Tetradecane

Other names: n-Tetradecane
Inchi: InChI=1S/C14H30/c1-3-5-7-9-11-13-14-12-10-8-6-4-2/h3-14H2,1-2H3
InchiKey: BGHCVCJVXZWKCC-UHFFFAOYSA-N
Formula: C14H30
SMILES: CCCCCCCCCCCCCC
Mol. weight [g/mol]: 198.39
CAS: 629-59-4

Physical Properties

Property code	Value	Unit	Source
af	0.5810		KDB
chg	-9393.50 ± 1.60	kJ/mol	NIST Webbook
gf	66.86	kJ/mol	KDB
hf	-332.30	kJ/mol	KDB
hf	-332.10 ± 1.80	kJ/mol	NIST Webbook
hfl	-403.30 ± 1.80	kJ/mol	NIST Webbook
hfus	32.02	kJ/mol	Joback Method
hsub	117.60	kJ/mol	NIST Webbook
hvap	71.70	kJ/mol	NIST Webbook
hvap	71.40	kJ/mol	NIST Webbook
hvap	71.10 ± 0.40	kJ/mol	NIST Webbook
hvap	71.70	kJ/mol	NIST Webbook
hvap	71.20	kJ/mol	NIST Webbook
hvap	72.00 ± 2.40	kJ/mol	NIST Webbook
hvap	72.10	kJ/mol	NIST Webbook
hvap	71.60 ± 1.30	kJ/mol	NIST Webbook
hvap	71.30	kJ/mol	NIST Webbook
hvap	71.80 ± 0.60	kJ/mol	NIST Webbook
log10ws	-7.96		Aqueous Solubility Prediction Method
log10ws	-7.96		Estimated Solubility Method
logp	5.707		Crippen Method
mcvol	208.120	ml/mol	McGowan Method
pc	1600.00 ± 200.00	kPa	NIST Webbook
pc	1440.00	kPa	NIST Webbook
pc	1438.00 ± 68.94	kPa	NIST Webbook
pc	1573.00 ± 20.00	kPa	NIST Webbook

pc	1570.00	kPa	KDB
rhoc	218.23 ± 39.68	kg/m3	NIST Webbook
rhoc	222.19 ± 5.95	kg/m3	NIST Webbook
rinpol	239.35		NIST Webbook
rinpol	236.21		NIST Webbook
sg	700.40	J/mol×K	NIST Webbook
sl	555.43	J/mol×K	NIST Webbook
sl	562.30	J/mol×K	NIST Webbook
tb	524.15 ± 0.60	K	NIST Webbook
tb	525.15 ± 0.40	K	NIST Webbook
tb	528.00 ± 2.00	K	NIST Webbook
tb	526.40 ± 0.30	K	NIST Webbook
tb	526.04 ± 0.30	K	NIST Webbook
tb	512.00 ± 3.00	K	NIST Webbook
tb	526.73	K	KDB
tb	510.00 ± 6.00	K	NIST Webbook
tb	525.70 ± 3.00	K	NIST Webbook
tb	526.90	K	NIST Webbook
tc	693.00	K	KDB
tc	693.00 ± 2.00	K	NIST Webbook
tc	693.00 ± 1.20	K	NIST Webbook
tc	691.80 ± 0.70	K	NIST Webbook
tc	693.00 ± 1.20	K	NIST Webbook
tc	694.00	K	NIST Webbook
tc	692.80 ± 1.00	K	NIST Webbook
tc	692.80 ± 1.00	K	NIST Webbook
tc	696.90 ± 2.00	K	NIST Webbook
tc	694.15 ± 1.00	K	NIST Webbook
tc	692.30	K	NIST Webbook
tc	691.20 ± 1.50	K	NIST Webbook
tf	277.70 ± 2.00	K	NIST Webbook
tf	277.70 ± 2.00	K	NIST Webbook
tf	278.00 ± 2.00	K	NIST Webbook
tf	278.70 ± 0.70	K	NIST Webbook
tf	277.40 ± 2.00	K	NIST Webbook
tf	278.60 ± 2.00	K	NIST Webbook
tf	278.80 ± 1.00	K	NIST Webbook
tf	279.20 ± 1.00	K	NIST Webbook
tf	279.20 ± 1.00	K	NIST Webbook
tf	279.01 ± 0.02	K	NIST Webbook
tf	277.85 ± 1.00	K	NIST Webbook
tf	279.01 ± 0.01	K	NIST Webbook
tf	279.00 ± 0.05	K	NIST Webbook
tf	278.92 ± 0.20	K	NIST Webbook

tf	278.90 ± 0.30	K	NIST Webbook
tf	279.01 ± 0.01	K	NIST Webbook
tf	279.00 ± 0.01	K	NIST Webbook
tf	279.00 ± 0.01	K	NIST Webbook
tf	279.01	K	KDB
tf	251.00 ± 5.00	K	NIST Webbook
tf	278.40 ± 0.30	K	NIST Webbook
tf	278.90	K	Determination of thermophysical properties of cyclopentane hydrate using a stirred calorimetric cell
tf	278.99 ± 0.30	K	NIST Webbook
tf	278.70 ± 2.00	K	NIST Webbook
tf	279.15 ± 0.50	K	NIST Webbook
tf	279.00 ± 0.20	K	NIST Webbook
tf	279.00 ± 0.20	K	NIST Webbook
tf	278.90 ± 0.20	K	NIST Webbook
tf	279.00 ± 0.20	K	NIST Webbook
tf	279.00 ± 0.20	K	NIST Webbook
tf	279.00 ± 0.20	K	NIST Webbook
tf	278.97 ± 0.02	K	NIST Webbook
tf	278.98	K	Aqueous Solubility Prediction Method
tf	279.00 ± 0.30	K	NIST Webbook
tf	279.40	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	278.99 ± 0.05	K	NIST Webbook
tt	279.01 ± 0.20	K	NIST Webbook
tt	279.02 ± 0.05	K	NIST Webbook
tt	279.02 ± 0.02	K	NIST Webbook
tt	279.02 ± 0.20	K	NIST Webbook
vc	0.894	m3/kmol	KDB
vc	0.894	m3/kmol	NIST Webbook
zc	0.2435940		KDB

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source

cpg	604.51	J/mol×K	679.33	Joback Method
cpg	505.91	J/mol×K	519.72	Joback Method
cpg	524.00	J/mol×K	546.32	Joback Method
cpg	541.40	J/mol×K	572.92	Joback Method
cpg	558.13	J/mol×K	599.52	Joback Method
cpg	574.22	J/mol×K	626.13	Joback Method
cpg	589.67	J/mol×K	652.73	Joback Method
cpl	434.16	J/mol×K	298.15	NIST Webbook
cpl	438.01	J/mol×K	298.15	NIST Webbook
cpl	434.20	J/mol×K	298.15	NIST Webbook
cpl	438.01	J/mol×K	298.15	NIST Webbook
cpl	438.28	J/mol×K	298.15	NIST Webbook
cpl	433.53	J/mol×K	298.15	NIST Webbook
cpl	434.20	J/mol×K	298.15	NIST Webbook
cpl	435.10	J/mol×K	296.20	NIST Webbook
cpl	434.30	J/mol×K	290.60	NIST Webbook
cpl	433.98	J/mol×K	298.15	NIST Webbook
cpl	438.44	J/mol×K	298.15	NIST Webbook
cpl	436.00	J/mol×K	298.00	NIST Webbook
cpl	436.91	J/mol×K	298.15	NIST Webbook
cpl	436.52	J/mol×K	298.15	NIST Webbook
cpl	436.40	J/mol×K	298.15	NIST Webbook
cpl	433.53	J/mol×K	298.15	NIST Webbook
cpl	434.20	J/mol×K	298.15	NIST Webbook
dvisc	0.0018970	Pa×s	303.15	Densities and Viscosities of Binary Mixtures of exo-Tetrahydrodicyclopentadiene with N-Undecane or N-Tetradecane at T = (293.15 to 313.15) K
dvisc	0.0023460	Pa×s	293.15	Densities and Viscosities of Binary Mixtures of exo-Tetrahydrodicyclopentadiene with N-Undecane or N-Tetradecane at T = (293.15 to 313.15) K
dvisc	0.0021070	Pa×s	298.15	Densities and Viscosities of Binary Mixtures of exo-Tetrahydrodicyclopentadiene with N-Undecane or N-Tetradecane at T = (293.15 to 313.15) K

dvisc	0.0015940	Pa×s	313.15	Densities and Viscosities of Binary Mixtures of exo-Tetrahydrodicyclopentadiene with N-Undecane or N-Tetradecane at T = (293.15 to 313.15) K
hfust	45.07	kJ/mol	279.00	NIST Webbook
hfust	45.07	kJ/mol	279.00	NIST Webbook
hfust	42.70	kJ/mol	278.30	NIST Webbook
hfust	45.07	kJ/mol	279.03	NIST Webbook
hvapt	64.10	kJ/mol	369.00	NIST Webbook
hvapt	65.70	kJ/mol	359.00	NIST Webbook
hvapt	70.10	kJ/mol	313.00	NIST Webbook
hvapt	67.80	kJ/mol	373.00	NIST Webbook
hvapt	66.80	kJ/mol	344.00	NIST Webbook
hvapt	68.90	kJ/mol	328.00	NIST Webbook
hvapt	68.60	kJ/mol	329.00	NIST Webbook
hvapt	69.00	kJ/mol	324.00	NIST Webbook
hvapt	47.61	kJ/mol	526.10	KDB
hvapt	57.80	kJ/mol	448.50	NIST Webbook
hvapt	67.90	kJ/mol	334.00	NIST Webbook
hvapt	57.10	kJ/mol	480.50	NIST Webbook
pvap	4.65	kPa	423.15	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K
pvap	6.84	kPa	433.15	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K

pvap	0.14	kPa	353.15	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K
pvap	0.45	kPa	373.15	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K
pvap	3.09	kPa	413.15	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K
pvap	2.00	kPa	403.15	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K
pvap	3.09	kPa	413.15	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K

pvap	4.64	kPa	423.15	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K	
pvap	6.81	kPa	433.15	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K	
pvap	9.78	kPa	443.15	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K	
pvap	13.75	kPa	453.15	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K	
pvap	50.70	kPa	498.07	Low-Pressure VLE Measurements and Thermodynamic Modeling, with PSRK and NRTL, of Binary 1-Alcohol + n-Alkane Systems	

pvap	50.50	kPa	497.96	Low-Pressure VLE Measurements and Thermodynamic Modeling, with PSRK and NRTL, of Binary 1-Alcohol + n-Alkane Systems
pvap	48.13	kPa	496.08	Low-Pressure VLE Measurements and Thermodynamic Modeling, with PSRK and NRTL, of Binary 1-Alcohol + n-Alkane Systems
pvap	46.96	kPa	495.18	Low-Pressure VLE Measurements and Thermodynamic Modeling, with PSRK and NRTL, of Binary 1-Alcohol + n-Alkane Systems
pvap	43.80	kPa	492.53	Low-Pressure VLE Measurements and Thermodynamic Modeling, with PSRK and NRTL, of Binary 1-Alcohol + n-Alkane Systems
pvap	42.42	kPa	491.29	Low-Pressure VLE Measurements and Thermodynamic Modeling, with PSRK and NRTL, of Binary 1-Alcohol + n-Alkane Systems

pvap	40.04	kPa	489.26	Low-Pressure VLE Measurements and Thermodynamic Modeling, with PSRK and NRTL, of Binary 1-Alcohol + n-Alkane Systems	
pvap	40.00	kPa	489.17	Low-Pressure VLE Measurements and Thermodynamic Modeling, with PSRK and NRTL, of Binary 1-Alcohol + n-Alkane Systems	
pvap	0.44	kPa	373.15	Isothermal Vapor Liquid Equilibria of n-Tetradecane + Ethyl Hexanoate, Ethyl Decanoate, and Ethyl Tetradecanoate	
pvap	0.75	kPa	383.15	Isothermal Vapor Liquid Equilibria of n-Tetradecane + Ethyl Hexanoate, Ethyl Decanoate, and Ethyl Tetradecanoate	
pvap	1.25	kPa	393.15	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K	
pvap	1.95	kPa	403.15	Isothermal Vapor Liquid Equilibria of n-Tetradecane + Ethyl Hexanoate, Ethyl Decanoate, and Ethyl Tetradecanoate	

pvap	3.02	kPa	413.15	Isothermal Vapor Liquid Equilibria of n-Tetradecane + Ethyl Hexanoate, Ethyl Decanoate, and Ethyl Tetradecanoate
pvap	4.54	kPa	423.15	Isothermal Vapor Liquid Equilibria of n-Tetradecane + Ethyl Hexanoate, Ethyl Decanoate, and Ethyl Tetradecanoate
pvap	6.68	kPa	433.15	Isothermal Vapor Liquid Equilibria of n-Tetradecane + Ethyl Hexanoate, Ethyl Decanoate, and Ethyl Tetradecanoate
pvap	9.63	kPa	443.15	Isothermal Vapor Liquid Equilibria of n-Tetradecane + Ethyl Hexanoate, Ethyl Decanoate, and Ethyl Tetradecanoate
pvap	13.60	kPa	453.15	Isothermal Vapor Liquid Equilibria of n-Tetradecane + Ethyl Hexanoate, Ethyl Decanoate, and Ethyl Tetradecanoate
pvap	4.27e-04	kPa	283.15	Gas Saturation Vapor Pressure Measurements of Mononitrotoluene Isomers from (283.15 to 313.15) K
pvap	1.21e-03	kPa	293.15	Gas Saturation Vapor Pressure Measurements of Mononitrotoluene Isomers from (283.15 to 313.15) K
pvap	3.22e-03	kPa	303.15	Gas Saturation Vapor Pressure Measurements of Mononitrotoluene Isomers from (283.15 to 313.15) K

pvap	8.10e-03	kPa	313.15	Gas Saturation Vapor Pressure Measurements of Mononitrotoluene Isomers from (283.15 to 313.15) K	
pvap	0.76	kPa	383.15	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K	
pvap	0.45	kPa	373.15	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K	
pvap	0.25	kPa	363.15	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K	
pvap	0.14	kPa	353.15	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K	

pvap	13.46	kPa	452.49	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K
pvap	1.23	kPa	393.15	Isothermal Vapor Liquid Equilibria of n-Tetradecane + Ethyl Hexanoate, Ethyl Decanoate, and Ethyl Tetradecanoate
pvap	9.46	kPa	442.49	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K
pvap	6.66	kPa	432.39	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K
pvap	4.54	kPa	422.55	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K

pvap	1.95	kPa	402.74	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K	
pvap	1.19	kPa	392.00	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K	
pvap	1.19	kPa	391.95	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K	
pvap	0.72	kPa	382.07	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K	
pvap	0.72	kPa	381.93	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K	

pvap	0.42	kPa	371.91	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K	
pvap	0.23	kPa	361.89	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K	
pvap	0.23	kPa	361.80	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K	
pvap	0.12	kPa	351.75	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K	

pvap	3.03	kPa	412.69	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K
pvap	0.76	kPa	383.15	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K
pvap	1.25	kPa	393.15	Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K
rfi	1.42910		293.10	Liquid liquid equilibria for n-alkanes (C12, C14, C17) + propylbenzene +NMP mixtures at temperatures between 298 and 328K

rfi	1.42360	308.15	Density, Viscosity, Refractive Index, and Speed of Sound in the Binary Mixtures of Tri-n-butylamine + Triethylamine, + Tetrahydrofuran, + Tetradecane, + Tetrachloroethylene, + Pyridine, or + Trichloroethylene at (298.15, 303.15, and 308.15) K
rfi	1.42600	303.15	Density, Viscosity, Refractive Index, and Speed of Sound in the Binary Mixtures of Tri-n-butylamine + Triethylamine, + Tetrahydrofuran, + Tetradecane, + Tetrachloroethylene, + Pyridine, or + Trichloroethylene at (298.15, 303.15, and 308.15) K
rfi	1.42820	298.15	Density, Viscosity, Refractive Index, and Speed of Sound in the Binary Mixtures of Tri-n-butylamine + Triethylamine, + Tetrahydrofuran, + Tetradecane, + Tetrachloroethylene, + Pyridine, or + Trichloroethylene at (298.15, 303.15, and 308.15) K
rfi	1.42730	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	1.42690		298.15	Liquid-Liquid Equilibria for Ternary Mixtures of gamma-Valerolactone + n-Tetradecane + (Butanoic Acid or Hexanoic Acid or Methyl Myristate) at 298.15 K
rfi	1.42890		293.10	Evaluation of [bmim][PF6] as an ionic solvent for the extraction of propylbenzene from aliphatic compounds
rfi	1.42910		293.10	Extraction of pentylbenzene from high molar mass alkanes (C14 and C17) by N-methyl-2-pyrrolidone
rhol	763.00	kg/m3	293.00	KDB
rhol	759.27	kg/m3	298.15	Liquid liquid equilibria for acetophenone + n-alkane mixtures and characterization of acetophenone systems using DISQUAC
rhol	759.27	kg/m3	298.15	Thermodynamics of aromatic polar compound (alkanone, alkanal or alkanoate) + hydrocarbon mixtures
rhol	763.09	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	759.27	kg/m3	298.15	Thermodynamics of Mixtures Containing a Very Strongly Polar Compound. 10. Liquid Liquid Equilibria for N,N-Dimethylacetamide + Selected Alkanes

rhol	759.27	kg/m3	298.15	Thermodynamics of Mixtures Containing Aromatic Alcohols. 1. Liquid Liquid Equilibria for (Phenylmethanol + Alkane) Systems
rhol	759.27	kg/m3	298.15	Thermodynamics of Mixtures Containing Ethers. Part III. Liquid-Liquid Equilibria for 2,5,8,11-Tetraoxadodecane or 2,5,8,11,14-Pentaoxapentadecane + Selected N-Alkanes
rhol	759.36	kg/m3	298.15	Excess Enthalpies of Binary Mixtures of 1-Hexene with Some n-Alkanes at 298.15 K
rhol	759.27	kg/m3	298.15	Liquid-Liquid Equilibria for 2-Phenylethan-1-ol + Alkane Systems
rhol	760.20	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	727.10	kg/m3	344.15	High-pressure densities and interfacial tensions of binary systems containing carbon dioxide + n-alkanes: (n-Dodecane, n-tridecane, n-tetradecane)
rhol	759.57	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	752.51	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	748.98	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	759.32	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	760.20	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	760.20	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	759.27	kg/m3	298.15	Liquid-liquid equilibria for benzaldehyde + n-alkane mixtures andcharacterization of benzaldehyde + hydrocarbon systems in terms of DISQUAC

rhol	759.19	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	759.27	kg/m3	298.15	Liquid Liquid Equilibria for Systems Containing 4-Phenylbutan-2-one or Benzyl Ethanoate and Selected Alkanes
rhol	759.38	kg/m3	298.15	Solubility behavior of .gamma.-valerolactone + n-tetradecane or diesel mixtures at different temperatures
rhol	756.03	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
sfust	161.52	J/mol×K	279.03	NIST Webbook
srf	0.02	N/m	313.15	Interfacial tensions of binary mixtures of ethanol with octane, decane, dodecane, and tetradecane
srf	0.03	N/m	293.20	KDB

srf	0.03	N/m	294.60	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

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	395.10	K	1.30	NIST Webbook
tfp	279.20	K	100.00	Liquid solid equilibria under high pressure of tetradecane + pentadecane and tetradecane + hexadecane binary systems
tfp	284.20	K	20000.00	Liquid solid equilibria under high pressure of tetradecane + pentadecane and tetradecane + hexadecane binary systems
tfp	289.10	K	40000.00	Liquid solid equilibria under high pressure of tetradecane + pentadecane and tetradecane + hexadecane binary systems
tfp	293.80	K	60000.00	Liquid solid equilibria under high pressure of tetradecane + pentadecane and tetradecane + hexadecane binary systems

tfp	297.90	K	80000.00	Liquid solid equilibria under high pressure of tetradecane + pentadecane and tetradecane + hexadecane binary systems
tfp	301.70	K	100000.00	Liquid solid equilibria under high pressure of tetradecane + pentadecane and tetradecane + hexadecane binary systems

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.50005e+01
Coeff. B	-4.49932e+03
Coeff. C	-8.96310e+01
Temperature range (K), min.	395.44
Temperature range (K), max.	554.00

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/T + C*ln(T) + D*T^2
Coeff. A	1.87822e+02
Coeff. B	-1.58065e+04
Coeff. C	-2.49854e+01
Coeff. D	1.21628e-05
Temperature range (K), min.	279.01
Temperature range (K), max.	692.40

Datasets

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	120.00	449.55
328.15	120.00	452.72
333.15	120.00	456.09
338.15	120.00	459.47
343.15	120.00	463.04
348.15	120.00	466.61
353.15	120.00	470.38
358.15	120.00	474.15
363.15	120.00	477.72
368.15	120.00	481.49
373.15	120.00	485.26
378.15	120.00	489.03
383.15	120.00	492.80
388.15	120.00	496.76
393.15	120.00	500.14
398.15	120.00	504.50
403.15	120.00	508.27
408.15	120.00	512.44
413.15	120.00	515.81
418.15	120.00	519.58
423.15	120.00	523.35
428.15	120.00	527.12
433.15	120.00	530.89
438.15	120.00	535.25
443.15	120.00	539.81
448.15	120.00	543.58
453.15	120.00	547.95
458.15	120.00	554.10
463.15	120.00	559.65
323.15	10120.00	447.76
328.15	10120.00	451.13
333.15	10120.00	454.51
338.15	10120.00	457.88
343.15	10120.00	461.25
348.15	10120.00	464.82
353.15	10120.00	468.20
358.15	10120.00	471.97
363.15	10120.00	475.54

368.15	10120.00	478.91
373.15	10120.00	483.07
378.15	10120.00	486.45
383.15	10120.00	489.82
388.15	10120.00	493.19
393.15	10120.00	497.16
398.15	10120.00	500.73
403.15	10120.00	503.71
408.15	10120.00	508.47
413.15	10120.00	511.64
418.15	10120.00	515.41
423.15	10120.00	518.78
428.15	10120.00	522.16
433.15	10120.00	525.93
438.15	10120.00	529.30
443.15	10120.00	533.47
448.15	10120.00	537.63
453.15	10120.00	541.60
458.15	10120.00	545.77
463.15	10120.00	550.33
468.15	10120.00	553.90
473.15	10120.00	558.07
478.15	10120.00	562.83
483.15	10120.00	566.79

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

Viscosity, Pa*s

Temperature, K - Liquid	Pressure, kPa - Liquid	Viscosity, Pa*s - Liquid
313.20	690.00	0.0016530
313.20	5000.00	0.0017380
313.20	10000.00	0.0018310
313.20	20000.00	0.0020250
313.20	30000.00	0.0022410
313.20	40000.00	0.0024830
313.20	50000.00	0.0027670
313.20	60000.00	0.0030930
333.20	690.00	0.0012180
333.20	5000.00	0.0012830
333.20	10000.00	0.0013450

333.20	20000.00	0.0014730
333.20	30000.00	0.0016070
333.20	40000.00	0.0017400
333.20	50000.00	0.0018860
333.20	60000.00	0.0020430
353.20	690.00	0.0008960
353.20	5000.00	0.0009570
353.20	10000.00	0.0010170
353.20	20000.00	0.0011280
353.20	30000.00	0.0012290
353.20	40000.00	0.0013250
353.20	50000.00	0.0014230
353.20	60000.00	0.0015180
373.20	690.00	0.0006600
373.20	5000.00	0.0007080
373.20	10000.00	0.0007570
373.20	20000.00	0.0008520
373.20	30000.00	0.0009430
373.20	40000.00	0.0010310
373.20	50000.00	0.0011170
373.20	60000.00	0.0012020
393.20	690.00	0.0005270
393.20	5000.00	0.0005680
393.20	10000.00	0.0006090
393.20	20000.00	0.0006870
393.20	30000.00	0.0007670
393.20	40000.00	0.0008390
393.20	50000.00	0.0009080
393.20	60000.00	0.0009760

Reference *https://www.doi.org/10.1016/j.fluid.2007.08.010*

Mass density, kg/m3

Temperature, K - Liquid	Pressure, kPa - Liquid	Mass density, kg/m3 - Liquid
294.80	2050.00	760.0
294.80	3540.00	762.0
294.40	5030.00	764.0
294.80	6500.00	765.0
294.60	8000.00	766.0
294.60	9490.00	767.0

324.10	2070.00	742.0
324.00	3540.00	743.0
324.00	5050.00	744.0
324.00	6560.00	746.0
324.10	8070.00	747.0
324.10	9540.00	748.0
373.50	2100.00	708.0
373.50	3560.00	709.0
373.30	5060.00	711.0
373.30	6560.00	712.0
373.50	8030.00	713.0
373.50	9500.00	715.0
447.60	1990.00	655.0
447.60	3590.00	658.0
447.50	4920.00	660.0
447.50	6450.00	662.0
447.60	7960.00	665.0
447.60	9470.00	667.0

Reference *https://www.doi.org/10.1016/j.fluid.2012.01.023*

Temperature, K	Pressure, kPa	Mass density, kg/m3
283.15	100.00	770.0
283.15	470.00	770.2
283.15	960.00	770.5
298.15	100.00	759.4
298.15	470.00	759.7
298.15	960.00	760.0
298.15	2460.00	761.0
298.15	2950.00	761.3
298.15	4930.00	762.6
298.15	7410.00	764.2
298.15	9890.00	765.8
298.15	14850.00	768.9
298.15	19810.00	771.9
298.15	24770.00	774.8
298.15	29730.00	777.6
298.15	34690.00	780.3
298.15	39650.00	782.9
298.15	44610.00	785.4
298.15	49570.00	787.9
298.15	54530.00	790.3
298.15	59490.00	792.6

298.15	64450.00	794.9
298.15	69410.00	797.1
338.15	100.00	731.4
338.15	470.00	731.7
338.15	960.00	732.1
338.15	2460.00	733.3
338.15	2950.00	733.7
338.15	4930.00	735.3
338.15	7410.00	737.3
338.15	9890.00	739.2
338.15	14850.00	743.0
338.15	19810.00	746.5
338.15	29730.00	753.2
338.15	34690.00	756.4
338.15	39650.00	759.4
338.15	44610.00	762.4
338.15	49570.00	765.2
338.15	59490.00	770.7
338.15	64450.00	773.3
338.15	69410.00	775.8
338.15	44610.00	762.3
338.15	49570.00	765.1
338.15	54530.00	767.9
338.15	59490.00	770.6
338.15	64450.00	773.2
338.15	69410.00	775.7
288.15	100.00	766.4
288.15	470.00	766.7
288.15	960.00	766.9
288.15	2460.00	767.9
288.15	2950.00	768.2
288.15	4930.00	769.5
288.15	7410.00	771.0
288.15	9890.00	772.5
308.15	100.00	752.3
308.15	470.00	752.6
308.15	2460.00	754.0
308.15	4930.00	755.7
308.15	9890.00	759.1
308.15	14850.00	762.3
308.15	19810.00	765.4
308.15	24770.00	768.4
308.15	29730.00	771.3
308.15	34690.00	774.1

308.15	39650.00	776.9
308.15	44610.00	779.5
308.15	49570.00	782.1
308.15	54530.00	784.5
308.15	59490.00	787.0
308.15	64450.00	789.3
308.15	69410.00	791.6
358.15	100.00	717.2
358.15	470.00	717.5
358.15	960.00	718.0
358.15	2460.00	719.4
358.15	2950.00	719.8
358.15	4930.00	721.6
358.15	7410.00	723.8
358.15	9890.00	725.9
358.15	14850.00	730.0
358.15	19810.00	733.9
358.15	24770.00	737.6
358.15	29730.00	741.2
358.15	34690.00	744.6
358.15	39650.00	747.8
358.15	44610.00	751.0
358.15	49570.00	754.0
358.15	54530.00	757.0
358.15	59490.00	759.8
358.15	64450.00	762.5
358.15	69410.00	765.2
293.15	100.00	762.9
293.15	470.00	763.2
293.15	960.00	763.5
293.15	2460.00	764.5
293.15	2950.00	764.8
293.15	4930.00	766.0
293.15	7410.00	767.6
293.15	9890.00	769.2
318.15	100.00	745.4
318.15	470.00	745.6
318.15	960.00	746.0
318.15	2460.00	747.1
318.15	2950.00	747.4
318.15	4930.00	748.9
318.15	7410.00	750.7
318.15	9890.00	752.4
318.15	14850.00	755.8

318.15	19810.00	759.1
318.15	24770.00	762.3
318.15	29730.00	765.2
318.15	34690.00	768.2
318.15	39650.00	771.0
318.15	44610.00	773.8
318.15	49570.00	776.4
318.15	54530.00	779.0
318.15	59490.00	781.5
318.15	64450.00	784.0
318.15	69410.00	786.3
373.15	100.00	706.5
373.15	470.00	706.8
373.15	960.00	707.3
373.15	2460.00	708.8
373.15	2950.00	709.3
373.15	4930.00	711.3
373.15	7410.00	713.6
373.15	9890.00	715.9
373.15	14850.00	720.3
373.15	19810.00	724.5
373.15	24770.00	728.5
373.15	29730.00	732.2
373.15	34690.00	735.8
373.15	39650.00	739.3
373.15	44610.00	742.6
373.15	49570.00	745.7
373.15	54530.00	748.8
373.15	59490.00	751.8
373.15	64450.00	754.6
373.15	69410.00	757.4

Reference *https://www.doi.org/10.1016/j.fluid.2017.08.025*

Temperature, K	Pressure, kPa	Mass density, kg/m3
313.19	10020.00	756.25
313.23	12040.00	757.62
313.15	14050.00	759.03
313.13	16040.00	760.35
313.15	18060.00	761.65
313.17	19040.00	762.28
323.26	10000.00	749.44
323.18	12040.00	750.93

323.14	14050.00	752.38
323.18	16070.00	753.74
323.23	18060.00	755.07
323.25	19080.00	755.76
333.14	10050.00	742.64
333.16	12040.00	744.14
333.28	14060.00	745.66
333.16	16060.00	747.18
333.13	18050.00	748.61
333.13	19060.00	749.31
343.32	10040.00	736.0
343.32	12050.00	737.59
343.35	14070.00	739.16
343.31	16030.00	740.68
343.34	18020.00	742.16
343.31	19040.00	742.92
353.63	10020.00	729.05
353.58	12050.00	730.83
353.66	14040.00	732.42
353.48	16030.00	734.17
353.50	18010.00	735.7
353.51	19050.00	736.41

Reference *https://www.doi.org/10.1021/acs.jced.5b00049*

Temperature, K	Pressure, kPa	Mass density, kg/m3
323.20	1050.00	737.0
323.20	2020.00	742.0
323.20	3160.00	743.0
323.20	4070.00	744.0
323.20	5060.00	745.0
323.30	5940.00	745.0
373.40	2080.00	707.0
373.40	4050.00	709.0
373.40	6010.00	710.0
373.40	7070.00	711.0
373.50	2970.00	708.0
373.50	5010.00	710.0
373.60	1010.00	706.0
422.50	1080.00	672.0
422.50	2140.00	673.0
422.60	3020.00	675.0
422.60	4020.00	676.0

422.60	5040.00	677.0
422.60	6050.00	679.0
422.70	7000.00	680.0
422.70	8000.00	681.0

Reference *https://www.doi.org/10.1021/je200575c*

Pressure, kPa	Temperature, K	Mass density, kg/m3
100.00	283.15	770.4
100.00	288.15	767.0
100.00	293.15	763.5
100.00	298.15	759.8
100.00	303.15	756.3
100.00	308.15	752.7
100.00	313.15	749.2
100.00	318.15	745.7
100.00	323.15	742.2
10000.00	283.15	776.4
10000.00	288.15	772.9
10000.00	293.15	769.6
10000.00	298.15	766.2
10000.00	303.15	762.8
10000.00	308.15	759.4
10000.00	313.15	756.0
10000.00	318.15	752.7
10000.00	323.15	749.4
20000.00	288.15	778.8
20000.00	293.15	775.6
20000.00	298.15	772.3
20000.00	303.15	769.0
20000.00	308.15	765.8
20000.00	313.15	762.5
20000.00	318.15	759.3
20000.00	323.15	756.2
30000.00	288.15	784.2
30000.00	293.15	781.1
30000.00	298.15	778.0
30000.00	303.15	774.8
30000.00	308.15	771.6
30000.00	313.15	768.5
30000.00	318.15	765.5
30000.00	323.15	762.4
40000.00	288.15	789.4

40000.00	293.15	786.4
40000.00	298.15	783.3
40000.00	303.15	780.2
40000.00	308.15	777.2
40000.00	313.15	774.2
40000.00	318.15	771.2
40000.00	323.15	768.4
50000.00	293.15	791.4
50000.00	298.15	788.4
50000.00	303.15	785.4
50000.00	308.15	782.4
50000.00	313.15	779.5
50000.00	318.15	776.6
50000.00	323.15	773.8
60000.00	293.15	796.1
60000.00	298.15	793.2
60000.00	303.15	790.3
60000.00	308.15	787.3
60000.00	313.15	784.5
60000.00	318.15	781.7
60000.00	323.15	779.0

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

Sources

Extraction of pentylbenzene from high molar mass alkanes (C14 and C17) by N-methyl-2-pyrrolidone:	https://www.doi.org/10.1016/j.jct.2005.06.012
Thermodynamic properties of mixtures containing ionic liquids Vapor pressures and activity coefficients of n-alcohols and benzene in binary mixtures with 1-methyl-3-butyl-imidazolium bis(trifluoromethyl-sulfonyl) imide:	https://www.doi.org/10.1016/j.fluid.2005.07.008
Excess Molar Enthalpies of Binary Systems of n-Valeric Anhydride or Hexanoic Anhydride with n-Dodecane, n-Tetradecane, or n-Hexadecane at 298.15 K:	https://www.doi.org/10.1021/je900598y
Measurement and correlation of saturated liquid properties and gas solubility for decane, tetradecane and their binary mixtures saturated with carbon dioxide:	https://www.doi.org/10.1016/j.fluid.2012.09.037
Interfacial tensions of binary mixtures of ethane with octane, decane, dodecane, and tetradecane:	https://www.doi.org/10.1016/j.jct.2011.04.005
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:	https://www.doi.org/10.1021/je400835u
Excess Molar Enthalpies of Binary Systems of 2-Octanone or 3-Octanone with Dodecane, Tetradecane, or Hexadecane at 298.15 K:	https://www.doi.org/10.1021/je900311v
Vapor liquid equilibrium measurement and thermodynamic modeling of binary systems (methane + n-tetradecane):	https://www.doi.org/10.1016/j.fluid.2012.01.023
Excess Molar Volumes for Three and Four Component Mixtures Simulating the Binary Mixture (Cyclohexane+ Hexadecane):	https://www.doi.org/10.1021/acs.jced.5b00331
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
Liquid Viscosities of Cyclohexane, Cyclohexane + Tetradecane, and Cyclohexane + Benzene from (313 to 393) K and Pressures Up to 60 MPa:	https://www.doi.org/10.1021/je800882f
Determination of thermophysical properties of cyclopentane hydrate using a stirred calorimetric cell:	https://www.doi.org/10.1016/j.jct.2018.05.023
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
Isothermal Vapor Pressures of Three Binary Systems: n-Tetradecane + Methyl Dodecanoate, Methyl Tetradecanoate, or Methyl Hexadecanoate between 353.15 and 453.15 K:	https://www.doi.org/10.1021/acs.jced.7b00099
Liquid solid equilibria under high pressure of tetradecane + pentadecane and tetradecane + hexadecane binary systems:	https://www.doi.org/10.1016/j.fluid.2005.06.028

Thermodynamics of aromatic polar compound (alkanone, alkanal or alkanoate) + hydrocarbon mixtures:	https://www.doi.org/10.1016/j.fluid.2016.04.004
Evaluation of [bmim][BF6] as an ionic solvent for the extraction of propylbenzene from aliphatic compounds:	https://www.doi.org/10.1016/j.jct.2012.05.010
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C629594&Units=SI
Thermodynamics of Mixtures Containing Ethers. Part III. Liquid-Liquid Equilibria for 2,5,8,11-Tetraoxadodecane or 2,5,8,11,14-Pentaoxapentadecane + Selected N-Alkanes:	https://www.doi.org/10.1021/je049903o
Separation of propylbenzene and n-alkanes from their mixtures using 4-methyl-N-butylpyridinium tetrafluoroborate as an ionic solvent at several temperatures:	https://www.doi.org/10.1016/j.fluid.2011.06.036
Liquid–liquid equilibria for n-alkanes (C12, C14, C17) + propylbenzene + NMP mixtures at temperatures between 298 and 328K:	https://www.doi.org/10.1016/j.fluid.2005.01.012
Liquid-Liquid Equilibria for Ternary Mixtures of gamma-Valerolactone + n-Tetradecane + (Butanoic Acid or Hexanoic Acid or Methyl Myristate) at 298.15 K:	https://www.doi.org/10.1021/acs.jced.8b01025
Aqueous Solubility Prediction Method:	http://onschallenge.wikispaces.com/file/view/AqueousDataset002.xlsx/351826032/AqueousDa
Heat capacity and Joule-Thomson coefficient of selected n-alkanes at 0.1 and 10 MPa in broad temperature ranges:	https://www.doi.org/10.1016/j.jct.2017.03.034
Liquid-Liquid Equilibria of Alkane (C10-C14) + Hexylbenzene + Sulfolane:	https://www.doi.org/10.1021/je7000123
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
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
Super- and near-critical fluid phase behavior and phenomena of the ternary system CO2 + 1-decanol + n-tetradecane:	https://www.doi.org/10.1016/j.jct.2017.03.009
Excess molar enthalpies of binary mixtures containing 2-decanone or dipentyl ether with long-chain n-alkanes at T = 298.15 K:	https://www.doi.org/10.1016/j.jct.2010.11.004
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:	https://www.doi.org/10.1021/acs.jced.6b00542
Liquid-Liquid Equilibria for the Ternary System Water + Tetradecane + Propylene Glycol n-Propyl Ether:	https://www.doi.org/10.1021/je200320z
Excess Enthalpies of Binary Mixtures of 1-Hexene with Some n-Alkanes at 298.15 K:	https://www.doi.org/10.1021/je030215z
Liquid-Liquid Equilibria for 2-Phenylethan-1-ol + Alkane Systems:	https://www.doi.org/10.1021/acs.jced.7b00869
Infinite dilution activity coefficients, specific retention volumes and solvation thermodynamics of hydrocarbons in C78H158 branched alkane solvent:	https://www.doi.org/10.1016/j.fluid.2006.07.015
Isobaric vapor-liquid equilibrium for the three binary systems of C14 - C16 alkanes + methyl myristate at 5.00 kPa:	https://www.doi.org/10.1016/j.fluid.2015.08.015
Evaluation of the Performance of Trigeminal Tricationic Ionic Liquids for Separation Problems:	https://www.doi.org/10.1021/je201129y
Liquid-Liquid Equilibria of Alkane (C10 C14) + sec-Butylbenzene + Sulfolane:	https://www.doi.org/10.1021/je200203k
High-pressure densities and interfacial tensions of binary systems containing carbon dioxide + n-alkanes: (n-Dodecane, n-tridecane, n-tetradecane):	https://www.doi.org/10.1016/j.fluid.2014.07.039
The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure
Phase composition and saturated liquid properties in binary and ternary systems containing carbon dioxide, n-decane, and n-tetradecane:	https://www.doi.org/10.1016/j.jct.2012.08.019
Liquid Viscosities of the Ternary System Benzene + Cyclohexane + n-Tetradecane from (313 to 393) K and Pressures up to 60 MPa:	https://www.doi.org/10.1021/je8009122
Partition Coefficients of Organic Compounds in New Imidazolium and Tetralkylammonium Based Ionic Liquids Using Inverse Gas Chromatography:	https://www.doi.org/10.1021/je9003178
Estimated Solubility Method:	http://pubs.acs.org/doi/suppl/10.1021/ci034243x/suppl_file/ci034243xsi20040112_053635.txt
Gas Saturation Vapor Pressure Measurements of Mononitrotoluene Isomers from (283.15 to 313.15) K:	https://www.doi.org/10.1021/je900293j
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:	https://www.doi.org/10.1016/j.fluid.2014.12.036
KDB:	https://www.cheric.org/files/research/kdb/mol/mol14.mol
Densities and Viscosities of Binary Mixtures of exo-Tetrahydrodicyclopentadiene with N-Undecane or N-Tetradecane at T = (293.15 to 313.15) K:	https://www.doi.org/10.1021/je100313a
Measurement and Prediction of Excess Properties of Binary Mixtures Methyl Decanoate + an Even-Numbered n-Alkane (C6-C16) at 298.15 K:	https://www.doi.org/10.1021/acs.jced.9b00185
(p, ρ, T) Behavior of CO2 + Tetradecane Systems: Experiments and Thermodynamic Modeling:	https://www.doi.org/10.1021/acs.jced.5b00049
Study of interaction between organic compounds and mono or dicationic oxygenated ionic liquids using gas chromatography:	https://www.doi.org/10.1016/j.fluid.2014.11.020
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:	https://www.doi.org/10.1016/j.jct.2012.07.006
Activity Coefficients at Infinite Dilution of Organic Compounds in Four New Imidazolium-Based Ionic Liquids:	https://www.doi.org/10.1021/je200195q
Interfacial Tension Measurement and Calculation of (Carbon Dioxide + n-Alkane) Binary Mixtures:	https://www.doi.org/10.1021/acs.jced.7b00159
Density, Viscosity, Refractive Index, and Speed of Sound in the Binary Mixtures of Tri-n-butylamine + Triethylamine, + Tetrahydrofuran, + Tetradecane, + Tetrachloroethylene, + Pyridine, or + Trichloroethylene at (288.15 to 308.15) K:	https://www.doi.org/10.1021/je030147g
Experimental and theoretical study of interaction between organic compounds and [illegible] imidazolium [illegible]	https://www.doi.org/10.1016/j.fluid.2014.06.021
Solid-Liquid Equilibria of Dibenzothiophene and Dibenzothiophene Sulfone in Organic Solvents:	https://www.doi.org/10.1021/je700234e
Study of Ether-, Alcohol-, or Cyano-Functionalized Ionic Liquids Using Inverse Gas Chromatography:	https://www.doi.org/10.1021/je900838a
Thermodynamics of Mixtures Containing a Very Strongly Polar Compound. 10. Liquid Liquid Equilibria for N,N-Dimethylacetamide + Selected Alkanes:	https://www.doi.org/10.1021/je400487e

Activity coefficients at infinite dilution of organic solutes in methylphosphonate based ionic liquids using gas-liquid chromatography:	https://www.doi.org/10.1016/j.jct.2015.02.023
Measurement and Modeling of Liquid Saturated Properties (Solubility, Density, and Viscosity) of (Ethane + n-Tetradecane) Binary Systems :	https://www.doi.org/10.1021/je200575c
Liquid viscosities of benzene, n-tetradecane, and benzene + n-tetradecane from 313 to 393K and pressures up to 60MPa: Experiment and modeling:	https://www.doi.org/10.1016/j.fluid.2007.08.010
Thermodynamics of Mixtures Containing Amines. XV. Liquid-Liquid Equilibria for Benzylamine + CH3(CH2)nCH3 (n = 8, 9, 10, 12, 14):	https://www.doi.org/10.1021/je500283s
Thermophysical Characterization of Liquids Using Precise Density and Isobaric Heat Capacity Measurements As a Function of Pressure:	https://www.doi.org/10.1021/je8006875
Low-Pressure VLE Measurements and Thermodynamic Modeling with PSRK and NRTL of Binary 1-Alcohol + n-Alkane Systems:	https://www.doi.org/10.1021/acs.jced.8b00680
Solution thermodynamics near the liquid-liquid critical point I. First-order excess derivatives:	https://www.doi.org/10.1016/j.fluid.2007.05.017
Experimental and thermodynamic modeling study on (vapor + liquid) equilibria and physical properties of ternary systems (methane + n-decane + n-tetradecane):	https://www.doi.org/10.1016/j.fluid.2012.06.028
Liquid-liquid equilibria for acetophenone + n-alkane mixtures and characterization of acetophenone systems using DISQUAC:	https://www.doi.org/10.1016/j.fluid.2015.01.026
Thermodynamics of Mixtures Containing Aromatic Alcohols. 1. Liquid-Liquid Equilibria for (Phenylmethanol + Alkane) Systems:	https://www.doi.org/10.1021/je300146k
Infinite Dilution Binary Diffusion Coefficients of Hydrotreating Compounds in Tetradecane in the Temperature Range from (310 to 475) K:	https://www.doi.org/10.1021/je700535q
Effect of Solvent Cation Alkyl Chain Length on the Separation of Butylbenzene from n-Tetradecane Using Hexafluorophosphate-Based Ionic Liquids at (313.15 and 333.15) K and 101.3 kPa:	https://www.doi.org/10.1021/acs.jced.8b00356
Measurement and correlation of solubility of carbon dioxide in triglycerides:	https://www.doi.org/10.1016/j.jct.2016.09.035
Solubility behavior of .gamma.-valerolactone + n-tetradecane or diesel mixtures at different temperatures:	https://www.doi.org/10.1016/j.fluid.2018.11.012
Viscosity and density measurements on liquid n-tetradecane at moderately high pressures:	https://www.doi.org/10.1016/j.fluid.2017.08.025
CO2 and alkane minimum miscible pressure estimation by the extrapolation of interfacial tension:	https://www.doi.org/10.1016/j.fluid.2019.05.002
KDB Vapor Pressure Data:	https://www.cheric.org/research/kdb/hcprop/showprop.php?cmpid=14
Determination and correlation of liquid-liquid equilibria for nine binary acetonitrile + n-alkane systems:	https://www.doi.org/10.1016/j.fluid.2010.10.013
Isothermal Vapor-Liquid Equilibria of n-Tetradecane + Ethyl Hexanoate, Ethyl Decanoate, and Ethyl Tetradecanoate:	https://www.doi.org/10.1021/je301294a
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.2014.01.013
Liquid-liquid equilibria for the ternary system (water + tetradecane + 1-(1-methyl-2-propoxyethoxy-2-propanol):	https://www.doi.org/10.1016/j.fluid.2013.06.023
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

af:	Acentric Factor
chg:	Standard gas enthalpy of combustion
cpg:	Ideal gas heat capacity
cpl:	Liquid phase heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfl:	Liquid phase enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hfust:	Enthalpy of fusion at a given temperature
hsub:	Enthalpy of sublimation at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
hvapt:	Enthalpy of vaporization at a given temperature
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume

pc:	Critical Pressure
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
srf:	Surface Tension
tb:	Normal Boiling Point Temperature
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
tfp:	Melting point
tt:	Triple Point Temperature
vc:	Critical Volume
zc:	Critical Compressibility