15	Experimental Liquid Densities of n-Pentane, n-Octane, and n-Nonane and Their Binary Mixtures from (273.15 to 363.15) K at 0.1 MPa	
rhol	661.14	kg/m3	363.15	Experimental Liquid Densities of n-Pentane, n-Octane, and n-Nonane and Their Binary Mixtures from (273.15 to 363.15) K at 0.1 MPa	
rhol	717.94	kg/m3	293.15	Excess Molar Volume along with Viscosity, Flash Point, and Refractive Index for Binary Mixtures of cis-Decalin or trans-Decalin with C9 to C11 n-Alkanes	
rhol	714.11	kg/m3	298.15	Excess Molar Volume along with Viscosity, Flash Point, and Refractive Index for Binary Mixtures of cis-Decalin or trans-Decalin with C9 to C11 n-Alkanes	
rhol	710.20	kg/m3	303.15	Excess Molar Volume along with Viscosity, Flash Point, and Refractive Index for Binary Mixtures of cis-Decalin or trans-Decalin with C9 to C11 n-Alkanes	

rhol	706.29	kg/m3	308.15	Excess Molar Volume along with Viscosity, Flash Point, and Refractive Index for Binary Mixtures of cis-Decalin or trans-Decalin with C9 to C11 n-Alkanes	
rhol	702.35	kg/m3	313.15	Excess Molar Volume along with Viscosity, Flash Point, and Refractive Index for Binary Mixtures of cis-Decalin or trans-Decalin with C9 to C11 n-Alkanes	
rhol	706.12	kg/m3	308.15	Densities and Viscosities of Corn Oil + n-Alkanes Blends from (288.15 to 343.15) K at 0.1 MPa	
speedsl	755.60	m/s	418.15	Temperature Dependence of the Speed of Sound of Nonane + 1-Chlorononane in the Range of (293.15 to 423.15) K	
speedsl	1069.30	m/s	333.15	Temperature Dependence of the Speed of Sound of Nonane + 1-Chlorononane in the Range of (293.15 to 423.15) K	
speedsl	844.70	m/s	393.15	Temperature Dependence of the Speed of Sound of Nonane + 1-Chlorononane in the Range of (293.15 to 423.15) K	

speedsl	826.70	m/s	398.15	Temperature Dependence of the Speed of Sound of Nonane	
				1-Chlorononane in the Range of (293.15 to 423.15) K	
speedsl	808.80	m/s	403.15	Temperature Dependence of the Speed of Sound of Nonane	
				1-Chlorononane in the Range of (293.15 to 423.15) K	
speedsl	790.90	m/s	408.15	Temperature Dependence of the Speed of Sound of Nonane	
				1-Chlorononane in the Range of (293.15 to 423.15) K	
speedsl	773.20	m/s	413.15	Temperature Dependence of the Speed of Sound of Nonane	
				1-Chlorononane in the Range of (293.15 to 423.15) K	
speedsl	862.90	m/s	388.15	Temperature Dependence of the Speed of Sound of Nonane	
				1-Chlorononane in the Range of (293.15 to 423.15) K	
speedsl	881.10	m/s	383.15	Temperature Dependence of the Speed of Sound of Nonane +	
				1-Chlorononane in the Range of (293.15 to 423.15) K	
speedsl	899.50	m/s	378.15	Temperature Dependence of the Speed of Sound of Nonane	
				1-Chlorononane in the Range of (293.15 to 423.15) K	

speedsl	917.90	m/s	373.15	Temperature Dependence of the Speed of Sound of Nonane + 1-Chlorononane in the Range of (293.15 to 423.15) K	
speedsl	936.50	m/s	368.15	Temperature Dependence of the Speed of Sound of Nonane + 1-Chlorononane in the Range of (293.15 to 423.15) K	
speedsl	955.20	m/s	363.15	Temperature Dependence of the Speed of Sound of Nonane + 1-Chlorononane in the Range of (293.15 to 423.15) K	
speedsl	973.90	m/s	358.15	Temperature Dependence of the Speed of Sound of Nonane + 1-Chlorononane in the Range of (293.15 to 423.15) K	
speedsl	992.80	m/s	353.15	Temperature Dependence of the Speed of Sound of Nonane + 1-Chlorononane in the Range of (293.15 to 423.15) K	
speedsl	1011.80	m/s	348.15	Temperature Dependence of the Speed of Sound of Nonane + 1-Chlorononane in the Range of (293.15 to 423.15) K	
speedsl	1030.80	m/s	343.15	Temperature Dependence of the Speed of Sound of Nonane + 1-Chlorononane in the Range of (293.15 to 423.15) K	

speedsl	1050.00	m/s	338.15	Temperature Dependence of the Speed of Sound of Nonane + 1-Chlorononane	
				in the Range of (293.15 to 423.15) K	
speedsl	1167.30	m/s	308.15	Temperature Dependence of the Speed of Sound of Nonane	
				1-Chlorononane in the Range of (293.15 to 423.15) K	
speedsl	1088.70	m/s	328.15	Temperature Dependence of the Speed of Sound of Nonane	
				1-Chlorononane in the Range of (293.15 to 423.15) K	
speedsl	1108.20	m/s	323.15	Temperature Dependence of the Speed of Sound of Nonane	
				1-Chlorononane in the Range of (293.15 to 423.15) K	
speedsl	1127.80	m/s	318.15	Temperature Dependence of the Speed of Sound of Nonane	
				1-Chlorononane in the Range of (293.15 to 423.15) K	
speedsl	1147.50	m/s	313.15	Temperature Dependence of the Speed of Sound of Nonane +	
				1-Chlorononane in the Range of (293.15 to 423.15) K	
speedsl	738.00	m/s	423.15	Temperature Dependence of the Speed of Sound of Nonane + 1-Chlorononane	
				in the Range of (293.15 to 423.15) K	

speedsl	1187.20	m/s	303.15	Temperature Dependence of the Speed of Sound of Nonane + 1-Chlorononane in the Range of (293.15 to 423.15) K	
speedsl	1207.20	m/s	298.15	Temperature Dependence of the Speed of Sound of Nonane + 1-Chlorononane in the Range of (293.15 to 423.15) K	
speedsl	1227.30	m/s	293.15	Temperature Dependence of the Speed of Sound of Nonane + 1-Chlorononane in the Range of (293.15 to 423.15) K	
srf	0.02	N/m	293.15	Surface Tension of Dilute Solutions of Alkanes in Cyclohexanol at Different Temperatures	
srf	0.02	N/m	318.15	Surface Tension of Dilute Solutions of Alkanes in Cyclohexanol at Different Temperatures	
srf	0.02	N/m	313.15	Surface Tension of Dilute Solutions of Alkanes in Cyclohexanol at Different Temperatures	
srf	0.02	N/m	308.15	Surface Tension of Dilute Solutions of Alkanes in Cyclohexanol at Different Temperatures	
srf	0.02	N/m	298.15	Surface Tension of Dilute Solutions of Alkanes in Cyclohexanol at Different Temperatures	

Str					
Refractive index, Viscosity, and Surface Tension of Binary Mixtures of exo-Tetrahydrodicyclopentadiene with Some n-Alkanes from (293.15 to 313.15) K srf 0.02 N/m 293.15 Density, Refractive Index, Viscosity, and Surface Tension of Binary Mixtures of exo-Tetrahydrodicyclopentadiene with Some n-Alkanes from (293.15 to 313.15) K srf 0.02 N/m 323.15 Surface Properties of Dilute Solutions of Alkanes in Benzyl Alcohol srf 0.02 N/m 318.15 Surface Properties of Dilute Solutions of Alkanes in Benzyl Alcohol srf 0.02 N/m 313.15 Surface Properties of Dilute Solutions of Alkanes in Benzyl Alcohol srf 0.02 N/m 313.15 Surface Properties of Dilute Solutions of Alkanes in Benzyl Alcohol srf 0.02 N/m 308.15 Surface Properties of Dilute Solutions of Alkanes in Benzyl Alcohol srf 0.02 N/m 308.15 Surface Properties of Dilute Solutions of Alkanes in Benzyl Alcohol srf 0.02 N/m 308.15 Surface Properties of Dilute Solutions of Alkanes in Benzyl Alcohol	srf	0.02	N/m	323.15	of Dilute Solutions of Alkanes in Cyclohexanol at Different
Refractive Índex, Viscosity, and Surface Tension of Binary Mixtures of exo-Tetrahydrodicyclopentadiene with Some n-Alkanes from (293.15 to 313.15) K srf 0.02 N/m 323.15 Surface Properties of Dilute Solutions of Alkanes in Benzyl Alcohol srf 0.02 N/m 318.15 Properties of Dilute Solutions of Alkanes in Benzyl Alcohol srf 0.02 N/m 313.15 Surface Properties of Dilute Solutions of Alkanes in Benzyl Alcohol srf 0.02 N/m 313.15 Surface Properties of Dilute Solutions of Alkanes in Benzyl Alcohol srf 0.02 N/m 308.15 Surface Properties of Dilute Solutions of Alkanes in Benzyl Alcohol srf 0.02 N/m 308.15 Surface Properties of Dilute Solutions of Alkanes in Benzyl Alcohol srf 0.02 N/m 303.15 Surface Properties of Dilute Solutions of Alkanes in Benzyl Alcohol	srf	0.02	N/m		Refractive Index, Viscosity, and Surface Tension of Binary Mixtures of etrahydrodicyclopentadiene with Some n-Alkanes from (293.15 to
Properties of Dilute Solutions of Alkanes in Benzyl Alcohol srf 0.02 N/m 318.15 Surface Properties of Dilute Solutions of Alkanes in Benzyl Alcohol srf 0.02 N/m 313.15 Surface Properties of Dilute Solutions of Alkanes in Benzyl Alcohol srf 0.02 N/m 308.15 Surface Properties of Dilute Solutions of Alkanes in Benzyl Alcohol srf 0.02 N/m 308.15 Surface Properties of Dilute Solutions of Alkanes in Benzyl Alcohol srf 0.02 N/m 303.15 Surface Properties of Dilute Solutions of Alkanes in Benzyl Alcohol srf 0.02 N/m 303.15 Surface Properties of Dilute Solutions of Alkanes in Benzyl Alcohol	srf	0.02	N/m		Refractive Index, Viscosity, and Surface Tension of Binary Mixtures of etrahydrodicyclopentadiene with Some n-Alkanes from (293.15 to
Properties of Dilute Solutions of Alkanes in Benzyl Alcohol srf 0.02 N/m 313.15 Surface Properties of Dilute Solutions of Alkanes in Benzyl Alcohol srf 0.02 N/m 308.15 Surface Properties of Dilute Solutions of Alkanes in Benzyl Alcohol srf 0.02 N/m 303.15 Surface Properties of Dilute Solutions of Alkanes in Benzyl Alcohol srf 0.02 N/m 303.15 Surface Properties of Dilute Solutions of Alkanes in Benzyl Alcohol	srf	0.02	N/m	323.15	Properties of Dilute Solutions of Alkanes in
Properties of Dilute Solutions of Alkanes in Benzyl Alcohol srf 0.02 N/m 308.15 Surface Properties of Dilute Solutions of Alkanes in Benzyl Alcohol srf 0.02 N/m 303.15 Surface Properties of Dilute Solutions of Alkanes in Benzyl Alcohol srf 0.02 N/m 303.15 Surface Properties of Dilute Solutions of Alkanes in Benzyl Alcohol	srf	0.02	N/m	318.15	Properties of Dilute Solutions of Alkanes in
Properties of Dilute Solutions of Alkanes in Benzyl Alcohol srf 0.02 N/m 303.15 Surface Properties of Dilute Solutions of Alkanes in Benzyl Alcohol	srf	0.02	N/m	313.15	Properties of Dilute Solutions of Alkanes in
Properties of Dilute Solutions of Alkanes in Benzyl Alcohol	srf	0.02	N/m	308.15	Properties of Dilute Solutions of Alkanes in
srf 0.02 N/m 298.15 Surface	srf	0.02	N/m	303.15	Properties of Dilute Solutions of Alkanes in
Properties of Dilute Solutions of Alkanes in Benzyl Alcohol	srf	0.02	N/m	298.15	Dilute Solutions of Alkanes in

srf	0.02	N/m	303.15	Surface Tension of Dilute Solutions of Alkanes in Cyclohexanol at Different Temperatures	
srf	0.02	N/m	308.15	Density and surface tension variation with temperature for n-nonane + 1-hexanol	
srf	0.02	N/m	298.15	Density and surface tension variation with temperature for n-nonane + 1-hexanol	
srf	0.02	N/m	288.15	Density and surface tension variation with temperature for n-nonane + 1-hexanol	
srf	0.02	N/m	293.20	KDB	
srf	0.02	N/m	293.15	Surface Properties of Dilute Solutions of Alkanes in Benzyl Alcohol	

Correlations

Information Value

Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.45385e+01
Coeff. B	-3.70195e+03
Coeff. C	-5.07360e+01
Temperature range (K), min.	310.51
Temperature range (K), max.	451.94

Information Value

Property code	pvap
Equation	$ln(Pvp) = A + B/T + C*ln(T) + D*T^2$
Coeff. A	7.25466e+01
Coeff. B	-7.73941e+03
Coeff. C	-8.32740e+00

Coeff. D	3.89483e-06
Temperature range (K), min.	219.63
Temperature range (K), max.	595.65

Datasets

Viscosity, Pa*s

Temperature, K - Liquid	Pressure, kPa - Liquid	Viscosity, Pa*s - Liquid
303.15	101.33	0.0006323
Deference	https:	//www.doi.org/10.1016/i.fluid.2010.10.000

Reference

https://www.doi.org/10.1016/j.fluid.2010.10.009

Mass density, kg/m3

	Mass density, kg/m3 - Liquid
101.46	763.962
1176.07	764.563
2178.21	765.126
4167.03	766.231
5936.52	767.203
8144.53	768.395
10065.60	769.42
12147.70	770.516
14076.40	771.516
16087.10	772.548
18066.90	773.551
19984.50	774.511
21989.60	775.502
24043.80	776.506
25990.20	777.446
27926.70	778.373
29906.00	779.308
101.82	748.678
1135.27	749.335
2178.61	749.992
	1176.07 2178.21 4167.03 5936.52 8144.53 10065.60 12147.70 14076.40 16087.10 18066.90 19984.50 21989.60 24043.80 25990.20 27926.70 29906.00 101.82 1135.27

253.15	3967.76	751.107
253.15	6147.47	752.446
253.15	8137.98	753.648
253.15	10112.30	754.82
253.15	12111.20	755.991
253.15	14130.20	757.156
253.15	16140.10	758.299
253.15	18106.10	759.398
253.15	20064.20	760.484
253.15	22026.10	761.552
253.15	23955.00	762.59
253.15	25972.30	763.661
253.15	27912.60	764.677
253.15	29966.80	765.739
273.15	102.52	733.389
273.15	1156.84	734.143
273.15	2137.97	734.842
273.15	4026.01	736.166
273.15	6169.44	737.644
273.15	8161.45	738.99
273.15	10122.00	740.29
273.15	12106.50	741.586
273.15	14100.70	742.864
273.15	16067.00	744.108
273.15	18074.30	745.354
273.15	20036.30	746.555
273.15	21999.70	747.737
273.15	23995.50	748.923
273.15	25993.50	750.093
273.15	27981.50	751.238
273.15	29875.50	752.316
293.15	101.69	717.968
293.15	1184.28	718.847
293.15	2129.17	719.604
293.15	3960.49	721.055
293.15	6115.45	722.729
293.15	7981.56	724.145
293.15	10014.70	725.663
293.15	12148.60	727.214
293.15	13981.10	728.526
293.15	16170.10	730.062
293.15	17942.90	731.285
293.15	20200.00	732.813
293.15	22156.50	734.115

293.15	24157.90	735.421
293.15	26136.50	736.696
293.15	28126.30	737.958
293.15	29978.50	739.115
313.15	98.73	702.339
313.15	1168.73	703.323
313.15	2131.95	704.205
313.15	3967.37	705.852
313.15	6162.29	707.777
313.15	8113.86	709.449
313.15	10023.50	711.038
313.15	12172.80	712.791
313.15	14170.00	714.384
313.15	16194.40	715.964
313.15	17956.10	717.315
313.15	20057.40	718.889
313.15	22190.80	720.459
313.15	24136.30	721.862
313.15	26139.10	723.282
313.15	28073.10	724.629
313.15	29972.40	725.932
333.15	102.84	686.431
333.15	1137.45	687.521
333.15	2113.93	688.539
333.15	4162.71	690.632
333.15	6145.33	692.599
333.15	8151.89	694.535
333.15	10023.60	696.296
333.15	12113.90	698.208
333.15	14126.60	700.005
333.15	15989.20	701.627
333.15	18027.40	703.362
333.15	19954.20	704.977
333.15	22112.40	706.723
333.15	24079.90	708.292
333.15	26037.60	709.821
333.15	28054.20	711.366
333.15	29912.30	712.772
353.15	97.13	671.217
353.15	2136.70	672.617
353.15	6141.90	677.222
353.15	8110.87	679.378
353.15	10054.10	681.439
353.15	12124.00	683.57

353.15	14143.80	685.589
353.15	15989.00	687.385
353.15	18010.60	689.305
353.15	20035.80	691.174
353.15	21991.10	692.938
353.15	23964.80	694.678
353.15	25968.30	696.403
353.15	27955.30	698.078
353.15	29938.70	699.718
373.15	102.37	653.427
373.15	1227.94	655.018
373.15	2148.86	656.298
373.15	4131.53	658.968
373.15	6127.03	661.551
373.15	8138.76	664.058
373.15	10022.20	666.323
373.15	12111.60	668.749
373.15	14118.80	671.003
373.15	16133.90	673.197
373.15	18104.00	675.276
373.15	20078.30	677.302
373.15	22063.50	679.286
373.15	23987.70	681.158
373.15	26124.00	683.184
373.15	28010.20	684.93
373.15	29904.70	686.647

Reference https://www.doi.org/10.1016/j.jct.2008.02.020

Pressure, kPa	Temperature, K	Mass density, kg/m3
100.00	298.15	713.93
Reference		https://www.doi.org/10.1016/j.jct.2017.09.027

Temperature, K	Pressure, kPa	Mass density, kg/m3
283.15	1010.00	726.22
283.15	5040.00	729.17
283.15	10020.00	732.75
283.15	15020.00	736.14
283.15	20040.00	739.41
283.15	25020.00	742.54
283.15	30040.00	745.52

283.15	35050.00	748.45
283.15	40010.00	751.23
283.15	45050.00	753.99
283.15	50010.00	756.62
283.15	55020.00	759.19
283.15	60030.00	761.66
283.15	65010.00	764.08
283.15	5020.00	729.22
298.15	1020.00	714.83
298.15	5010.00	718.08
298.15	10030.00	721.94
298.15	15060.00	725.7
298.15	20040.00	729.17
298.15	25040.00	732.54
298.15	30010.00	735.76
298.15	35050.00	738.87
298.15	40010.00	741.88
298.15	45060.00	744.79
298.15	50010.00	747.56
298.15	55040.00	750.31
298.15	60020.00	752.92
298.15	65010.00	755.48
298.15	5040.00	718.12
323.15	1030.00	695.27
323.15	5030.00	699.04
323.15	10050.00	703.57
323.15	15020.00	707.81
323.15	20050.00	711.84
323.15	25020.00	715.63
323.15	30020.00	719.22
323.15	35080.00	722.75
323.15	40050.00	726.09
323.15	45060.00	729.27
323.15	50030.00	732.36
323.15	55050.00	735.35
323.15	60010.00	738.19
323.15	65010.00	741.02
323.15	5060.00	699.09
348.15	1010.00	675.18
348.15	5040.00	679.76
348.15	10030.00	685.0
348.15	15020.00	689.84
348.15	20040.00	694.44
348.15	25050.00	698.79

348.15	30030.00	702.84
348.15	35050.00	706.74
348.15	40020.00	710.4
348.15	45070.00	714.01
348.15	50040.00	717.37
348.15	55050.00	720.67
348.15	60000.00	723.79
348.15	65040.00	726.84
348.15	5030.00	679.76
373.15	1010.00	654.52
373.15	5050.00	659.99
373.15	10030.00	666.13
373.15	15070.00	671.78
373.15	20030.00	677.04
373.15	25060.00	681.94
373.15	30040.00	686.51
373.15	35060.00	690.83
373.15	40020.00	694.95
373.15	45070.00	698.87
373.15	50070.00	702.65
373.15	55060.00	706.23
373.15	60040.00	709.66
373.15	65030.00	712.95
373.15	5050.00	659.99
398.15	1020.00	633.06
398.15	5020.00	639.53
398.15	10050.00	646.89
398.15	15070.00	653.53
398.15	20020.00	659.49
398.15	25030.00	665.05
398.15	30050.00	670.22
398.15	35050.00	675.1
398.15	40020.00	679.63
398.15	45070.00	683.97
398.15	50020.00	688.07
398.15	55040.00	692.01
398.15	60030.00	695.72
398.15	65040.00	699.37
398.15	5030.00	639.58
423.15	1020.00	610.45
423.15	5030.00	618.42
423.15	10030.00	627.15
423.15	15030.00	634.86
423.15	20040.00	641.8

423.15	25040.00	648.1
423.15	30020.00	653.92
423.15	35050.00	659.35
423.15	40020.00	664.4
423.15	45020.00	669.15
423.15	50040.00	673.7
423.15	55020.00	677.97
423.15	60030.00	682.03
423.15	65040.00	685.95
423.15	5030.00	618.47
448.15	1000.00	586.37
448.15	5020.00	596.41
448.15	10040.00	607.05
448.15	15010.00	616.06
448.15	20010.00	624.0
448.15	25040.00	631.27
448.15	30030.00	637.78
448.15	35030.00	643.8
448.15	40010.00	649.38
448.15	45050.00	654.67
448.15	50020.00	659.58
448.15	55040.00	664.24
448.15	60030.00	668.62
448.15	65020.00	672.85
448.15	5020.00	596.46
473.15	5010.00	573.14
473.15	10040.00	586.15
473.15	15040.00	596.86
473.15	20020.00	606.05
473.15	25050.00	614.28
473.15	30020.00	621.6
473.15	35030.00	628.3
473.15	40050.00	634.51
473.15	45050.00	640.25
473.15	50040.00	645.6
473.15	55020.00	650.62
473.15	60010.00	655.39
473.15	65010.00	659.92
473.15	5010.00	573.14
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Reference

https://www.doi.org/10.1016/j.jct.2018.04.019

293.21	1993.00	719.36
293.21	3991.00	721.16
293.21	5993.00	722.88
293.21	7996.00	724.42
293.21	10001.00	725.92
293.21	13001.00	728.0
293.22	16000.00	730.02
293.21	19004.00	732.11
293.21	22005.00	734.14
293.21	24997.00	736.13
293.21	27997.00	738.31
293.21	29995.00	739.58
313.11	2000.00	704.08
313.11	4007.00	705.88
313.11	6006.00	707.62
313.11	8004.00	709.24
313.11	10007.00	710.92
313.11	13003.00	713.28
313.11	16007.00	715.76
313.10	19007.00	718.18
313.10	22007.00	720.52
313.10	25009.00	722.7
313.10	28007.00	724.82
313.10	30010.00	726.21
333.00	2014.00	688.53
333.00	3990.00	690.6
333.00	5995.00	692.58
333.01	8001.00	694.51
333.01	10007.00	696.11
333.01	13004.00	698.84
333.01	16002.00	701.48
333.01	19006.00	704.03
333.01	22003.00	706.5
333.01	25006.00	708.9
333.01	28003.00	711.23
333.01	30012.00	712.74
353.12	2004.00	672.27
353.12	3995.00	674.59
353.12	6000.00	676.83
353.12	8005.00	679.1
353.12	10010.00	681.31
353.12	13002.00	684.37
353.12	16003.00	687.3
353.12	18999.00	689.99

353.12	22002.00	692.72
353.12	25004.00	695.35
353.12	28007.00	697.9
353.12	30003.00	699.56

Reference

https://www.doi.org/10.1021/acs.jced.7b00650

Pressure, kPa	Temperature, K	Mass density, kg/m3
100.00	283.15	725.6
100.00	288.15	721.6
100.00	293.15	717.8
100.00	298.15	713.7
100.00	303.15	709.9
100.00	308.15	706.0
100.00	313.15	701.9
100.00	318.15	698.1
100.00	323.15	694.1
3000.00	283.15	727.7
3000.00	288.15	723.8
3000.00	293.15	720.0
3000.00	298.15	716.1
3000.00	303.15	712.3
3000.00	308.15	708.5
3000.00	313.15	704.5
3000.00	318.15	700.7
3000.00	323.15	696.9
5000.00	283.15	729.1
5000.00	288.15	725.3
5000.00	293.15	721.5
5000.00	298.15	717.7
5000.00	303.15	713.9
5000.00	308.15	710.1
5000.00	313.15	706.3
5000.00	318.15	702.4
5000.00	323.15	698.6
7500.00	283.15	730.8
7500.00	288.15	727.0
7500.00	293.15	723.4
7500.00	298.15	719.5
7500.00	303.15	715.8
7500.00	308.15	712.1
7500.00	313.15	708.3
7500.00	318.15	704.6

7500.00	323.15	700.8
10000.00	283.15	732.6
10000.00	288.15	728.9
10000.00	293.15	725.2
10000.00	298.15	721.5
10000.00	303.15	717.8
10000.00	308.15	714.2
10000.00	313.15	710.4
10000.00	318.15	706.8
10000.00	323.15	703.0
20000.00	283.15	739.2
20000.00	288.15	735.7
20000.00	293.15	732.2
20000.00	298.15	728.7
20000.00	303.15	725.2
20000.00	308.15	721.7
20000.00	313.15	718.2
20000.00	318.15	714.7
20000.00	323.15	711.2
30000.00	283.15	745.3
30000.00	288.15	742.0
30000.00	293.15	738.7
30000.00	298.15	735.2
30000.00	303.15	731.9
30000.00	308.15	728.5
30000.00	313.15	725.3
30000.00	318.15	721.9
30000.00	323.15	718.6
40000.00	283.15	751.1
40000.00	288.15	747.9
40000.00	293.15	744.6
40000.00	298.15	741.4
40000.00	303.15	738.2
40000.00	308.15	735.0
40000.00	313.15	731.8
40000.00	318.15	728.6
40000.00	323.15	725.4
50000.00	283.15	756.4
50000.00	288.15	753.4
50000.00	293.15	750.3
50000.00	298.15	747.1
50000.00	303.15	744.1
50000.00	308.15	740.9
50000.00	313.15	737.8

318.15	734.8
323.15	731.6
283.15	761.6
288.15	758.5
293.15	755.5
298.15	752.5
303.15	749.5
308.15	746.6
313.15	743.5
318.15	740.5
323.15	737.5
	323.15 283.15 288.15 293.15 298.15 303.15 308.15 318.15

Reference

https://www.doi.org/10.1021/je8006875

Speed of sound, m/s

Pressure, kPa - Liquid	Temperature, K - Liquid	Speed of sound, m/s - Liquid
100.00	293.15	1226.379
100.00	313.15	1146.226
100.00	333.15	1068.198
100.00	353.15	992.6189
100.00	373.15	922.1599
100.00	393.15	867.4314
10000.00	293.15	1288.02
10000.00	313.15	1212.824
10000.00	333.15	1140.94
10000.00	353.15	1072.568
10000.00	373.15	1004.987
10000.00	393.15	946.865
20000.00	293.15	1344.821
20000.00	313.15	1274.241
20000.00	333.15	1206.915
20000.00	353.15	1142.609
20000.00	373.15	1081.282
20000.00	393.15	1022.924
30000.00	293.15	1396.854
30000.00	313.15	1329.834
30000.00	333.15	1266.203
30000.00	353.15	1205.597
30000.00	373.15	1148.091
30000.00	393.15	1093.674

40000.00	293.15	1445.084
40000.00	313.15	1380.943
40000.00	353.15	1262.461
40000.00	373.15	1207.979
40000.00	393.15	1156.595
50000.00	293.15	1490.057
50000.00	313.15	1428.288
50000.00	333.15	1369.835
50000.00	353.15	1314.591
50000.00	373.15	1262.528
50000.00	393.15	1213.59
60000.00	293.15	1532.464
60000.00	313.15	1472.742
60000.00	333.15	1416.313
60000.00	353.15	1363.169
60000.00	373.15	1313.133
60000.00	393.15	1266.136
70000.00	293.15	1572.512
70000.00	313.15	1514.719
70000.00	333.15	1460.059
70000.00	353.15	1408.501
70000.00	373.15	1360.053
70000.00	393.15	1314.71
80000.00	293.15	1610.591
80000.00	313.15	1554.351
80000.00	333.15	1501.308
80000.00	353.15	1451.316
80000.00	373.15	1404.349
80000.00	393.15	1360.387
90000.00	293.15	1646.928
90000.00	313.15	1592.049
90000.00	333.15	1540.349
90000.00	353.15	1491.697
90000.00	373.15	1446.071
90000.00	393.15	1403.307
100000.00	293.15	1681.563
100000.00	313.15	1628.026
100000.00	333.15	1577.369
100000.00	353.15	1529.841
100000.00	373.15	1485.463
100000.00	393.15	1443.653
Reference	https:/	//www.doi.org/10.1007/s10765-006-0079-5

Sources

Carbonate with Alkanes (C9 to C10) at

101.3 kPa:

https://www.doi.org/10.1016/j.jct.2010.12.019 Activity coefficients at infinite dilution The solutes in the ionic liquid Activity and finite dilution and all wise of him to the ionic liquid Activity and finite dilution and all wise of him to the ionic liquid and the solution of of organic solutes in the ionic liquid https://www.doi.org/10.1016/j.fluid.2006.02.003 http://link.springer.com/article/10.1007/BF02311772 Liquids Using Inverse Gas Chiving coefficients at infinite dilution of hydrocarbons, alkylbenzenes, and Liquids Using Inverse Gas
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       n-Pentane, n-Octane, and n-Nonane
รคยสายตายกุรสามาพาหายเชียงเอา
รายายกระทางการเขาสมาชาย
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with n-Octane, n-Nonane, and

n-Decane:

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multicomponent systems containing

cyclohexylamine:

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  aliphatic hydrocarbons:
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473.15)K and at pressures up to

390MPa:

Densities and Viscosities of Corn Oil + n-Alkanes Blends from (288.15 to Man spremarts of pativity coefficients n-Alkanes Blends from (288.15 to Meass) on any of mativity coefficients at infinite dilution of aromatic and Expersed rolar extraorries and Expersed rolar ARTINION Refficients at infinite dilution measurement for analyse solutes and weight him to the property of th Wateriname to neudique to invalidation with the profession of the control of the and physicochemical properties for Departies angles is a sweer of the removing Mixingres of Heptane, Octane, Nonane, 472-Hexido Repersyle 4 Faret Round or Kitolinium หีให็น่อาฮ์เทเร(perfluoroethyl)phosphate:

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partial piece of the demany real research methyl is the demany of the demand of th https://www.doi.org/10.1016/j.fluid.2004.12.013

af: Acentric Factor

is the part thyl) sulfonyl imide

aigt: Autoignition Temperature

Aniline Point ap:

chl: Standard liquid enthalpy of combustion

Ideal gas heat capacity cpg: cpl: Liquid phase heat capacity

Dynamic viscosity dvisc:

fII: Lower Flammability Limit Upper Flammability Limit flu:

Flash Point (Open Cup Method) fpo:

gf: Standard Gibbs free energy of formation

hcg: Heat of Combustion, Gross form hcn: Heat of Combustion, Net Form

hf: Enthalpy of formation at standard conditions

hfl: Liquid phase enthalpy of formation at standard conditions

hfus: Enthalpy of fusion at standard conditions hfust: Enthalpy of fusion at a given temperature

hsubt: Enthalpy of sublimation at a given temperaturehvap: Enthalpy of vaporization at standard conditionshvapt: Enthalpy of vaporization at a given temperature

ie: Ionization energy

log10ws: Log10 of Water solubility in mol/llogp: Octanol/Water partition coefficientmcvol: McGowan's characteristic volume

nfpaf: NFPA Fire Rating
pc: Critical Pressure
pvap: Vapor pressure
rfi: Refractive Index
rhoc: Critical density
rhol: Liquid Density

rinpol: Non-polar retention indices

sg: Molar entropy at standard conditions

sl: Liquid phase molar entropy at standard conditions

speedsl: Speed of sound in fluid

srf: Surface Tension

tb: Normal Boiling Point Temperature

tc: Critical Temperature

tf: Normal melting (fusion) pointtt: Triple Point Temperature

vc: Critical Volume

zc: Critical Compressibility
zra: Rackett Parameter

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https://www.chemeo.com/cid/65-577-0/Nonane.pdf

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