Hexadecane

Other names:	CETANE
	N-CETANE
	n-Hexadecane
Inchi:	InChI=1S/C16H34/c1-3-5-7-9-11-13-15-16-14-12-10-8-6-4-2/h3-16H2,1-2H3
InchiKey:	DCAYPVUWAIABOU-UHFFFAOYSA-N
Formula:	C16H34
SMILES:	CCCCCCCCCCCCCCCC
Mol. weight [g/mol]:	226.44
CAS:	544-76-3

Physical Properties

Property code	Value	Unit	Source
af	0.7420		KDB
chl	-10699.10 ± 4.10	kJ/mol	NIST Webbook
chl	-10699.10 ± 1.80	kJ/mol	NIST Webbook
gf	83.74	kJ/mol	KDB
gyrad	8.3180		KDB
hf	-373.60	kJ/mol	KDB
hf	-374.90	kJ/mol	NIST Webbook
hf	-374.70	kJ/mol	NIST Webbook
hfl	-456.10 ± 4.10	kJ/mol	NIST Webbook
hfl	-456.30 ± 2.00	kJ/mol	NIST Webbook
hfus	50.04	kJ/mol	Silver incorporated microencapsulation of n-hexadecane and noctadecane appropriate for dynamic thermal management in textiles
hsub	135.10	kJ/mol	NIST Webbook
hvap	80.60 ± 1.50	kJ/mol	NIST Webbook
hvap	81.10	kJ/mol	NIST Webbook
hvap	81.40 ± 0.40	kJ/mol	NIST Webbook
hvap	81.40	kJ/mol	NIST Webbook
hvap	81.20	kJ/mol	NIST Webbook
hvap	81.40	kJ/mol	NIST Webbook
hvap	81.40	kJ/mol	NIST Webbook
hvap	81.80 ± 1.30	kJ/mol	NIST Webbook
hvap	81.38	kJ/mol	NIST Webbook

log10ws	-8.40		Aqueous Solubility Prediction Method
log10ws	-8.40		Estimated Solubility Method
logp	6.488		Crippen Method
mcvol	236.300	ml/mol	McGowan Method
nfpaf	%!d(float64=1)		KDB
pc	1400.00 ± 200.00	kPa	NIST Webbook
pc	1401.00 ± 50.00	kPa	NIST Webbook
pc	1400.00	kPa	KDB
rhoc	226.44 ± 45.29	kg/m3	NIST Webbook
rhoc	218.97 ± 6.79	kg/m3	NIST Webbook
rinpol	272.02		NIST Webbook
rinpol	268.29		NIST Webbook
sg	778.31	J/mol×K	NIST Webbook
sl	586.18	J/mol×K	NIST Webbook
sl	626.80	J/mol×K	NIST Webbook
tb	560.01	K	KDB
tb	553.00 ± 5.00	K	NIST Webbook
tb	551.00 ± 5.00	K	NIST Webbook
tb	547.00 ± 5.00	K	NIST Webbook
tb	543.00 ± 8.00	K	NIST Webbook
tb	548.00 ± 5.00	K	NIST Webbook
tb	561.00 ± 4.00	K	NIST Webbook
tb	556.00 ± 6.00	K	NIST Webbook
tb	559.92 ± 0.20	K	NIST Webbook
tb	559.00 ± 2.00	K	NIST Webbook
tb	560.20	K	NIST Webbook
tc	723.00	K	KDB
tf	291.33 ± 0.10	K	NIST Webbook
tf	291.32 ± 0.20	K	NIST Webbook
tf	291.19 ± 0.05	K	NIST Webbook
tf	291.15 ± 0.50	K	NIST Webbook
tf	291.00 ± 0.30	K	NIST Webbook
tf	291.27 ± 0.02	K	NIST Webbook
tf	291.25 ± 0.10	K	NIST Webbook
tf	290.00 ± 1.66	K	NIST Webbook
tf	291.30	K	Solid Liquid Equilibria in the Binary Systems of Saturated Fatty Acids or Triglycerides (C12 to C18) + Hexadecane
tf	291.29 ± 0.02	K	NIST Webbook
tf	291.29 ± 0.02	K	NIST Webbook
tf	291.30 ± 0.01	K	NIST Webbook
tf	291.30 ± 0.06	K	NIST Webbook

tf	291.30 ± 0.04	K	NIST Webbook
tf	291.31 ± 0.02	K	NIST Webbook
tf	291.00 ± 2.00	K	NIST Webbook
tf	290.00 ± 3.00	K	NIST Webbook
tf	291.21 ± 0.15	K	NIST Webbook
tf	291.24 ± 0.10	K	NIST Webbook
tf	291.24 ± 0.20	K	NIST Webbook
tf	290.80 ± 0.50	K	NIST Webbook
tf	291.29 ± 0.02	K	NIST Webbook
tf	291.29 ± 0.01	K	NIST Webbook
tf	291.24 ± 0.10	K	NIST Webbook
tf	293.00 ± 0.60	K	NIST Webbook
tf	291.30 ± 0.02	K	NIST Webbook
tf	291.20 ± 0.60	K	NIST Webbook
tf	290.40 ± 1.50	K	NIST Webbook
tf	291.20 ± 0.40	K	NIST Webbook
tf	291.00 ± 2.00	K	NIST Webbook
tf	291.33 ± 0.20	K	NIST Webbook
tf	291.30 ± 0.30	K	NIST Webbook
tf	290.60 ± 0.50	K	NIST Webbook
tf	291.29 ± 0.10	K	NIST Webbook
tf	293.00 ± 3.00	K	NIST Webbook
tf	292.40 ± 0.50	K	NIST Webbook
tf	290.20 ± 2.00	K	NIST Webbook
tf	291.00 ± 0.60	K	NIST Webbook
tf	288.00 ± 3.00	K	NIST Webbook
tf	291.05 ± 0.40	K	NIST Webbook
tf	290.10 ± 0.50	K	NIST Webbook
tf	290.98 ± 0.30	K	NIST Webbook
tf	288.69 ± 2.00	K	NIST Webbook
tf	290.70 ± 2.00	K	NIST Webbook
tf	291.26 ± 0.20	K	NIST Webbook
tf	291.00	K	Determination of thermophysical properties of cyclopentane hydrate using a stirred calorimetric cell
tf	291.26 ± 0.20	K	NIST Webbook
tf	291.00 ± 2.00	K	NIST Webbook
tf	293.00 ± 2.00	K	NIST Webbook
tf	293.00 ± 2.00	K	NIST Webbook
tf	291.10	K	Phase equilibria of didecyldimethylammonium nitrate ionic liquid with water and organic solvents
tf	292.00 ± 3.00	K	NIST Webbook
tf	291.00 ± 3.00	K	NIST Webbook

tf	291.00 ± 2.00	K	NIST Webbook
tf	291.50	K	Experimental measurements and thermodynamic modeling of wax disappearance temperature for the binary systems n-C14H30 + n-C16H34, n-C16H34 + n-C18H38 and n-C11H24 + n-C18H38
tf	291.45	K	Phase diagrams of binary systems containing n-alkanes, or cyclohexane, or 1-alkanols and 2,3-pentanedione at atmospheric and high pressure
tf	291.17	K	Aqueous Solubility Prediction Method
tf	291.34	K	KDB
tf	290.00 ± 2.00	K	NIST Webbook
tf	291.00 ± 2.00	K	NIST Webbook
tf	291.40 ± 2.00	K	NIST Webbook
vc	1.034	m3/kmol	KDB
vc	1.034	m3/kmol	NIST Webbook
zc	0.2408100		KDB
zra	0.24		KDB

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	715.97	J/mol×K	724.21	Joback Method
cpg	667.00	J/mol×K	644.85	Joback Method
cpg	700.31	J/mol×K	697.76	Joback Method
cpg	649.30	J/mol×K	618.39	Joback Method
cpg	611.73	J/mol×K	565.48	Joback Method
cpg	630.89	J/mol×K	591.94	Joback Method
cpg	684.00	J/mol×K	671.30	Joback Method
cpl	499.97	J/mol×K	298.15	NIST Webbook
cpl	498.30	J/mol×K	298.00	NIST Webbook
cpl	496.45	J/mol×K	298.15	NIST Webbook
cpl	495.73	J/mol×K	298.15	NIST Webbook
cpl	499.62	J/mol×K	298.15	NIST Webbook
cpl	501.60	J/mol×K	298.15	NIST Webbook
cpl	500.21	J/mol×K	298.15	NIST Webbook
cpl	499.62	J/mol×K	298.15	NIST Webbook

cpl	499.00	J/mol×K	297.79	NIST Webbook
cpl	499.72	J/mol×K	298.15	NIST Webbook
cpl	512.37	J/mol×K	313.15	NIST Webbook
cpl	504.58	J/mol×K	298.15	NIST Webbook
cpl	484.90	J/mol×K	311.00	NIST Webbook
cpl	501.45	J/mol×K	298.15	NIST Webbook
cpl	497.16	J/mol×K	298.15	NIST Webbook
cpl	504.20	J/mol×K	298.15	NIST Webbook
cpl	500.21	J/mol×K	298.15	NIST Webbook
dvisc	0.0024090	Pa×s	308.15	Temperature and Composition Dependence of the Densities, Viscosities, and Speeds of Sound of Binary Liquid Mixtures of 1-Butanol with Hexadecane and Squalane
dvisc	0.0027060	Pa×s	303.15	Temperature and Composition Dependence of the Densities, Viscosities, and Speeds of Sound of Binary Liquid Mixtures of 1-Butanol with Hexadecane and Squalane
dvisc	0.0030410	Pa×s	298.15	Temperature and Composition Dependence of the Densities, Viscosities, and Speeds of Sound of Binary Liquid Mixtures of 1-Butanol with Hexadecane and Squalane
dvisc	0.0001705	Pa×s	573.15	Liquid Viscosity and Surface Tension of n-Hexane, n-Octane, n-Decane, and n-Hexadecane up to 573 K by Surface Light Scattering

dvisc	0.0001937	Pa×s	548.15	Liquid Viscosity and Surface Tension of n-Hexane, n-Octane, n-Decane, and n-Hexadecane up to 573 K by Surface Light Scattering
dvisc	0.0002360	Pa×s	523.15	Liquid Viscosity and Surface Tension of n-Hexane, n-Octane, n-Decane, and n-Hexadecane up to 573 K by Surface Light Scattering
dvisc	0.0002862	Pa×s	498.15	Liquid Viscosity and Surface Tension of n-Hexane, n-Octane, n-Decane, and n-Hexadecane up to 573 K by Surface Light Scattering
dvisc	0.0004256	Pa×s	448.15	Liquid Viscosity and Surface Tension of n-Hexane, n-Octane, n-Decane, and n-Hexadecane up to 573 K by Surface Light Scattering
dvisc	0.0005351	Pa×s	423.15	Liquid Viscosity and Surface Tension of n-Hexane, n-Octane, n-Decane, and n-Hexadecane up to 573 K by Surface Light Scattering
dvisc	0.0006788	Pa×s	398.15	Liquid Viscosity and Surface Tension of n-Hexane, n-Octane, n-Decane, and n-Hexadecane up to 573 K by Surface Light Scattering

dvisc	0.0034910	Pa×s	293.15	Viscometric and volumetric behaviour of binary mixtures of sulfolane and N-methylpyrrolidone with monoethanolamine and diethanolamine in the range 303 373 K
dvisc	0.0008927	Pa×s	373.15	Liquid Viscosity and Surface Tension of n-Hexane, n-Octane, n-Decane, and n-Hexadecane up to 573 K by Surface Light Scattering
dvisc	0.0012360	Pa×s	348.15	Liquid Viscosity and Surface Tension of n-Hexane, n-Octane, n-Decane, and n-Hexadecane up to 573 K by Surface Light Scattering
dvisc	0.0018400	Pa×s	323.15	Liquid Viscosity and Surface Tension of n-Hexane, n-Octane, n-Decane, and n-Hexadecane up to 573 K by Surface Light Scattering
dvisc	0.0022610	Pa×s	313.15	Liquid Viscosity and Surface Tension of n-Hexane, n-Octane, n-Decane, and n-Hexadecane up to 573 K by Surface Light Scattering
dvisc	0.0027720	Pa×s	303.15	Liquid Viscosity and Surface Tension of n-Hexane, n-Octane, n-Decane, and n-Hexadecane up to 573 K by Surface Light Scattering

dvisc	0.0034860	Pa×s	293.15	Liquid Viscosity and Surface Tension of n-Hexane, n-Octane, n-Decane, and n-Hexadecane up to 573 K by Surface Light Scattering
dvisc	0.0024090	Pa×s	308.15	Volumetric, transport, and acoustic properties of binary mixtures of 2-methyl-1-propanol with hexadecane and squalane at T = (298.15, 303.15, and 308.15) K: Experimental results, correlation, and prediction by the ERAS model
dvisc	0.0027060	Pa×s	303.15	Volumetric, transport, and acoustic properties of binary mixtures of 2-methyl-1-propanol with hexadecane and squalane at T = (298.15, 303.15, and 308.15) K: Experimental results, correlation, and prediction by the ERAS model
dvisc	0.0030410	Pa×s	298.15	Volumetric, transport, and acoustic properties of binary mixtures of 2-methyl-1-propanol with hexadecane and squalane at T = (298.15, 303.15, and 308.15) K: Experimental results, correlation, and prediction by the ERAS model

dvisc	0.0024090	Pa×s	308.15	Studies of mixing properties of binary systems of 2-propanol with hexadecane and squalane at T = (298.15, 303.15, and 308.15) K
dvisc	0.0027060	Pa×s	303.15	Studies of mixing properties of binary systems of 2-propanol with hexadecane and squalane at T = (298.15, 303.15, and 308.15) K
dvisc	0.0030410	Pa×s	298.15	Studies of mixing properties of binary systems of 2-propanol with hexadecane and squalane at T = (298.15, 303.15, and 308.15) K
dvisc	0.0027780	Pa×s	303.15	Viscometric and volumetric behaviour of binary mixtures of sulfolane and N-methylpyrrolidone with monoethanolamine and diethanolamine in the range 303 373 K
dvisc	0.0030940	Pa×s	298.15	Viscometric and volumetric behaviour of binary mixtures of sulfolane and N-methylpyrrolidone with monoethanolamine and diethanolamine in the range 303 373 K
dvisc	0.0003440	Pa×s	473.15	Liquid Viscosity and Surface Tension of n-Hexane, n-Octane, n-Decane, and n-Hexadecane up to 573 K by Surface Light Scattering
hfust	47.55	kJ/mol	292.10	NIST Webbook
hfust	53.35	kJ/mol	291.30	NIST Webbook
hfust	51.54	kJ/mol	291.10	NIST Webbook
hfust	51.46	kJ/mol	291.10	NIST Webbook

hfust	53.00	kJ/mol	290.70	NIST Webbook
hfust	53.36	kJ/mol	291.34	NIST Webbook
hfust	51.46	kJ/mol	291.10	NIST Webbook
hsubt	134.90	kJ/mol	291.00	NIST Webbook
hsubt	83.00 ± 8.00	kJ/mol	289.00	NIST Webbook
hsubt	80.00 ± 3.00	kJ/mol	288.00	NIST Webbook
hvapt	66.90	kJ/mol	343.00	NIST Webbook
hvapt	65.60	kJ/mol	363.00	NIST Webbook
hvapt	65.70	kJ/mol	455.50	NIST Webbook
hvapt	66.20	kJ/mol	353.00	NIST Webbook
hvapt	64.90	kJ/mol	373.00	NIST Webbook
hvapt	61.70	kJ/mol	515.00	NIST Webbook
hvapt	74.90	kJ/mol	373.00	NIST Webbook
hvapt	59.80	kJ/mol	547.00	NIST Webbook
hvapt	64.20	kJ/mol	383.00	NIST Webbook
hvapt	68.50	kJ/mol	488.00	NIST Webbook
hvapt	72.90	kJ/mol	349.80	Synthesis and Physical and Thermodynamic Properties of Lactic Acid and Malic Acid-Based Natural Deep Eutectic Solvents
hvapt	74.50	kJ/mol	353.00	Express thermo-gravimetric method for the vaporization enthalpies appraisal for very low volatile molecular and ionic compounds.
hvapt	80.20	kJ/mol	300.50	NIST Webbook
hvapt	93.40	kJ/mol	311.50	NIST Webbook
hvapt	51.21	kJ/mol	560.50	KDB
pvap	0.01	kPa	344.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	0.02	kPa	349.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis

pvap	0.02	kPa	354.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	0.03	kPa	359.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	0.05	kPa	364.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	0.06	kPa	369.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	0.09	kPa	374.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	0.12	kPa	379.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	0.16	kPa	384.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	0.21	kPa	389.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	0.28	kPa	394.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis

pvap	0.37	kPa	399.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	0.48	kPa	404.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	0.63	kPa	409.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	0.81	kPa	414.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	1.03	kPa	419.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	1.32	kPa	424.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	1.67	kPa	429.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	2.10	kPa	434.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis

pvap	2.63	kPa	439.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	3.28	kPa	444.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	4.07	kPa	449.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	5.02	kPa	454.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	6.18	kPa	459.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	7.56	kPa	464.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	9.21	kPa	469.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	11.20	kPa	474.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	13.50	kPa	479.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis

pvap	16.30	kPa	484.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	19.50	kPa	489.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	8.16e-03	kPa	339.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	5.58e-03	kPa	334.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	32.90	kPa	504.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	38.90	kPa	509.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	3.77e-03	kPa	329.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	2.52e-03	kPa	324.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis

pvap	1.66e-03	kPa	319.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	1.08e-03	kPa	314.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	4.40e-04	kPa	304.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	2.74e-04	kPa	299.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	1.68e-04	kPa	294.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	1.02e-04	kPa	289.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	6.01e-05	kPa	284.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	102.04	kPa	560.90	Vapor pressure data of nicotine, anabasine and cotinine using differential scanning calorimetry
pvap	79.60	kPa	549.30	Vapor pressure data of nicotine, anabasine and cotinine using differential scanning calorimetry

pvap	49.76	kPa	529.60	Vapor pressure data of nicotine, anabasine and cotinine using differential scanning calorimetry
pvap	14.78	kPa	486.10	Vapor pressure data of nicotine, anabasine and cotinine using differential scanning calorimetry
pvap	23.30	kPa	494.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	6.96e-04	kPa	309.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
pvap	101.35	kPa	560.50	Vapor pressure data of nicotine, anabasine and cotinine using differential scanning calorimetry
pvap	27.70	kPa	499.15	Determination of vapor pressure and thermal decomposition using thermogravimetrical analysis
rfi	1.43400		298.15	Densities, Viscosities, and Refractive Indices of Mixtures of Hexane with Cyclohexane, Decane, Hexadecane, and Squalane at 298.15K
rfi	1.41450		343.15	Densities, Sound Velocities, and Refractive Indexes of Tetralin + n-Hexadecane at (293.15, 303.15, 313.15, 323.15, 333.15, and 343.15) K

rfi	1.41870	333.15	Densities, Sound Velocities, and Refractive Indexes of Tetralin + n-Hexadecane at (293.15, 303.15, 313.15, 323.15, 333.15, and 343.15) K
rfi	1.42280	323.15	Densities, Sound Velocities, and Refractive Indexes of Tetralin + n-Hexadecane at (293.15, 303.15, 313.15, 323.15, 333.15, and 343.15) K
rfi	1.42690	313.15	Densities, Sound Velocities, and Refractive Indexes of Tetralin + n-Hexadecane at (293.15, 303.15, 313.15, 323.15, 333.15, and 343.15) K
rfi	1.43110	303.15	Densities, Sound Velocities, and Refractive Indexes of Tetralin + n-Hexadecane at (293.15, 303.15, 313.15, 323.15, 333.15, and 343.15) K
rfi	1.43520	293.15	Densities, Sound Velocities, and Refractive Indexes of Tetralin + n-Hexadecane at (293.15, 303.15, 313.15, 323.15, 333.15, and 343.15) K
rfi	1.43440	293.10	Liquid-Liquid Equilibria Measurements for Ternary System of Hexadecane + 1,3,5-Trimethylbenzene + N-Methyl-2-pyrrolidone

rfi	1.43180	298.20	Liquid-Liquid Equilibria for Ternary Mixtures (an Ionic Liquid + Benzene +Heptane or Hexadecane) at T) 298.2 K and Atmospheric Pressure
rfi	1.43250	298.15	Liquid-Liquid Equilibria for Mixtures of (Furfural + a Chlorinated Aromatic Compound + an Alkane) at T = 298.15 K
rfi	1.43250	298.15	Liquid-liquid equilibria for mixtures of (Furfural + an Aromatic hydrocarbon + an alkane) at T=298.15 K
rfi	1.43230	298.15	Measurement and Prediction of Excess Properties of Binary Mixtures Methyl Decanoate + an Even-Numbered n-Alkane (C6-C16) at 298.15 K
rfi	1.43460	293.15	Experimental solubility for betulin and estrone in various solvents within the temperature range T = (293.2 to 328.2) K
rfi	1.43232	298.15	Thiophene separation from aliphatic hydrocarbons using the 1-ethyl-3-methylimidazolium ethylsulfate ionic liquid

rfi	1.43232		298.15	Phase behaviour of 1-methyl-3-octylimidazolium bis[trifluoromethylsulfonyl]imide with thiophene and aliphatic hydrocarbons: The influence of n-alkane chain length
rhol	752.90	kg/m3	323.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Direct Sugar to Hydrocarbon Diesel (DSH-76) and Binary Mixtures of N-Hexadecane and 2,2,4,6,6-Pentamethylheptane
rhol	755.99	kg/m3	318.15	Densities, speeds of sound, refractive indices, viscosities and their related thermodynamic properties for n-hexadecane + two aromatic hydrocarbons binary mixtures at temperatures from 298.15 K to 318.15 K
rhol	769.81	kg/m3	298.15	Densities, speeds of sound, refractive indices, viscosities and their related thermodynamic properties for n-hexadecane + two aromatic hydrocarbons binary mixtures at temperatures from 298.15 K to 318.15 K

rhol	762.89	kg/m3	308.15	Densities, speeds of sound, refractive indices, viscosities and their related thermodynamic properties for n-hexadecane + two aromatic hydrocarbons binary mixtures at temperatures from 298.15 K to 318.15 K
rhol	755.98	kg/m3	318.15	Densities, speeds of sound, refractive indices, viscosities and their related thermodynamic properties for n-hexadecane + two aromatic hydrocarbons binary mixtures at temperatures from 298.15 K to 318.15 K
rhol	773.33	kg/m3	293.15	Densities, speeds of sound, refractive indices, viscosities and their related thermodynamic properties for n-hexadecane + two aromatic hydrocarbons binary mixtures at temperatures from 298.15 K to 318.15 K
rhol	766.40	kg/m3	303.15	Densities, speeds of sound, refractive indices, viscosities and their related thermodynamic properties for n-hexadecane + two aromatic hydrocarbons binary mixtures at temperatures from 298.15 K to 318.15 K

rhol	759.48	kg/m3	313.15	Densities, speeds of sound, refractive indices, viscosities and their related thermodynamic properties for n-hexadecane + two aromatic hydrocarbons binary mixtures at temperatures from 298.15 K to 318.15 K
rhol	752.58	kg/m3	323.15	Densities, speeds of sound, refractive indices, viscosities and their related thermodynamic properties for n-hexadecane + two aromatic hydrocarbons binary mixtures at temperatures from 298.15 K to 318.15 K
rhol	762.90	kg/m3	313.15	Excess Molar Volumes for Three and Four Component Mixtures Simulating the Binary Mixture (Cyclohexane+ Hexadecane)
rhol	770.22	kg/m3	298.15	Liquid Liquid Equilibria for Systems Containing 4-Phenylbutan-2-one or Benzyl Ethanoate and Selected Alkanes
rhol	773.42	kg/m3	293.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Selected Ternary Mixtures of n-Butylcyclohexane + a Linear Alkane (n-Hexadcane or n-Dodecane) + an Aromatic Compound (Toluene, n-Butylbenzene, or n-Hexylbenzene)

rhol	766.47	kg/m3	303.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Selected Ternary Mixtures of n-Butylcyclohexane + a Linear Alkane (n-Hexadcane or n-Dodecane) + an Aromatic Compound (Toluene, n-Butylbenzene, or n-Hexylbenzene)
rhol	759.55	kg/m3	313.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Selected Ternary Mixtures of n-Butylcyclohexane + a Linear Alkane (n-Hexadcane or n-Dodecane) + an Aromatic Compound (Toluene, n-Butylbenzene, or n-Hexylbenzene)
rhol	752.63	kg/m3	323.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Selected Ternary Mixtures of n-Butylcyclohexane + a Linear Alkane (n-Hexadcane or n-Dodecane) + an Aromatic Compound (Toluene, n-Butylbenzene, or n-Hexylbenzene)

rhol	745.71	kg/m3	333.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Selected Ternary Mixtures of n-Butylcyclohexane + a Linear Alkane (n-Hexadcane or n-Dodecane) + an Aromatic Compound (Toluene, n-Butylbenzene, or n-Hexylbenzene)
rhol	738.80	kg/m3	343.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Selected Ternary Mixtures of n-Butylcyclohexane + a Linear Alkane (n-Hexadcane or n-Dodecane) + an Aromatic Compound (Toluene, n-Butylbenzene, or n-Hexylbenzene)
rhol	773.37	kg/m3	293.15	Densities, Viscosities, Speeds of Sound, Bulk Moduli, Surface Tensions, and Flash Points of Binary Mixtures of Ethylcyclohexane or Methylcyclohexane with n-Dodecane or n-Hexadecane at 0.1 MPa
rhol	770.22	kg/m3	298.15	Liquid liquid equilibria for acetophenone + n-alkane mixtures and characterization of acetophenone systems using DISQUAC

rhol	769.89	kg/m3	298.15	Densities, Viscosities, Speeds of Sound, Bulk Moduli, Surface Tensions, and Flash Points of Binary Mixtures of Ethylcyclohexane or Methylcyclohexane with n-Dodecane or n-Hexadecane at 0.1 MPa
rhol	766.43	kg/m3	303.15	Densities, Viscosities, Speeds of Sound, Bulk Moduli, Surface Tensions, and Flash Points of Binary Mixtures of Ethylcyclohexane or Methylcyclohexane with n-Dodecane or n-Hexadecane at 0.1 MPa
rhol	759.51	kg/m3	313.15	Densities, Viscosities, Speeds of Sound, Bulk Moduli, Surface Tensions, and Flash Points of Binary Mixtures of Ethylcyclohexane or Methylcyclohexane with n-Dodecane or n-Hexadecane at 0.1 MPa
rhol	752.60	kg/m3	323.15	Densities, Viscosities, Speeds of Sound, Bulk Moduli, Surface Tensions, and Flash Points of Binary Mixtures of Ethylcyclohexane or Methylcyclohexane with n-Dodecane or n-Hexadecane at 0.1 MPa

rhol	745.69	kg/m3	333.15	Densities, Viscosities, Speeds of Sound, Bulk Moduli, Surface Tensions, and Flash Points of Binary Mixtures of Ethylcyclohexane or Methylcyclohexane with n-Dodecane or n-Hexadecane at 0.1 MPa
rhol	770.30	kg/m3	298.20	Ternary Liquid-Liquid Equilibria for Mixtures of 1-Methyl-3-octylimidazolium Chloride + an Alkanol + an Alkane at 298.2 K and 1 bar
rhol	773.70	kg/m3	293.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Direct Sugar to Hydrocarbon Diesel (DSH-76) and Binary Mixtures of N-Hexadecane and 2,2,4,6,6-Pentamethylheptane
rhol	766.80	kg/m3	303.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Direct Sugar to Hydrocarbon Diesel (DSH-76) and Binary Mixtures of N-Hexadecane and 2,2,4,6,6-Pentamethylheptane

rhol	759.90	kg/m3	313.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Direct Sugar to Hydrocarbon Diesel (DSH-76) and Binary Mixtures of N-Hexadecane and 2,2,4,6,6-Pentamethylheptane
rhol	762.94	kg/m3	308.15	Densities, speeds of sound, refractive indices, viscosities and their related thermodynamic properties for n-hexadecane + two aromatic hydrocarbons binary mixtures at temperatures from 298.15 K to 318.15 K
rhol	746.00	kg/m3	333.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Direct Sugar to Hydrocarbon Diesel (DSH-76) and Binary Mixtures of N-Hexadecane and 2,2,4,6,6-Pentamethylheptane
rhol	739.00	kg/m3	343.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Direct Sugar to Hydrocarbon Diesel (DSH-76) and Binary Mixtures of N-Hexadecane and 2,2,4,6,6-Pentamethylheptane

rhol	731.90	kg/m3	353.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Direct Sugar to Hydrocarbon Diesel (DSH-76) and Binary Mixtures of N-Hexadecane and 2,2,4,6,6-Pentamethylheptane
rhol	766.40	kg/m3	303.15	A systematic study on volumetric and transport properties of binary systems 1-propanol + n-hexadecane, 1-butanol + n-hexadecane and 1-propanol + ethyl oleate at different temperatures: Experimental and modeling
rhol	724.80	kg/m3	363.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Direct Sugar to Hydrocarbon Diesel (DSH-76) and Binary Mixtures of N-Hexadecane and 2,2,4,6,6-Pentamethylheptane
rhol	717.70	kg/m3	373.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Direct Sugar to Hydrocarbon Diesel (DSH-76) and Binary Mixtures of N-Hexadecane and 2,2,4,6,6-Pentamethylheptane

rhol	770.32	kg/m3	298.15	Thermodynamics of Mixtures Containing Amines. XV. Liquid Liquid Equilibria for Benzylamine + CH3(CH2)nCH3 (n = 8, 9, 10, 12, 14)
rhol	773.49	kg/m3	293.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Binary Mixtures of n-Hexadecane + Ethylbenzene or + Toluene at (293.15 to 373.15) K and 0.1 MPa
rhol	766.55	kg/m3	303.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Binary Mixtures of n-Hexadecane + Ethylbenzene or + Toluene at (293.15 to 373.15) K and 0.1 MPa
rhol	759.63	kg/m3	313.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Binary Mixtures of n-Hexadecane + Ethylbenzene or + Toluene at (293.15 to 373.15) K and 0.1 MPa
rhol	752.71	kg/m3	323.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Binary Mixtures of n-Hexadecane + Ethylbenzene or + Toluene at (293.15 to 373.15) K and 0.1 MPa

rhol	745.79	kg/m3	333.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Binary Mixtures of n-Hexadecane + Ethylbenzene or + Toluene at (293.15 to 373.15) K and 0.1 MPa
rhol	738.90	kg/m3	343.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Binary Mixtures of n-Hexadecane + Ethylbenzene or + Toluene at (293.15 to 373.15) K and 0.1 MPa
rhol	731.80	kg/m3	353.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Binary Mixtures of n-Hexadecane + Ethylbenzene or + Toluene at (293.15 to 373.15) K and 0.1 MPa
rhol	724.70	kg/m3	363.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Binary Mixtures of n-Hexadecane + Ethylbenzene or + Toluene at (293.15 to 373.15) K and 0.1 MPa
rhol	717.50	kg/m3	373.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Binary Mixtures of n-Hexadecane + Ethylbenzene or + Toluene at (293.15 to 373.15) K and 0.1 MPa

rhol	770.14	kg/m3	298.15	Liquid-Liquid Equilibria for Binary System of Ethanol + Hexadecane at Elevated Temperature and the Ternary Systems of Ethanol + Heterocyclic Nitrogen Compounds + Hexadecane at 298.15 K
rhol	770.01	kg/m3	298.15	Liquid-Liquid Equilibrium of Ternary Mixtures Formed by Some Oligooxaethylenes with Ethanol and Hexadecane
rhol	773.19	kg/m3	298.15	Binary Liquid-Liquid Equilibrium (LLE) for N-Methylformamide (NMF) + Hexadecane between (288.15 and 318.15) K and Ternary LLE for Systems of NMF + Heterocyclic Nitrogen Compounds + Hexadecane at 298.15 K
rhol	770.31	kg/m3	298.15	Excess Molar Enthalpies of Binary Systems of 2-Octanone or 3-Octanone with Dodecane, Tetradecane, or Hexadecane at 298.15 K
rhol	770.31	kg/m3	298.15	Excess Molar Enthalpies of Binary Systems of n-Valeric Anhydride or n-Hexanoic Anhydride with n-Dodecane, n-Tetradecane, or n-Hexadecane at 298.15 K

rhol	770.22	kg/m3	298.15	Thermodynamics of aromatic polar compound (alkanone, alkanal or alkanoate) + hydrocarbon mixtures
rhol	762.95	kg/m3	308.15	A systematic study on volumetric and transport properties of binary systems 1-propanol + n-hexadecane, 1-butanol + n-hexadecane and 1-propanol + ethyl oleate at different temperatures: Experimental and modeling
rhol	769.86	kg/m3	298.15	Densities, speeds of sound, refractive indices, viscosities and their related thermodynamic properties for n-hexadecane + two aromatic hydrocarbons binary mixtures at temperatures from 298.15 K to 318.15 K
rhol	771.50	kg/m3	298.15	Ternary (liquid + liquid) equilibria for mixtures of 1-hexyl-3-methylimidazolium (tetrafluoroborate or hexafluorophosphate) + benzene + an alkane at T = 298.2 K and p = 0.1 MPa
rhol	752.68	kg/m3	323.15	Measurement and correlation of density and viscosity of n-hexadecane with three fatty acid ethyl esters
rhol	756.14	kg/m3	318.15	Measurement and correlation of density and viscosity of n-hexadecane with three fatty acid ethyl esters

rhol	759.60	kg/m3	313.15	Measurement and correlation of density and viscosity of n-hexadecane with three fatty acid ethyl esters
rhol	771.15	kg/m3	298.15	Solvent extraction of thiophene from n-alkanes (C7, C12, and C16) using the ionic liquid [C8mim][BF4]
rhol	770.31	kg/m3	298.15	Excess molar enthalpies of binary mixtures containing 2-decanone or dipentyl ether with long-chain n-alkanes at T = 298.15 K
rhol	769.91	kg/m3	298.15	Thermodynamics of mixtures containing amines. XI. Liquid + liquid equilibria and molar excess enthalpies at 298.15 K for N-methylaniline + hydrocarbon systems. Characterization in terms of DISQUAC and ERAS models
rhol	759.55	kg/m3	313.15	Experimental high pressure speed of sound and density of (tetralin + n-decane) and (tetralin + n-hexadecane) systems and thermodynamic modeling
rhol	763.06	kg/m3	308.15	Measurement and correlation of density and viscosity of n-hexadecane with three fatty acid ethyl esters

rhol	766.51	kg/m3	303.15	Measurement and correlation of density and viscosity of n-hexadecane with three fatty acid ethyl esters
rhol	769.92	kg/m3	298.15	Measurement and correlation of density and viscosity of n-hexadecane with three fatty acid ethyl esters
rhol	745.73	kg/m3	333.15	Experimental high pressure speed of sound and density of (tetralin + n-decane) and (tetralin + n-hexadecane) systems and thermodynamic modeling
rhol	773.00	kg/m3	293.00	KDB
rhol	773.50	kg/m3	293.15	Liquid-liquid equilibria for the ternary system (water + hexadecane + dipropylene glycol n-propyl ether)
rhol	769.93	kg/m3	298.15	Liquid-liquid equilibria for the ternary system (water + hexadecane + dipropylene glycol n-propyl ether)
rhol	770.21	kg/m3	298.15	Liquid-liquid equilibria for benzaldehyde + n-alkane mixtures andcharacterization of benzaldehyde + hydrocarbon systems in terms of DISQUAC
rhol	770.30	kg/m3	298.15	Liquid liquid equilibria in the ternary systems {hexadecane + BTX aromatics + 2-methoxyethanol or acetonitrile} at 298.15 K

rhol	752.64	kg/m3	323.15	Experimental high pressure speed of sound and density of (tetralin + n-decane) and (tetralin + n-hexadecane) systems and thermodynamic modeling
rhol	773.19	kg/m3	298.15	(Liquid + Liquid) Equilibrium for (N,N-Dimethylformamide (DMF) + Hexadecane) at Temperatures between (293.15 and 313.15) K and Ternary Mixtures of (DMF + Hexadecane) with Either Quinoline, or Pyridine, or Pyrrole, or Aniline, or Indole at T = 298.15 K
rhol	769.87	kg/m3	298.15	A systematic study on volumetric and transport properties of binary systems 1-propanol + n-hexadecane, 1-butanol + n-hexadecane and 1-propanol + ethyl oleate at different temperatures: Experimental and modeling
sfust	183.13	J/mol×K	291.30	NIST Webbook
sfust	183.15	J/mol×K	291.34	NIST Webbook
sfust	177.10	J/mol×K	291.10	NIST Webbook
sfust	176.79	J/mol×K	291.10	NIST Webbook
speedsl	1265.00	m/s	318.15	Temperature Dependence of Speed of Sound, Densities, and Isentropic Compressibilities of Hexane + Hexadecane, In the Range (293.15 to 373.15) K
speedsl	1363.40	m/s	291.65	Density and speed of sound measurements of hexadecane

speedsl	1365.30	m/s	291.15	Density and speed of sound measurements of hexadecane
speedsl	1367.20	m/s	290.65	Density and speed of sound measurements of hexadecane
speedsl	1361.50	m/s	292.15	Density and speed of sound measurements of hexadecane
speedsl	1359.60	m/s	292.65	Density and speed of sound measurements of hexadecane
speedsl	1357.70	m/s	293.15	Density and speed of sound measurements of hexadecane
speedsl	1338.80	m/s	298.15	Density and speed of sound measurements of hexadecane
speedsl	1320.20	m/s	303.15	Density and speed of sound measurements of hexadecane
speedsl	1301.70	m/s	308.15	Density and speed of sound measurements of hexadecane
speedsl	1283.40	m/s	313.15	Density and speed of sound measurements of hexadecane
speedsl	1265.30	m/s	318.15	Density and speed of sound measurements of hexadecane
speedsl	1247.40	m/s	323.15	Density and speed of sound measurements of hexadecane
speedsl	1229.80	m/s	328.15	Density and speed of sound measurements of hexadecane
speedsl	1212.30	m/s	333.15	Density and speed of sound measurements of hexadecane
speedsl	1194.90	m/s	338.15	Density and speed of sound measurements of hexadecane

speedsl	1074.00	m/s	373.15	Temperature Dependence of Speed of Sound, Densities, and Isentropic Compressibilities of Hexane + Hexadecane, In the Range (293.15 to 373.15) K
speedsl	1090.00	m/s	368.15	Temperature Dependence of Speed of Sound, Densities, and Isentropic Compressibilities of Hexane + Hexadecane, In the Range (293.15 to 373.15) K
speedsl	1107.00	m/s	363.15	Temperature Dependence of Speed of Sound, Densities, and Isentropic Compressibilities of Hexane + Hexadecane, In the Range (293.15 to 373.15) K
speedsl	1124.00	m/s	358.15	Temperature Dependence of Speed of Sound, Densities, and Isentropic Compressibilities of Hexane + Hexadecane, In the Range (293.15 to 373.15) K
speedsl	1141.00	m/s	353.15	Temperature Dependence of Speed of Sound, Densities, and Isentropic Compressibilities of Hexane + Hexadecane, In the Range (293.15 to 373.15) K

speedsl	1158.00	m/s	348.15	Temperature Dependence of Speed of Sound, Densities, and Isentropic Compressibilities of Hexane + Hexadecane, In the Range (293.15 to 373.15) K
speedsl	1176.00	m/s	343.15	Temperature Dependence of Speed of Sound, Densities, and Isentropic Compressibilities of Hexane + Hexadecane, In the Range (293.15 to 373.15) K
speedsl	1193.00	m/s	338.15	Temperature Dependence of Speed of Sound, Densities, and Isentropic Compressibilities of Hexane + Hexadecane, In the Range (293.15 to 373.15) K
speedsl	1211.00	m/s	333.15	Temperature Dependence of Speed of Sound, Densities, and Isentropic Compressibilities of Hexane + Hexadecane, In the Range (293.15 to 373.15) K
speedsl	1228.00	m/s	328.15	Temperature Dependence of Speed of Sound, Densities, and Isentropic Compressibilities of Hexane + Hexadecane, In the Range (293.15 to 373.15) K

speedsl	1246.00	m/s	323.15	Temperature Dependence of Speed of Sound, Densities, and Isentropic Compressibilities of Hexane + Hexadecane, In the Range (293.15 to 373.15) K
speedsl	1283.00	m/s	313.15	Temperature Dependence of Speed of Sound, Densities, and Isentropic Compressibilities of Hexane + Hexadecane, In the Range (293.15 to 373.15) K
speedsl	1357.40	m/s	293.15	Densities, Speeds of Sound, and Viscosities of Binary Mixtures of an n-Alkylcyclohexane (n-Propyl-, n-Pentyl-, n-Hexyl-, n-Heptyl, n-Octyl-, n-Nonyl-, n-Decyl-, and n-Dodecyl-) with n-Hexadecane
speedsl	1312.00	m/s	303.15	Temperature Dependence of Speed of Sound, Densities, and Isentropic Compressibilities of Hexane + Hexadecane, In the Range (293.15 to 373.15) K
speedsl	1338.00	m/s	298.15	Temperature Dependence of Speed of Sound, Densities, and Isentropic Compressibilities of Hexane + Hexadecane, In the Range (293.15 to 373.15) K

speedsl	1357.00	m/s	293.15	Temperature Dependence of Speed of Sound, Densities, and Isentropic Compressibilities of Hexane + Hexadecane, In the Range (293.15 to 373.15) K
speedsl	1210.00	m/s	333.00	Fixed-Path Length Laser-Induced Sound Pinging: A Streamlined Method for Sound Speed Determination in Arbitrary Liquids
speedsl	1227.00	m/s	328.00	Fixed-Path Length Laser-Induced Sound Pinging: A Streamlined Method for Sound Speed Determination in Arbitrary Liquids
speedsl	1248.00	m/s	323.00	Fixed-Path Length Laser-Induced Sound Pinging: A Streamlined Method for Sound Speed Determination in Arbitrary Liquids
speedsl	1268.00	m/s	318.00	Fixed-Path Length Laser-Induced Sound Pinging: A Streamlined Method for Sound Speed Determination in Arbitrary Liquids
speedsl	1287.00	m/s	313.00	Fixed-Path Length Laser-Induced Sound Pinging: A Streamlined Method for Sound Speed Determination in Arbitrary Liquids

speedsl	1325.00	m/s	303.00	Fixed-Path Length Laser-Induced Sound Pinging: A Streamlined Method for Sound Speed Determination in Arbitrary Liquids
speedsl	1340.00	m/s	298.00	Fixed-Path Length Laser-Induced Sound Pinging: A Streamlined Method for Sound Speed Determination in Arbitrary Liquids
speedsl	1356.00	m/s	293.00	Fixed-Path Length Laser-Induced Sound Pinging: A Streamlined Method for Sound Speed Determination in Arbitrary Liquids
speedsl	1212.10	m/s	333.15	Densities, Speeds of Sound, and Viscosities of Binary Mixtures of an n-Alkylcyclohexane (n-Propyl-, n-Pentyl-, n-Hexyl-, n-Heptyl, n-Octyl-, n-Nonyl-, n-Decyl-, and n-Dodecyl-) with n-Hexadecane
speedsl	1247.00	m/s	323.15	Densities, Speeds of Sound, and Viscosities of Binary Mixtures of an n-Alkylcyclohexane (n-Propyl-, n-Pentyl-, n-Hexyl-, n-Heptyl, n-Octyl-, n-Nonyl-, n-Decyl-, and n-Dodecyl-) with n-Hexadecane

speedsl	1282.90	m/s	313.15	Densities, Speeds of Sound, and Viscosities of Binary Mixtures of an n-Alkylcyclohexane (n-Propyl-, n-Pentyl-, n-Hexyl-, n-Heptyl, n-Octyl-, n-Nonyl-, n-Decyl-, and n-Dodecyl-) with n-Hexadecane
speedsl	1319.60	m/s	303.15	Densities, Speeds of Sound, and Viscosities of Binary Mixtures of an n-Alkylcyclohexane (n-Propyl-, n-Pentyl-, n-Hexyl-, n-Heptyl, n-Octyl-, n-Nonyl-, n-Decyl-, and n-Dodecyl-) with n-Hexadecane
speedsl	1301.00	m/s	308.15	Temperature Dependence of Speed of Sound, Densities, and Isentropic Compressibilities of Hexane + Hexadecane, In the Range (293.15 to 373.15) K
speedsl	1177.90	m/s	343.15	Density and speed of sound measurements of hexadecane
srf	0.03	N/m	294.80	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Binary Mixtures of Butylbenzene + Linear Alkanes (n-Decane, n-Dodecane, n-Tetradecane, n-Hexadecane, or n-Heptadecane) at 0.1 MPa

srf	0.03	N/m	294.00	Densities and Viscosities at 293.15 373.15 K, Speeds of Sound and Bulk Moduli at 293.15 333.15 K, Surface Tensions, and Flash Points of Binary Mixtures of n-Hexadecane and Alkylbenzenes at 0.1 MPa	
srf	0.03	N/m	313.20	KDB	
vols	0.00	m3/kg	298.00	A simple method to determine the specific volumes of liquids and melts as a function of the temperature. Application to four n-alkanes (C16H34, C18H38, C19H40 and C21H44) under saturating vapour pressure in the 298-573K range	
vols	0.00	m3/kg	398.00	A simple method to determine the specific volumes of liquids and melts as a function of the temperature. Application to four n-alkanes (C16H34, C18H38, C19H40 and C21H44) under saturating vapour pressure in the 298-573K range	
vols	0.00	m3/kg	423.00	A simple method to determine the specific volumes of liquids and melts as a function of the temperature. Application to four n-alkanes (C16H34, C18H38, C19H40 and C21H44) under saturating vapour pressure in the 298-573K range	

vols	0.00	m3/kg	448.00	A simple method to determine the specific volumes of liquids and melts as a function of the temperature. Application to four n-alkanes (C16H34, C18H38, C19H40 and C21H44) under saturating vapour pressure in the 298-573K range
vols	0.00	m3/kg	473.00	A simple method to determine the specific volumes of liquids and melts as a function of the temperature. Application to four n-alkanes (C16H34, C18H38, C19H40 and C21H44) under saturating vapour pressure in the 298-573K range
vols	0.00	m3/kg	498.00	A simple method to determine the specific volumes of liquids and melts as a function of the temperature. Application to four n-alkanes (C16H34, C18H38, C19H40 and C21H44) under saturating vapour pressure in the 298-573K range
vols	0.00	m3/kg	523.00	A simple method to determine the specific volumes of liquids and melts as a function of the temperature. Application to four n-alkanes (C16H34, C18H38, C19H40 and C21H44) under saturating vapour pressure in the 298-573K range

vols	0.00	m3/kg	548.00	A simple method to determine the specific volumes of liquids and melts as a function of the temperature. Application to four n-alkanes (C16H34, C18H38, C19H40 and C21H44) under saturating vapour pressure in the 298-573K range
vols	0.00	m3/kg	373.00	A simple method to determine the specific volumes of liquids and melts as a function of the temperature. Application to four n-alkanes (C16H34, C18H38, C19H40 and C21H44) under saturating vapour pressure in the 298-573K range
vols	0.00	m3/kg	348.00	A simple method to determine the specific volumes of liquids and melts as a function of the temperature. Application to four n-alkanes (C16H34, C18H38, C19H40 and C21H44) under saturating vapour pressure in the 298-573K range
vols	0.00	m3/kg	323.00	A simple method to determine the specific volumes of liquids and melts as a function of the temperature. Application to four n-alkanes (C16H34, C18H38, C19H40 and C21H44) under saturating vapour pressure in the 298-573K range

vols	0.00	m3/kg	573.00	A simple method to determine the specific volumes of liquids and melts as a function of the temperature. Application to four n-alkanes (C16H34, C18H38, C19H40 and C21H44) under saturating vapour pressure in the 298-573K range

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbp	474.05	K	10.37	Improving a variation of the DSC technique for measuring the boiling points of pure compounds at low pressures
tbp	486.81	K	15.17	Improving a variation of the DSC technique for measuring the boiling points of pure compounds at low pressures
tbp	493.60	K	18.66	Improving a variation of the DSC technique for measuring the boiling points of pure compounds at low pressures
tbp	496.42	K	22.39	Improving a variation of the DSC technique for measuring the boiling points of pure compounds at low pressures
tbp	444.06	K	3.47	Improving a variation of the DSC technique for measuring the boiling points of pure compounds at low pressures

tfp	291.50	K	100.00	Liquid solid equilibria under high pressure of tetradecane + pentadecane and tetradecane + hexadecane binary systems
tfp	303.15	K	50650.00	High pressure (solid + liquid) equilibria of n-alkane mixtures: experimental results, correlation and prediction
tfp	313.15	K	95560.00	High pressure (solid + liquid) equilibria of n-alkane mixtures: experimental results, correlation and prediction
tfp	323.15	K	143920.00	High pressure (solid + liquid) equilibria of n-alkane mixtures: experimental results, correlation and prediction
tfp	333.15	K	195740.00	High pressure (solid + liquid) equilibria of n-alkane mixtures: experimental results, correlation and prediction
tfp	343.15	K	251030.00	High pressure (solid + liquid) equilibria of n-alkane mixtures: experimental results, correlation and prediction
tfp	293.15	K	9210.00	High pressure (solid + liquid) equilibria of n-alkane mixtures: experimental results, correlation and prediction

tfp	296.00	K	20000.00	Liquid solid equilibria under high pressure of tetradecane + pentadecane and tetradecane + hexadecane binary systems
tfp	300.40	K	40000.00	Liquid solid equilibria under high pressure of tetradecane + pentadecane and tetradecane + hexadecane binary systems
tfp	304.80	K	60000.00	Liquid solid equilibria under high pressure of tetradecane + pentadecane and tetradecane + hexadecane binary systems
tfp	309.70	K	80000.00	Liquid solid equilibria under high pressure of tetradecane + pentadecane and tetradecane + hexadecane binary systems
tfp	313.50	K	100000.00	Liquid solid equilibria under high pressure of tetradecane + pentadecane and tetradecane + hexadecane binary systems
tfp	293.15	K	9210.00	Influence of size and shape effects on the high-pressure solubility of n-alkanes: Experimental data, correlation and prediction
tfp	303.15	K	50650.00	Influence of size and shape effects on the high-pressure solubility of n-alkanes: Experimental data, correlation and prediction

tfp	313.15	K	95560.00	Influence of size and shape effects on the high-pressure solubility of n-alkanes: Experimental data, correlation and prediction
tfp	323.15	K	143920.00	Influence of size and shape effects on the high-pressure solubility of n-alkanes: Experimental data, correlation and prediction
tfp	333.15	K	195740.00	Influence of size and shape effects on the high-pressure solubility of n-alkanes: Experimental data, correlation and prediction
tfp	343.15	K	251030.00	Influence of size and shape effects on the high-pressure solubility of n-alkanes: Experimental data, correlation and prediction

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.54069e+01
Coeff. B	-4.97629e+03
Coeff. C	-9.27430e+01
Temperature range (K), min.	421.88
Temperature range (K), max.	585.67

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/T + C*ln(T) + D*T^2

Coeff. A	1.60137e+02
Coeff. B	-1.55289e+04
Coeff. C	-2.05917e+01
Coeff. D	8.01493e-06
Temperature range (K), min.	291.32
Temperature range (K), max.	720.60

Datasets

Viscosity, Pa*s

Temperature, K - Liquid	Pressure, kPa - Liquid	Viscosity, Pa*s - Liquid
303.90	3300.00	0.0028260
303.90	7300.00	0.0029590
303.90	12900.00	0.0031840
303.90	19000.00	0.0034540
303.90	26800.00	0.0037930
303.90	33600.00	0.0041070
325.70	8100.00	0.0019430
325.70	8300.00	0.0019560
325.70	21500.00	0.0022630
325.70	35600.00	0.0026750
325.70	49300.00	0.0030670
325.70	63600.00	0.0035500
325.70	77500.00	0.0040560
325.70	91800.00	0.0046250
325.70	104100.00	0.0051790
325.70	119200.00	0.0058650
325.70	122700.00	0.0060700
429.10	12800.00	0.0005820
429.10	12800.00	0.0005860
429.10	22200.00	0.0006490
429.10	22700.00	0.0006500
429.10	35800.00	0.0007420
429.10	70500.00	0.0010100
429.10	91600.00	0.0011810
429.10	118800.00	0.0014050
429.10	140300.00	0.0015940
429.10	167800.00	0.0018470

429.10	188000.00	0.0020460
429.10	222900.00	0.0024590
533.70	14100.00	0.0002720
533.70	14300.00	0.0002760
533.70	29900.00	0.0003410
533.70	30100.00	0.0003420
533.70	50400.00	0.0004300
533.70	50500.00	0.0004330
533.70	77100.00	0.0005340
533.70	104600.00	0.0006420
533.70	125000.00	0.0007210
533.70	152800.00	0.0008290
533.70	188400.00	0.0009830
533.70	210000.00	0.0010770
533.70	226600.00	0.0011540

Reference *https://www.doi.org/10.1016/j.jct.2014.01.008*

Temperature, K	Pressure, kPa	Viscosity, Pa*s
323.70	970.00	0.0018570
322.70	1940.00	0.0018850
323.80	1980.00	0.0018780
323.70	3000.00	0.0019040
323.80	3910.00	0.0019250
372.70	990.00	0.0009090
372.70	1960.00	0.0009220
372.80	2970.00	0.0009290
372.80	3950.00	0.0009470
373.90	980.00	0.0008960
373.90	2000.00	0.0009090
373.90	2980.00	0.0009150
373.90	3900.00	0.0009360
422.90	1990.00	0.0005540
422.90	2970.00	0.0005570
422.90	3840.00	0.0005680
471.90	1000.00	0.0003580
472.00	2010.00	0.0003630
472.10	2910.00	0.0003710
472.10	3870.00	0.0003740
473.70	3990.00	0.0003750
521.90	970.00	0.0002450
521.90	1960.00	0.0002540
521.90	2950.00	0.0002600

522.00	3830.00	0.0002670
572.20	2000.00	0.0001870
572.10	2930.00	0.0001920
572.20	3850.00	0.0001960
621.90	2010.00	0.0001310
622.00	2890.00	0.0001370
622.10	3820.00	0.0001420
623.20	3990.00	0.0001430
673.20	2000.00	0.0000910
673.60	3000.00	0.0000970
672.60	3990.00	0.0001040

Reference *https://www.doi.org/10.1021/acs.jced.8b00930*

Temperature, K	Pressure, kPa	Viscosity, Pa*s
318.15	6895.00	0.0021510
318.15	13790.00	0.0023310
318.15	20680.00	0.0025380
318.15	27580.00	0.0027280
318.15	34470.00	0.0029200
318.15	41370.00	0.0031690
318.15	48260.00	0.0034130
318.15	55160.00	0.0036410
318.15	62050.00	0.0039010
333.15	6895.00	0.0017050
333.15	13790.00	0.0018270
333.15	20680.00	0.0019510
333.15	27580.00	0.0021010
333.15	34470.00	0.0022460
333.15	41370.00	0.0024060
333.15	48260.00	0.0025820
333.15	55160.00	0.0027610
333.15	62050.00	0.0029900
348.15	6895.00	0.0013290
348.15	13790.00	0.0014500
348.15	20680.00	0.0015710
348.15	27580.00	0.0016700
348.15	34470.00	0.0017880
348.15	41370.00	0.0019380
348.15	48260.00	0.0020840
348.15	55160.00	0.0022340
348.15	62050.00	0.0023640
363.15	6895.00	0.0011450

363.15	13790.00	0.0012360
363.15	20680.00	0.0013380
363.15	27580.00	0.0014280
363.15	34470.00	0.0015280
363.15	41370.00	0.0016210
363.15	48260.00	0.0017140
363.15	55160.00	0.0018330
363.15	62050.00	0.0019290
388.15	6895.00	0.0008310
388.15	13790.00	0.0008990
388.15	20680.00	0.0009680
388.15	27580.00	0.0010420
388.15	34470.00	0.0011600
388.15	41370.00	0.0011770
388.15	48260.00	0.0012640
388.15	55160.00	0.0013310
388.15	62050.00	0.0013960
413.15	6895.00	0.0006210
413.15	13790.00	0.0006730
413.15	20680.00	0.0007330
413.15	27580.00	0.0007900
413.15	34470.00	0.0008130
413.15	41370.00	0.0008790
413.15	48260.00	0.0009350
413.15	55160.00	0.0009720
413.15	62050.00	0.0010140

Reference *https://www.doi.org/10.1021/je9000262*

Mass density, kg/m3

Temperature, K - Liquid	Pressure, kPa - Liquid	Mass density, kg/m3 - Liquid
323.65	14900.00	758.0
323.65	27900.00	769.0
323.65	41500.00	779.0
323.65	55500.00	787.0
323.65	69400.00	792.0
323.65	81300.00	799.0
323.65	109700.00	807.0
422.85	14100.00	700.0
422.85	27900.00	713.0

422.85	41200.00	724.0
422.85	55500.00	734.0
422.85	69800.00	743.0
422.85	82800.00	750.0
422.85	108800.00	765.0
422.85	136900.00	778.0
422.85	170700.00	792.0
422.85	204300.00	804.0
422.85	236500.00	815.0
422.85	262300.00	823.0
522.55	15100.00	643.0
522.55	27100.00	660.0
522.55	42000.00	675.0
522.55	55400.00	687.0
522.55	69100.00	698.0
522.55	82100.00	707.0
522.55	107900.00	723.0
522.55	135800.00	738.0
522.55	170100.00	755.0
522.55	203300.00	769.0
522.55	235800.00	782.0
522.55	255000.00	788.0

Reference *https://www.doi.org/10.1016/j.fluid.2011.08.020*

Temperature, K	Pressure, kPa	Mass density, kg/m3
298.15	100.00	769.98
313.15	100.00	759.6
333.15	100.00	745.81
373.15	100.00	717.79
393.15	100.00	703.59
433.15	100.00	674.64
298.15	10100.00	776.41
313.15	10100.00	766.44
373.15	10100.00	727.21
393.15	10100.00	714.02
433.15	10100.00	687.77
298.15	20100.00	782.34
313.15	20100.00	772.76
333.15	20100.00	760.5
373.15	20100.00	735.47
393.15	20100.00	723.09
433.15	20100.00	698.82

313.15	30100.00	778.65
373.15	30100.00	742.97
313.15	40100.00	784.24
333.15	40100.00	773.01
373.15	40100.00	749.88
393.15	40100.00	738.85
433.15	40100.00	717.04
333.15	50100.00	778.56
373.15	50100.00	756.25
313.15	60100.00	794.38
333.15	60100.00	783.47
373.15	60100.00	762.2
393.15	60100.00	752.0
433.15	60100.00	731.95
313.15	80100.00	803.42
333.15	80100.00	793.1
373.15	80100.00	773.03
393.15	80100.00	763.28
433.15	80100.00	744.68
333.15	100100.00	801.83
373.15	100100.00	782.74
393.15	100100.00	773.48
433.15	100100.00	755.89

Reference *https://www.doi.org/10.1016/j.fluid.2018.02.008*

Temperature, K	Pressure, kPa	Mass density, kg/m3
298.15	100.00	770.5
298.15	1000.00	771.1
298.15	5000.00	773.6
298.15	10000.00	776.9
298.15	20000.00	782.6
298.15	30000.00	788.1
323.15	100.00	753.1
323.15	1000.00	753.9
323.15	5000.00	756.8
323.15	10000.00	760.4
323.15	20000.00	766.9
323.15	30000.00	772.9
323.15	40000.00	778.5
323.15	50000.00	783.8
323.15	60000.00	788.7
348.15	100.00	735.6

348.15	1000.00	736.5
348.15	5000.00	739.8
348.15	10000.00	743.8
348.15	20000.00	751.1
348.15	30000.00	757.8
348.15	40000.00	763.9
348.15	50000.00	769.7
348.15	60000.00	775.1
373.15	100.00	717.8
373.15	1000.00	719.4
373.15	5000.00	723.2
373.15	10000.00	727.7
373.15	20000.00	735.9
373.15	30000.00	743.4
373.15	40000.00	750.3
373.15	50000.00	756.5
373.15	60000.00	762.4
423.15	100.00	680.8
423.15	1000.00	684.1
423.15	5000.00	689.2
423.15	10000.00	695.1
423.15	20000.00	705.5
423.15	30000.00	714.7
423.15	40000.00	722.9
423.15	50000.00	730.4
423.15	60000.00	737.2
463.15	100.00	651.6
463.15	1000.00	654.5
463.15	5000.00	661.0
463.15	10000.00	668.5
463.15	20000.00	681.2
463.15	30000.00	692.0
463.15	40000.00	701.4
463.15	50000.00	709.8
463.15	60000.00	717.5

Reference *https://www.doi.org/10.1021/acs.jced.5b00613*

Temperature, K	Pressure, kPa	Mass density, kg/m3
298.20	10000.00	775.86
303.20	10000.00	773.66
313.20	10000.00	764.59
323.20	10000.00	759.8

333.20	10000.00	753.38
348.20	10000.00	744.11
353.20	10000.00	740.03
373.20	10000.00	727.81
393.20	10000.00	713.25
413.20	10000.00	700.27
423.20	10000.00	694.3
433.20	10000.00	687.01
453.20	10000.00	674.02
463.20	10000.00	669.34
473.20	10000.00	660.45
298.20	20000.00	782.89
303.20	20000.00	779.38
313.20	20000.00	773.09
323.20	20000.00	766.48
333.20	20000.00	760.44
348.20	20000.00	751.32
353.20	20000.00	748.27
373.20	20000.00	736.02
393.20	20000.00	723.64
413.20	20000.00	711.23
423.20	20000.00	705.01
433.20	20000.00	698.74
453.20	20000.00	686.53
463.20	20000.00	680.32
473.20	20000.00	673.95
298.20	30000.00	788.75
303.20	30000.00	785.01
313.20	30000.00	778.81
323.20	30000.00	773.19
333.20	30000.00	767.3
348.20	30000.00	758.67
353.20	30000.00	755.72
373.20	30000.00	744.18
393.20	30000.00	732.3
413.20	30000.00	720.49
423.20	30000.00	714.62
433.20	30000.00	708.69
453.20	30000.00	696.77
463.20	30000.00	690.8
473.20	30000.00	685.23
298.20	40000.00	793.81
303.20	40000.00	790.38
313.20	40000.00	784.36

323.20	40000.00	778.83
333.20	40000.00	773.53
348.20	40000.00	765.1
353.20	40000.00	762.19
373.20	40000.00	751.02
393.20	40000.00	739.4
413.20	40000.00	728.42
423.20	40000.00	722.88
433.20	40000.00	717.4
453.20	40000.00	706.13
463.20	40000.00	700.49
473.20	40000.00	695.19
298.20	50000.00	799.18
303.20	50000.00	795.64
313.20	50000.00	789.46
323.20	50000.00	784.38
333.20	50000.00	779.1
348.20	50000.00	770.98
353.20	50000.00	768.11
373.20	50000.00	757.42
393.20	50000.00	746.41
413.20	50000.00	735.85
423.20	50000.00	730.73
433.20	50000.00	725.14
453.20	50000.00	714.59
463.20	50000.00	709.18
473.20	50000.00	704.05

Reference *https://www.doi.org/10.1021/acs.jced.9b00078*

Temperature, K	Pressure, kPa	Mass density, kg/m3
318.15	6895.00	760.3
318.15	13789.00	765.0
318.15	20684.00	769.6
318.15	27579.00	773.9
318.15	34474.00	777.7
318.15	41369.00	781.5
318.15	48263.00	785.2
318.15	55158.00	788.7
318.15	62053.00	791.7
333.15	6895.00	750.7
333.15	13789.00	755.8
333.15	20684.00	760.4

333.15	27579.00	765.1
333.15	34474.00	769.7
333.15	41369.00	773.9
333.15	48263.00	777.6
333.15	55158.00	781.2
333.15	62053.00	784.3
348.15	6895.00	741.7
348.15	13789.00	747.2
348.15	20684.00	752.5
348.15	27579.00	757.2
348.15	34474.00	761.9
348.15	41369.00	766.1
348.15	48263.00	770.2
348.15	55158.00	774.1
348.15	62053.00	777.6
363.15	6895.00	732.0
363.15	13789.00	738.1
363.15	20684.00	743.9
363.15	27579.00	748.6
363.15	34474.00	753.7
363.15	41369.00	758.4
363.15	48263.00	762.6
363.15	55158.00	766.7
363.15	62053.00	770.5
388.15	6895.00	714.7
388.15	13789.00	721.7
388.15	20684.00	728.1
388.15	27579.00	733.9
388.15	34474.00	739.2
388.15	41369.00	744.1
388.15	48263.00	748.8
388.15	55158.00	753.3
388.15	62053.00	757.5
413.15	6895.00	696.2
413.15	13789.00	704.3
413.15	20684.00	711.0
413.15	27579.00	717.9
413.15	34474.00	723.7
413.15	41369.00	729.4
413.15	48263.00	734.5
413.15	55158.00	739.5
413.15	62053.00	743.8

Reference *https://www.doi.org/10.1021/je0605036*

Temperature, K	Pressure, kPa	Mass density, kg/m3
313.15	340.00	759.52
313.15	690.00	759.83
313.15	1030.00	760.08
313.15	1380.00	760.33
313.15	1720.00	760.65
313.15	2070.00	760.88
313.15	2410.00	761.08
313.15	2760.00	761.33
313.15	3100.00	761.65
313.15	3450.00	761.83
313.15	3800.00	762.08
313.15	4140.00	762.33
313.15	4480.00	762.49
313.15	4830.00	762.83
313.15	5170.00	763.08
313.15	5510.00	763.33
313.15	5860.00	763.58
313.15	6200.00	763.83
313.15	6550.00	764.08
313.15	6890.00	764.33
313.15	7240.00	764.65
313.15	7580.00	764.83
313.15	7930.00	765.08
313.15	8270.00	765.33
313.15	8620.00	765.58
313.15	8960.00	765.74
313.15	9310.00	765.99
313.15	9650.00	766.24
313.15	10000.00	766.49
313.15	10340.00	766.74
313.15	10690.00	766.98
313.15	11030.00	767.22
313.15	11380.00	767.48
333.15	340.00	746.8
333.15	690.00	747.1
333.15	1030.00	747.4
333.15	1380.00	747.7
333.15	1720.00	748.0
333.15	2070.00	748.2
333.15	2410.00	748.5
333.15	2760.00	748.7

333.15	3100.00	749.0
333.15	3450.00	749.2
333.15	3800.00	749.5
333.15	4140.00	749.8
333.15	4480.00	750.0
333.15	4830.00	750.2
333.15	5170.00	750.5
333.15	5510.00	750.7
333.15	5860.00	751.0
333.15	6200.00	751.2
333.15	6550.00	751.4
333.15	6890.00	751.6
333.15	7240.00	752.0
333.15	7580.00	752.4
333.15	7930.00	752.6
333.15	8270.00	752.8
333.15	8620.00	753.0
333.15	8960.00	753.2
333.15	9310.00	753.5
333.15	9650.00	753.8
333.15	10000.00	754.0
333.15	10340.00	754.3
333.15	10690.00	754.5
333.15	11030.00	754.8
333.15	11380.00	755.0
353.15	340.00	736.2
353.15	690.00	736.4
353.15	1030.00	736.6
353.15	1380.00	736.9
353.15	1720.00	737.1
353.15	2070.00	737.4
353.15	2410.00	737.7
353.15	2760.00	738.0
353.15	3100.00	738.3
353.15	3450.00	738.7
353.15	3800.00	739.1
353.15	4140.00	739.3
353.15	4480.00	739.5
353.15	4830.00	739.8
353.15	5170.00	740.0
353.15	5510.00	740.2
353.15	5860.00	740.4
353.15	6200.00	740.5
353.15	6550.00	740.7

353.15	6890.00	741.0
353.15	7240.00	741.2
353.15	7580.00	741.5
353.15	7930.00	741.7
353.15	8270.00	742.0
353.15	8620.00	742.2
353.15	8960.00	742.5
353.15	9310.00	742.7
353.15	9650.00	742.9
353.15	10000.00	743.1
353.15	10340.00	743.5
353.15	10690.00	743.9
353.15	11030.00	744.1
353.15	11380.00	744.3
373.15	340.00	723.1
373.15	690.00	723.3
373.15	1030.00	723.6
373.15	1380.00	723.8
373.15	1720.00	724.0
373.15	2070.00	724.3
373.15	2410.00	724.6
373.15	2760.00	724.9
373.15	3100.00	725.1
373.15	3450.00	725.4
373.15	3800.00	725.6
373.15	4140.00	725.9
373.15	4480.00	726.1
373.15	4830.00	726.4
373.15	5170.00	726.7
373.15	5510.00	726.9
373.15	5860.00	727.2
373.15	6200.00	727.5
373.15	6550.00	727.8
373.15	6890.00	728.1
373.15	7240.00	728.4
373.15	7580.00	728.5
373.15	7930.00	728.9
373.15	8270.00	729.4
373.15	8620.00	729.9
373.15	8960.00	730.2
373.15	9310.00	730.6
373.15	9650.00	730.8
373.15	10000.00	731.0
373.15	10340.00	731.4

373.15	10690.00	731.6
373.15	11030.00	731.9
373.15	11380.00	732.1
393.15	340.00	710.0
393.15	690.00	710.3
393.15	1030.00	710.6
393.15	1380.00	710.9
393.15	1720.00	711.1
393.15	2070.00	711.4
393.15	2410.00	711.7
393.15	2760.00	712.0
393.15	3100.00	712.2
393.15	3450.00	712.3
393.15	3800.00	712.5
393.15	4140.00	712.8
393.15	4480.00	713.0
393.15	4830.00	713.3
393.15	5170.00	713.5
393.15	5510.00	713.8
393.15	5860.00	714.0
393.15	6200.00	714.3
393.15	6550.00	714.6
393.15	6890.00	714.9
393.15	7240.00	715.1
393.15	7580.00	715.3
393.15	7930.00	715.5
393.15	8270.00	715.8
393.15	8620.00	716.0
393.15	8960.00	716.3
393.15	9310.00	716.6
393.15	9650.00	716.8
393.15	10000.00	717.1
393.15	10340.00	717.4
393.15	10690.00	717.6
393.15	11030.00	717.9
393.15	11380.00	718.1

Reference *https://www.doi.org/10.1021/je301283e*

Molar heat capacity at constant pressure, J/K/mol

Temperature, K - Liquid	Pressure, kPa - Liquid	Molar heat capacity at constant pressure, J/K/mol - Liquid
323.15	130.00	513.57
328.15	130.00	517.19
333.15	130.00	520.81
338.15	130.00	524.66
343.15	130.00	528.51
348.15	130.00	532.82
353.15	130.00	536.44
358.15	130.00	540.74
363.15	130.00	544.59
368.15	130.00	548.67
373.15	130.00	553.20
378.15	130.00	557.27
383.15	130.00	561.57
388.15	130.00	565.65
393.15	130.00	569.73
398.15	130.00	574.03
403.15	130.00	578.56
408.15	130.00	583.09
413.15	130.00	586.94
418.15	130.00	591.46
423.15	130.00	595.77
428.15	130.00	599.62
433.15	130.00	603.92
438.15	130.00	608.67
443.15	130.00	613.20
448.15	130.00	617.28
453.15	130.00	622.26
323.15	10090.00	512.21
328.15	10090.00	515.83
333.15	10090.00	519.46
338.15	10090.00	523.31
343.15	10090.00	526.48
348.15	10090.00	530.10
353.15	10090.00	534.40
358.15	10090.00	538.48
363.15	10090.00	542.10
368.15	10090.00	546.40
373.15	10090.00	550.70
378.15	10090.00	554.55
383.15	10090.00	558.86
388.15	10090.00	563.16
393.15	10090.00	567.24

398.15	10090.00	571.31
403.15	10090.00	575.61
408.15	10090.00	579.92
413.15	10090.00	584.44
418.15	10090.00	588.97
423.15	10090.00	593.05
428.15	10090.00	596.45
433.15	10090.00	600.30
438.15	10090.00	604.60
443.15	10090.00	609.35
448.15	10090.00	613.66
453.15	10090.00	617.05
458.15	10090.00	621.35
463.15	10090.00	625.43
468.15	10090.00	630.19
473.15	10090.00	634.94

Reference *https://www.doi.org/10.1016/j.jct.2017.03.034*

Sources

Determination of thermophysical properties of cyclopentane hydrate using a stirred calorimetric cell: https://www.doi.org/10.1016/j.jct.2018.05.023

Ternary liquid/liquid phase equilibria of {ionic liquid + thiophene + (octane/hexadecane)}: https://www.doi.org/10.1016/j.jct.2019.03.017

Solid-Liquid Equilibria in the Binary Systems of Saturated Fatty Acids or Triglycerides (C12 to C18) + Hexadecane: https://www.doi.org/10.1021/acs.jced.6b00355

Vapor-Liquid Phase Equilibria and Physical Properties Measurements for Ternary Systems (Methane + Decane + Hexadecane): https://www.doi.org/10.1021/je300482b

Excess Molar Enthalpies of Binary Systems of 3-Octanone or 3-Octanone with Dodecane, Tetradecane, or Hexadecane at 298.15 K: https://www.doi.org/10.1021/je900311v

Relation between characteristic molecular volume and hydrophobicity of nonpolar molecules: https://www.cheric.org/files/research/kdb/mol/mol16.mol

Express thermo-gravimetric method for the vaporization enthalpies appraisal for very low volatile molecular and ionic compounds: https://www.doi.org/10.1016/j.jct.2010.04.011

High-Pressure Viscosity Measurements for the Binary System Cyclohexane + n-Hexadecane in the Temperature Range of (318.15 to 413.15) K: https://www.doi.org/10.1016/j.tca.2012.03.018

Phase diagrams of binary systems containing n-alkanes, or cyclohexane, or 1-alkanols and 2,3-pentanedione at atmospheric and higher pressures: https://www.doi.org/10.1021/je9000262

Measurement and correlation of density and viscosity of n-hexadecane with three fatty acid ethyl esters: https://en.wikipedia.org/wiki/Joback_method

Measurement and correlation of liquid liquid equilibria for acetonitrile + n-alkane systems: https://www.doi.org/10.1016/j.fluid.2006.02.001

Liquid-liquid equilibria for acetophenone + n-alkane mixtures and characterization of acetophenone + hydrocarbon systems in terms of DISQUAC: https://www.doi.org/10.1016/j.jct.2016.01.021

Liquid-liquid equilibria for benzaldehyde + n-alkane mixtures and characterization of benzaldehyde + hydrocarbon systems in terms of DISQUAC: https://www.doi.org/10.1016/j.fluid.2007.01.024

NIST Webbook: https://www.doi.org/10.1016/j.fluid.2015.01.026

Bubble Pressure Measurement and Prediction for n-Hexadecane and 1-Eicosane + Cyclohexane: https://www.doi.org/10.1016/j.fluid.2014.01.013

Liquid-Liquid Equilibria of Binary and Ternary Systems Methanol/Water + Methylcyclohexane and Ethylcyclohexane + n-Hexadecane: http://webbook.nist.gov/cgi/cbook.cgi?ID=C544763&Units=SI

Density and Volumetric Properties of Binary Mixtures of C12-Hexadecane and n-Hexadecane at 0.1 MPa in the Temperature Range between T = 283.15 K and T = 353.15 K: https://www.doi.org/10.1021/acs.jced.8b00125

A systematic study on volumetric and transport properties of binary systems 1-propanol + n-hexadecane, 1-butanol + n-hexadecane and 1-propanol + ethyl oleate at different temperatures: Experimental and modeling: https://www.doi.org/10.1021/acs.jced.6b00022

https://www.doi.org/10.1021/acs.jced.9b00078

https://www.doi.org/10.1016/j.fluid.2018.05.028

High pressure (solid + liquid) equilibria of n-alkane mixtures: experimental results, correlation and prediction:	https://www.doi.org/10.1016/j.fluid.2004.11.020
Temperature and Composition Dependence of the Densities, Viscosities, and Speeds of Sound of Binary Liquid Mixtures of 1-Butanol with Hexadecane and Octadecane at 298.15 K:	https://www.doi.org/10.1021/je7007654
Liquid-liquid equilibria in the ternary systems {hexadecane + BTX aromatics + 2-methoxyethanol} at 298.15 K:	https://www.doi.org/10.1016/j.fluid.2015.01.002
Densities of the binary systems: n-pentane + n-decane and n-hexane + n-hexadecane up to 50 MPa and 453 K:	https://www.doi.org/10.1021/acs.jced.5b00613
Liquid-liquid equilibria for the ternary system (water + hexadecane + dipropylene glycol n-propyl ether):	https://www.doi.org/10.1016/j.fluid.2013.03.002
Liquid-Liquid Equilibrium of Ternary Mixtures Formed by Some Oligooxaethylenes with Ethanol and Hexadecane:	https://www.doi.org/10.1021/je800503d
Liquid-Liquid Equilibria for Binary System of Ethanol + Hexadecane at Elevated Temperature and the Ternary Systems of Ethanol + Heterocyclic Nitrogen Compounds + Hexadecane at 298.15 K:	https://www.doi.org/10.1021/je700233p
McCoubrey Method:	http://link.springer.com/article/10.1007/BF02311772
Experimental measurements and thermodynamic modeling of wax disappearance temperature for the n-octadecane and n-eicosane at 298.15 K:	https://www.doi.org/10.1016/j.fluid.2014.12.036
Binary systems n-C16H34, n-C18H38 + n-C16H34 and n-C11H24 + n-C18H38 at 5341 M:	https://www.doi.org/10.1016/j.jct.2014.01.008
Experimental measurement and prediction of (liquid + liquid + liquid) equilibrium of the system (n-hexadecane + water + triacetin):	https://www.doi.org/10.1016/j.jct.2015.11.011
Measurements for Ternary System of Hexadecane + 1,3,5-Trimethylbenzene for Three and Four Component Mixtures Simulating Solid-Liquid Equilibria of Dibenzothiophene and Dibenzothiophene Sulfone in Organic Solvents:	https://www.doi.org/10.1021/je050513r
Silver-incorporated microencapsulation of n-hexadecane and noctadecane	https://www.doi.org/10.1021/acs.jced.5b00331
Determination and correlation of liquid-liquid equilibria for nine binary acetonitrile + alkane systems:	https://www.doi.org/10.1021/je700234e
Effect on CO2 Miscibility by Interfacial Tension Measurement:	https://www.doi.org/10.1016/j.tca.2015.05.015
Viscosities of Liquid Hexadecane at Temperatures between 323 K and 673 K and Pressures up to 4 MPa Measured	https://www.doi.org/10.1016/j.fluid.2010.10.013
Experimental solubility for betulin and estrone in various solvents within the temperature range T = (293.2 to 328.2) K:	https://www.doi.org/10.1016/j.jct.2016.02.006
Molar Cavity Size Effect:	https://www.doi.org/10.1021/je301283e
Systems of n-Valeric Anhydride or n-Hexanoic Anhydride with n-Dodecane, n-Tetradecane, or n-Hexadecane at 298.15 K:	https://www.doi.org/10.1021/je900598y
Isobaric vapor-liquid equilibrium for the three binary systems of C14 - C16	https://www.doi.org/10.1021/acs.jced.8b00930
Viscometric and volumetric behaviour of binary mixtures of sulfolane and N-methylpyrrolidone with monoethanolamine and diethanolamine in the range 303-373 K:	https://www.doi.org/10.1016/j.fluid.2015.08.015
Thermodynamics of Mixtures Containing Amines. XV. Liquid-Liquid Equilibria for Benzylamine +	https://www.doi.org/10.1016/j.fluid.2008.02.023
Fixed-Path-Length Laser-Induced Sound Pinging: A Streamlined Method for Sound Speed Determination	https://www.doi.org/10.1021/acs.jced.9b00436
Solvent Extraction Determination from n-alkanes (C7, C12, and C16) using the Ionic liquid [C8mim][BF4]:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Liquid-Liquid Equilibria for Benzene/Thiophene + Cyclohexane/Hexadecane + Deep Eutectic Solvents: Data and Modelling:	https://www.doi.org/10.1021/je500283s
Densities and Viscosities at 293.15 K, Speeds of Sound and Bulk Moduli at 293.15 K, Surface Tension and Flash Point of Binary Mixtures of n-Hexadecane and Squalane at T = (298.15, 303.15, and 308.15) K:	https://www.doi.org/10.1021/acs.jced.9b00313
Solubility of Carbon Dioxide in Water and Hexadecane: Experimental Measurements and Modeling.	https://www.doi.org/10.1021/acs.jced.7b00087
Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Binary Mixtures of n-Hexadecane + Ethylbenzene at 4 Temperatures (298.15 to 318.15) K and 0.1 MPa:	https://www.doi.org/10.1021/je0605036
Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Binary Mixtures of n-Hexadecane and 1-Methyl-3-octylimidazolium Chloride + 1-Methanol at 298.2 K and 1 bar:	https://www.doi.org/10.1021/je025629r
Thermodynamics of Mixtures Containing Amines. XI. Liquid + liquid equilibria and HiDiA excess enthalpies	https://www.doi.org/10.1016/j.jct.2008.07.010
Improving a variant of the DSC technique for measuring the boiling	https://www.doi.org/10.1016/j.fluid.2008.06.012
Solubility of Dodecane, Tetradecane, Hexadecane, or n-Heptadecane in Water and Hexadecane: Experimental Measurements and Modeling.	https://www.doi.org/10.1021/je800966f
Measurements and Thermodynamic Modeling.	https://www.doi.org/10.1016/j.jct.2005.03.007
n-alkanes: Experimental data, correlation and prediction.	https://www.doi.org/10.1021/je500498m
Separation of propylbenzene and n-alkanes from their mixtures using	https://www.doi.org/10.1016/j.fluid.2011.06.036
Liquid-liquid equilibrium of cumene, tert-butylbenzene and	https://www.doi.org/10.1016/j.fluid.2018.02.008
Thermodynamics of mixtures containing amines. XI. Liquid + liquid equilibria and HiDiA excess enthalpies	https://www.doi.org/10.1016/j.jct.2012.07.006
Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Binary Mixtures of n-Hexadecane + Dodecane, Tetradecane, or n-Heptadecane) at 0.1 MPa:	https://www.doi.org/10.1021/acs.jced.6b00542
Experimental measurements and equation of state modeling of liquid densities for long-chain n-alkanes at pressures to 265 MPa and temperatures to 523 K:	https://www.doi.org/10.1016/j.jct.2016.04.023
Aqueous Solubility Prediction Method:	https://www.doi.org/10.1016/j.fluid.2005.02.016
	https://www.doi.org/10.1016/j.fluid.2011.08.020
	http://onschallenge.wikispaces.com/file/view/AqueousDataset002.xlsx/351826032/AqueousDa

KDB Vapor Pressure Data:	https://www.cheric.org/research/kdb/hcprop/showprop.php?cmpid=16
Densities, Sound Velocities, and Refractive Indexes of Tetralin + n-Hexadecane at (293.15, 303.15, 313.15, 323.15, 333.15, and 343.15) K:	https://www.doi.org/10.1021/je200504u
Liquid−Liquid equilibria for mixtures of (Furfural + an Aromatic hydrocarbon + an alkane) at T = 298.15 K:	https://www.doi.org/10.1021/je010317u
A flow apparatus for gas solubility measurements at high pressure and temperature with carbon dioxide:	https://www.doi.org/10.1016/j.fluid.2014.08.035
Determination of melting temperatures in hydrocarbon mixtures by differential scanning calorimetry:	https://www.doi.org/10.1016/j.jct.2016.12.030
Liquid−Liquid Equilibria for the Ternary System Water + Hexadecane + Propylene Glycol n-Propyl Ether:	https://www.doi.org/10.1021/je101281x
Binary Liquid−Liquid Equilibrium (LLE) for N-Methylformamide (NMF) + Hexadecane between 288.15 and 318.15 K and Ternary LLE for Systems of NMF + Heterocyclic Nitrogen Compounds + Hexadecane:	https://www.doi.org/10.1021/je8006265
Density and speed of sound measurements of hexadecane + 1-propanol to four n-alkanes (C16H34, C18H38, C19H40 and C21H44) under pressure in the temperature range T = 298.15 K and p = 0.1 MPa:	https://www.doi.org/10.1016/j.jct.2010.01.003
A simple method to determine the specific volumes of liquids and melts as a function of the temperature:	https://www.doi.org/10.1016/j.tca.2006.04.001
Liquid−Liquid Equilibria for mixtures of n-Hexadecane + an Aromatic Compound (Toluene, n-Butylbenzene, or n-Propylbenzene) at T = (298.15, 303.15, and 308.15) K. Experimental results, correlation, and prediction by the ERAS model:	https://www.doi.org/10.1016/j.jct.2004.05.001
Ionic liquids on desulfurization of fuel oil: fluoroborate or methylsulfonate?:	https://www.doi.org/10.1016/j.fluid.2009.12.020
Effect of pressure in the range (0.1 to 100 MPa) on the viscosity and surface tension of n-Heptane, n-Octane, n-Decane, and n-Hexadecane up to 373 K by Surface Light Scattering:	https://www.doi.org/10.1021/acs.jced.9b00525
Bulk Modulus, Surface Tension, and Flash Point of Selected Ternary Mixtures of Hydrocarbons:	https://www.doi.org/10.1021/acs.jced.7b00466
Measurement and prediction of ternary liquid−liquid equilibria for 2-methyl-1-pentanol + a linear alkane (n-Hexadecane or n-Tetradecane) + an Aromatic Compound (Toluene, n-Butylbenzene, or n-Propylbenzene) at T = (298.15, 303.15, and 308.15) K. Experimental results, correlation, and prediction by the ERAS model:	https://www.doi.org/10.1016/j.fluid.2016.03.014
Volumetric, transport, and acoustic properties of binary mixtures of 1-Tetradecanol + an Aromatic Compound (Toluene, n-Butylbenzene, or n-Propylbenzene) at T = (298.15, 303.15, and 308.15) K. Experimental results, correlation, and prediction by the ERAS model:	https://www.doi.org/10.1016/j.jct.2009.02.002
Handbook of Vapor Pressure: Volume 2: Hydrocarbons and Halogenated Hydrocarbons:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure
Liquid−Liquid Equilibria for Systems Containing 4-Phenylbutan-2-one or Benzyl Ethanoate and Selected Alkanes:	https://www.doi.org/10.1021/acs.jced.6b00803
1-Octyl-3-methylimidazolium methylsulfate and 1-Octyl-3-methylimidazolium ethylsulfate as solvents for extraction of aromatics from aromatic/alkane mixtures:	https://www.doi.org/10.1016/j.fluid.2017.09.011
(Liquid + Liquid) Equilibrium for (N,N-Dimethylformamide (DMF) + n-Hexadecane) and (N,N-Dimethylformamide (DMF) + n-Hexadecane + Benzene) at 313 K:	https://www.doi.org/10.1021/je9006234
Densities, Speeds of Sound, and Viscosities of Binary Mixtures of an Alkylbenzene (Toluene or Ethylbenzene) with n-Hexadecane at 313 K:	https://www.doi.org/10.1021/acs.jced.8b00692
Liquid−Liquid Equilibrium for Ternary Mixtures of (n-Hexadecane + Benzene + 1-Octyl-3-methylimidazolium Tetrafluoroborate or 1-Octyl-3-methylimidazolium Hexafluorophosphate):	https://www.doi.org/10.1016/j.tca.2014.08.033
Application of water-dilution method to ternary liquid−liquid equilibrium data of (n-Hexadecane + Benzene + Ethanol or 1-Propanol or 2-Propanol) at 298.15 K:	https://www.doi.org/10.1016/j.jct.2019.05.011
Ternary liquid−liquid equilibrium for systems based on activity coefficients at infinite dilution with phosphonium ionic liquids:	https://www.doi.org/10.1016/j.fluid.2005.06.028
Liquid−liquid equilibria under high pressure of tetradecane + pentadecane and tetradecanol + hexadecane binary systems:	https://www.doi.org/10.1021/je020107x
Liquid−Liquid Equilibria for Mixtures of (Furfural + a Chlorinated Aromatic Compound + an Alkane) at T = 298.15 K:	https://www.doi.org/10.1016/j.jct.2018.08.036
Density, speeds of sound, refractive indices, viscosities and their related properties for (decan-1-ol + n-hexadecane) at T = (293.15 to 323.15) K:	https://www.doi.org/10.1021/acs.jced.7b01037
Thermodynamic properties for Synthesis and Physical and Thermodynamic Properties of Lactic Acid and Its Binary Mixtures with Water:	https://www.doi.org/10.1016/j.fluid.2018.08.019
Experimental measurement and thermodynamic modeling of phase equilibria of PDO2 + tetralin + n-alkanes (n = 6, 10) and its binary systems:	https://www.doi.org/10.1021/acs.jced.6b00691
Solubility of Methane in Water and Hexadecane:	https://www.doi.org/10.1016/j.jct.2010.11.004
Estimated Solubility Method:	http://pubs.acs.org/doi/suppl/10.1021/ci034243x/suppl_file/ci034243xsi20040112_053635.txt
Phase equilibria of didecyldimethylammonium nitrate ionic liquid with water and organic solvents:	https://www.doi.org/10.1016/j.jct.2006.10.009
Dortmund Data Bank Vapor-Liquid Equilibrium Data:	http://www.ddbst.com/en/EED/VLE/VLE%20Acetone%3BHexadecane.php
Excess Volumes, Densities, Speeds of Sound, and Viscosities for the Binary System 1-Butanol + n-Hexadecane at (298.15, 303.15, and 308.15) K:	https://www.doi.org/10.1007/s10765-008-0491-0
Measurement and Prediction of Excess Properties of Binary Mixtures: Methyl Butanoate + an Even-Numbered n-Alkane at (298.15, 303.15, and 308.15) K:	https://www.doi.org/10.1021/acs.jced.9b00185
Bulk Modulus, Surface Tensions, and Flash Points of Binary Mixtures of Ethylbenzene + n-Dodecane or n-Hexadecane at 0.1 MPa:	https://www.doi.org/10.1021/acs.jced.8b00008
Thermodynamics of aromatic polar compound (alkanone, alkanal or alkanol) + n-Dodecane or n-Hexadecane:	https://www.doi.org/10.1016/j.fluid.2016.04.004
Temperature Dependence of Speed of Sound, Densities, and Isentropic Compressibilities of n-Hexane + n-Hexadecane in the Range 293.15 to 373.15 K:	https://www.doi.org/10.1021/je050060q
Joule−Thomson coefficient of selected n-alkanes at 0.1 MPa:	https://www.doi.org/10.1016/j.jct.2017.03.034
Liquid−liquid equilibria for ternary systems acetic acid + n-butylacetate + hydrocarbons at 293.15 K:	https://www.doi.org/10.1016/j.fluid.2013.07.032

Extraction of nitrogen compounds from diesel fuel using imidazolium- and pyridinium-based ionic liquids:	https://www.doi.org/10.1016/j.fluid.2015.07.021
Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Refractive Indices of Mixtures of Hexane with 1-Chlorobutane and 1-Chlorohexane at T = (293.2 to 328.2) K:	https://www.doi.org/10.1021/je400839x
Extractive Desulfurization of Hydrocarbon Fuels: Viscosities and Refractive Indices of Mixtures of Hexane with 1-Methyl-3-octylimidazolium Bis(trifluoromethylsulfonyl)imide:	https://www.doi.org/10.1007/s10765-005-5572-8
Determination of vapor pressure and thermochemical properties of sucrose and glucose anhydrides by thermogravimetric analysis:	https://www.doi.org/10.1016/j.tca.2015.03.020
Experimental high pressure speed of sound and density of (tetralin + n-Alkane) Binary Mixtures:	https://www.doi.org/10.1016/j.jct.2016.11.017
Measurement and Correlation of High Pressure Phase Equilibria for CO2 + Alkanes and CO2 + Crude Oil Systems:	https://www.doi.org/10.1021/acs.jced.7b00517
Phase behavior of hydrogenated soybean oil and estriol in various solvents between 293.15 and 328.15 K:	https://www.doi.org/10.1016/j.jct.2016.11.017
Interfacial Tension Measurement and Calculation of Carbon Dioxide + Systems and Thermodynamic modeling:	https://www.doi.org/10.1016/j.fluid.2007.10.010
Experimental high pressure speed of sound and density of (tetralin + n-Alkane) Binary Mixtures:	https://www.doi.org/10.1016/j.jct.2014.09.020
The influence of n-alkane chain length on thermodynamic properties of tetralin:	https://www.doi.org/10.1021/acs.jced.7b00159

Legend

af:	Acentric Factor
chl:	Standard liquid enthalpy of combustion
cpg:	Ideal gas heat capacity
cpl:	Liquid phase heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
gyrad:	Radius of Gyration
hf:	Enthalpy of formation at standard conditions
hfl:	Liquid phase enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hfust:	Enthalpy of fusion at a given temperature
hsub:	Enthalpy of sublimation at standard conditions
hsubt:	Enthalpy of sublimation at a given temperature
hvap:	Enthalpy of vaporization at standard conditions
hvapt:	Enthalpy of vaporization at a given temperature
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
nfpaf:	NFPA Fire Rating
pc:	Critical Pressure
pvap:	Vapor pressure
rfi:	Refractive Index
rhoc:	Critical density
rhol:	Liquid Density
rinpol:	Non-polar retention indices
sfust:	Entropy of fusion at a given temperature
sg:	Molar entropy at standard conditions
sl:	Liquid phase molar entropy at standard conditions
speedsl:	Speed of sound in fluid

srf:	Surface Tension
tb:	Normal Boiling Point Temperature
tbp:	Boiling point at given pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
tfp:	Melting point
vc:	Critical Volume
vols:	Specific Volume
zc:	Critical Compressibility
zra:	Rackett Parameter

Latest version available from:

https://www.chemeo.com/cid/30-657-9/Hexadecane.pdf

Generated by Cheméo on 2025-12-22 13:09:05.638213048 +0000 UTC m=+6157143.168253715.

Cheméo (https://www.chemeo.com) is the biggest free database of chemical and physical data for the process industry.