Cyclohexane, butyl-

Other names:	1-CYCLOHEXYLBUTANE
	Butane, 1-cyclohexyl-
	Butylcyclohexane
	Cyclohexane, n-butyl-
	n-Butylcyclohexane
Inchi:	InChI=1S/C10H20/c1-2-3-7-10-8-5-4-6-9-10/h10H,2-9H2,1H3
InchiKey:	GGBJHURWWWLEQH-UHFFFAOYSA-N
Formula:	C10H20
SMILES:	CCCCC1CCCCC1
Mol. weight [g/mol]:	140.27
CAS:	1678-93-9

Physical Properties

Property code	Value	Unit	Source
af	0.3620		KDB
chl	-6530.30 ± 1.20	kJ/mol	NIST Webbook
gf	56.48	kJ/mol	KDB
hf	-213.20 ± 1.40	kJ/mol	NIST Webbook
hf	-213.30	kJ/mol	KDB
hfl	-263.20 ± 1.30	kJ/mol	NIST Webbook
hfus	13.49	kJ/mol	Joback Method
hvap	50.00	kJ/mol	NIST Webbook
hvap	50.03	kJ/mol	NIST Webbook
hvap	49.40	kJ/mol	NIST Webbook
hvap	49.40 ± 0.40	kJ/mol	NIST Webbook
hvap	49.40 ± 0.30	kJ/mol	NIST Webbook
hvap	50.00	kJ/mol	NIST Webbook
hvap	50.00	kJ/mol	NIST Webbook
hvap	47.00 ± 0.20	kJ/mol	NIST Webbook
hvap	49.37	kJ/mol	NIST Webbook
hvap	48.90 ± 0.50	kJ/mol	NIST Webbook
ie	9.41	eV	NIST Webbook
ie	9.57 ± 0.03	eV	NIST Webbook
log10ws	-3.66		Crippen Method
logp	3.757		Crippen Method
mcvol	140.900	ml/mol	McGowan Method
pc	3150.00	kPa	KDB

pc	2560.00	kPa	Critical Point Measurements for Five n-Alkylcyclohexanes (C6 to C10) by the Pulse-Heating Method
rinpol	1028.90		NIST Webbook
rinpol	1030.00		NIST Webbook
rinpol	1045.00		NIST Webbook
rinpol	1061.00		NIST Webbook
rinpol	1029.00		NIST Webbook
rinpol	1061.00		NIST Webbook
rinpol	1025.00		NIST Webbook
rinpol	1032.00		NIST Webbook
rinpol	1035.00		NIST Webbook
rinpol	1026.00		NIST Webbook
rinpol	1052.00		NIST Webbook
rinpol	1033.80		NIST Webbook
rinpol	1030.20		NIST Webbook
rinpol	1036.00		NIST Webbook
rinpol	1026.60		NIST Webbook
rinpol	1030.20		NIST Webbook
rinpol	1031.60		NIST Webbook
rinpol	1026.60		NIST Webbook
rinpol	1030.20		NIST Webbook
rinpol	1031.60		NIST Webbook
rinpol	1030.20		NIST Webbook
rinpol	1028.90		NIST Webbook
rinpol	1028.46		NIST Webbook
rinpol	1023.13		NIST Webbook
rinpol	1026.83		NIST Webbook
rinpol	1029.30		NIST Webbook
rinpol	1028.77		NIST Webbook
rinpol	1032.57		NIST Webbook
rinpol	1036.00		NIST Webbook
rinpol	1026.00		NIST Webbook
rinpol	1027.00		NIST Webbook
rinpol	1033.10		NIST Webbook
rinpol	1029.00		NIST Webbook
rinpol	1041.00		NIST Webbook
rinpol	1028.00		NIST Webbook
rinpol	1022.00		NIST Webbook
rinpol	1025.00		NIST Webbook
rinpol	1030.00		NIST Webbook
rinpol	1028.00		NIST Webbook
rinpol	1048.00		NIST Webbook
rinpol	1033.80		NIST Webbook

rinpol	1025.00		NIST Webbook
rinpol	1028.90		NIST Webbook
rinpol	1028.77		NIST Webbook
rinpol	1024.00		NIST Webbook
rinpol	1060.90		NIST Webbook
rinpol	1051.30		NIST Webbook
rinpol	1024.00		NIST Webbook
rinpol	1047.00		NIST Webbook
rinpol	1037.00		NIST Webbook
rinpol	1031.60		NIST Webbook
rinpol	1035.27		NIST Webbook
ripol	1075.00		NIST Webbook
ripol	1094.00		NIST Webbook
ripol	1100.00		NIST Webbook
ripol	1105.00		NIST Webbook
ripol	1101.70		NIST Webbook
ripol	1107.60		NIST Webbook
ripol	1113.20		NIST Webbook
ripol	1118.10		NIST Webbook
ripol	1123.30		NIST Webbook
ripol	1091.20		NIST Webbook
ripol	1096.70		NIST Webbook
ripol	1116.00		NIST Webbook
ripol	1116.00		NIST Webbook
ripol	1075.00		NIST Webbook
ripol	1082.00		NIST Webbook
ripol	1082.00		NIST Webbook
sg	459.78	J/mol×K	NIST Webbook
sl	344.97	J/mol×K	NIST Webbook
tb	454.10	K	KDB
tc	653.10	K	Gas-Liquid Critical Temperatures of Some Alkenes, Amines, and Cyclic Hydrocarbons
tc	667.00	K	KDB
tf	198.30 ± 0.20	K	NIST Webbook
tf	198.40	K	KDB
tf	198.30 ± 0.50	K	NIST Webbook
tf	196.85 ± 0.50	K	NIST Webbook
tf	198.30 ± 0.20	K	NIST Webbook
tt	198.42 ± 0.02	K	NIST Webbook
vc	0.528	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	337.97	J/mol×K	513.35	Joback Method
cpg	372.37	J/mol×K	578.96	Joback Method
cpg	355.61	J/mol×K	546.16	Joback Method
cpg	319.42	J/mol×K	480.55	Joback Method
cpg	299.95	J/mol×K	447.75	Joback Method
cpg	388.28	J/mol×K	611.76	Joback Method
cpg	403.35	J/mol×K	644.56	Joback Method
cpl	271.04	J/mol×K	298.15	NIST Webbook
dvisc	0.0002640	Pa×s	447.75	Joback Method
dvisc	0.0003559	Pa×s	408.10	Joback Method
dvisc	0.0008027	Pa×s	328.79	Joback Method
dvisc	0.0086122	Pa×s	209.84	Joback Method
dvisc	0.0014252	Pa×s	289.14	Joback Method
dvisc	0.0030367	Pa×s	249.49	Joback Method
dvisc	0.0005116	Pa×s	368.45	Joback Method
hfust	14.14	kJ/mol	198.40	NIST Webbook
hfust	14.16	kJ/mol	198.42	NIST Webbook
hfust	14.20	kJ/mol	198.00	NIST Webbook
hfust	14.14	kJ/mol	198.40	NIST Webbook
hvapt	44.90	kJ/mol	412.00	NIST Webbook
hvapt	47.40 ± 0.20	kJ/mol	293.50	NIST Webbook
hvapt	38.49	kJ/mol	454.10	KDB
rfi	1.43990		293.15	Density, Viscosity, Refractive Index, and Freezing Point for Binary Mixtures of 1,1'-Bicyclohexyl with Alkylcyclohexane
rhol	799.00	kg/m3	293.00	KDB
rhol	784.30	kg/m3	313.15	Densities and Viscosities for the Ternary System of Cyclopropanemethanol (1) + n-Dodecane (2) + Butylcyclohexane (3) and Corresponding Binaries at T = 293.15 343.15 K

rhol	780.52	kg/m3	318.15	Densities and Viscosities for the Ternary System of Cyclopropanemethanol (1) + n-Dodecane (2) + Butylcyclohexane (3) and Corresponding Binaries at T = 293.15 343.15 K
rhol	776.74	kg/m3	323.15	Densities and Viscosities for the Ternary System of Cyclopropanemethanol (1) + n-Dodecane (2) + Butylcyclohexane (3) and Corresponding Binaries at T = 293.15 343.15 K
rhol	772.93	kg/m3	328.15	Densities and Viscosities for the Ternary System of Cyclopropanemethanol (1) + n-Dodecane (2) + Butylcyclohexane (3) and Corresponding Binaries at T = 293.15 343.15 K
rhol	769.13	kg/m3	333.15	Densities and Viscosities for the Ternary System of Cyclopropanemethanol (1) + n-Dodecane (2) + Butylcyclohexane (3) and Corresponding Binaries at T = 293.15 343.15 K
rhol	765.30	kg/m3	338.15	Densities and Viscosities for the Ternary System of Cyclopropanemethanol (1) + n-Dodecane (2) + Butylcyclohexane (3) and Corresponding Binaries at T = 293.15 343.15 K

rhol	761.47	kg/m3	343.15	Densities and Viscosities for the Ternary System of Cyclopropanemethanol (1) + n-Dodecane (2) + Butylcyclohexane (3) and Corresponding Binaries at T = 293.15 343.15 K
rhol	799.33	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	791.82	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	784.28	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	776.70	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	769.09	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	761.40	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	829.90	kg/m3	253.15	Densities, Viscosities, Speeds of Sound, Bulk Moduli, Surface Tensions, and Flash Points of Quaternary Mixtures of n-Dodecane (1), n-Butylcyclohexane (2), n-Butylbenzene (3), and 2,2,4,4,6,8,8-Heptamethylnonane (4) at 0.1 MPa as Potential Surrogate Mixtures for Military Jet Fuel, JP-5
rhol	803.07	kg/m3	288.15	Densities, Viscosities, Speeds of Sound, Bulk Moduli, Surface Tensions, and Flash Points of Quaternary Mixtures of n-Dodecane (1), n-Butylcyclohexane (2), n-Butylbenzene (3), and 2,2,4,4,6,8,8-Heptamethylnonane (4) at 0.1 MPa as Potential Surrogate Mixtures for Military Jet Fuel, JP-5

rhol	799.33	kg/m3	293.15	Densities, Viscosities, Speeds of Sound, Bulk Moduli, Surface Tensions, and Flash Points of Quaternary Mixtures of n-Dodecane (1), n-Butylcyclohexane (2), n-Butylbenzene (3), and 2,2,4,4,6,8,8-Heptamethylnonane (4) at 0.1 MPa as Potential Surrogate Mixtures for Military Jet Fuel, JP-5
rhol	795.57	kg/m3	298.15	Densities, Viscosities, Speeds of Sound, Bulk Moduli, Surface Tensions, and Flash Points of Quaternary Mixtures of n-Dodecane (1), n-Butylcyclohexane (2), n-Butylbenzene (3), and 2,2,4,4,6,8,8-Heptamethylnonane (4) at 0.1 MPa as Potential Surrogate Mixtures for Military Jet Fuel, JP-5
rhol	791.81	kg/m3	303.15	Densities, Viscosities, Speeds of Sound, Bulk Moduli, Surface Tensions, and Flash Points of Quaternary Mixtures of n-Dodecane (1), n-Butylcyclohexane (2), n-Butylbenzene (3), and 2,2,4,4,6,8,8-Heptamethylnonane (4) at 0.1 MPa as Potential Surrogate Mixtures for Military Jet Fuel, JP-5

rhol	784.27	kg/m3	313.15	Densities, Viscosities, Speeds of Sound, Bulk Moduli, Surface Tensions, and Flash Points of Quaternary Mixtures of n-Dodecane (1), n-Butylcyclohexane (2), n-Butylbenzene (3), and 2,2,4,4,6,8,8-Heptamethylnonane (4) at 0.1 MPa as Potential Surrogate Mixtures for Military Jet Fuel, JP-5
rhol	776.71	kg/m3	323.15	Densities, Viscosities, Speeds of Sound, Bulk Moduli, Surface Tensions, and Flash Points of Quaternary Mixtures of n-Dodecane (1), n-Butylcyclohexane (2), n-Butylbenzene (3), and 2,2,4,4,6,8,8-Heptamethylnonane (4) at 0.1 MPa as Potential Surrogate Mixtures for Military Jet Fuel, JP-5
rhol	769.10	kg/m3	333.15	Densities, Viscosities, Speeds of Sound, Bulk Moduli, Surface Tensions, and Flash Points of Quaternary Mixtures of n-Dodecane (1), n-Butylcyclohexane (2), n-Butylbenzene (3), and 2,2,4,4,6,8,8-Heptamethylnonane (4) at 0.1 MPa as Potential Surrogate Mixtures for Military Jet Fuel, JP-5

rhol	799.47	kg/m3	293.15	Excess Molar Volume along with Viscosity and Refractive Index for Binary Systems of Tricyclo[5.2.1.0(2.6)]decane with Five Cycloalkanes
rhol	795.71	kg/m3	298.15	Excess Molar Volume along with Viscosity and Refractive Index for Binary Systems of Tricyclo[5.2.1.0(2.6)]decane with Five Cycloalkanes
rhol	791.96	kg/m3	303.15	Excess Molar Volume along with Viscosity and Refractive Index for Binary Systems of Tricyclo[5.2.1.0(2.6)]decane with Five Cycloalkanes
rhol	788.20	kg/m3	308.15	Excess Molar Volume along with Viscosity and Refractive Index for Binary Systems of Tricyclo[5.2.1.0(2.6)]decane with Five Cycloalkanes
rhol	784.43	kg/m3	313.15	Excess Molar Volume along with Viscosity and Refractive Index for Binary Systems of Tricyclo[5.2.1.0(2.6)]decane with Five Cycloalkanes
rhol	780.65	kg/m3	318.15	Excess Molar Volume along with Viscosity and Refractive Index for Binary Systems of Tricyclo[5.2.1.0(2.6)]decane with Five Cycloalkanes
rhol	799.44	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	795.70	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	791.95	kg/m3	303.15	Excess Molar Volumes and Viscosities of Binary Systems of Butylcyclohexane with n-Alkanes (C7 to C14) at T = 293.15 K to 313.15 K
rhol	788.19	kg/m3	308.15	Excess Molar Volumes and Viscosities of Binary Systems of Butylcyclohexane with n-Alkanes (C7 to C14) at T = 293.15 K to 313.15 K
rhol	784.41	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	799.47	kg/m3	293.15	Density, Viscosity, Surface Tension, and Refractive Index for Binary Mixtures of 1,3-Dimethyladamantane with Four C10 Alkanes
rhol	795.71	kg/m3	298.15	Density, Viscosity, Surface Tension, and Refractive Index for Binary Mixtures of 1,3-Dimethyladamantane with Four C10 Alkanes

rhol	791.96	kg/m3	303.15	Density, Viscosity, Surface Tension, and Refractive Index for Binary Mixtures of 1,3-Dimethyladamantane with Four C10 Alkanes
rhol	788.07	kg/m3	308.15	Densities and Viscosities for the Ternary System of Cyclopropanemethanol (1) + n-Dodecane (2) + Butylcyclohexane (3) and Corresponding Binaries at T = 293.15 343.15 K
rhol	777.16	kg/m3	323.15	Density, Viscosity, Surface Tension, and Refractive Index for Binary Mixtures of 1,3-Dimethyladamantane with Four C10 Alkanes
rhol	769.55	kg/m3	333.15	Density, Viscosity, Surface Tension, and Refractive Index for Binary Mixtures of 1,3-Dimethyladamantane with Four C10 Alkanes
rhol	761.88	kg/m3	343.15	Density, Viscosity, Surface Tension, and Refractive Index for Binary Mixtures of 1,3-Dimethyladamantane with Four C10 Alkanes
rhol	754.16	kg/m3	353.15	Density, Viscosity, Surface Tension, and Refractive Index for Binary Mixtures of 1,3-Dimethyladamantane with Four C10 Alkanes

rhol	746.38	kg/m3	363.15	Density, Viscosity, Surface Tension, and Refractive Index for Binary Mixtures of 1,3-Dimethyladamantane with Four C10 Alkanes
rhol	791.84	kg/m3	303.15	Densities and Viscosities for the Ternary System of Cyclopropanemethanol (1) + n-Dodecane (2) + Butylcyclohexane (3) and Corresponding Binaries at T = 293.15 343.15 K
rhol	795.59	kg/m3	298.15	Densities and Viscosities for the Ternary System of Cyclopropanemethanol (1) + n-Dodecane (2) + Butylcyclohexane (3) and Corresponding Binaries at T = 293.15 343.15 K
rhol	799.34	kg/m3	293.15	Densities and Viscosities for the Ternary System of Cyclopropanemethanol (1) + n-Dodecane (2) + Butylcyclohexane (3) and Corresponding Binaries at T = 293.15 343.15 K
rhol	761.43	kg/m3	343.15	Densities, Viscosities, Refractive Indices, and Surface Tensions of Binary Mixtures of 2,2,4-Trimethylpentane with Several Alkylated Cyclohexanes from (293.15 to 343.15) K

rhol	769.09	kg/m3	333.15	Densities, Viscosities, Refractive Indices, and Surface Tensions of Binary Mixtures of 2,2,4-Trimethylpentane with Several Alkylated Cyclohexanes from (293.15 to 343.15) K
rhol	776.70	kg/m3	323.15	Densities, Viscosities, Refractive Indices, and Surface Tensions of Binary Mixtures of 2,2,4-Trimethylpentane with Several Alkylated Cyclohexanes from (293.15 to 343.15) K
rhol	780.49	kg/m3	318.15	Densities, Viscosities, Refractive Indices, and Surface Tensions of Binary Mixtures of 2,2,4-Trimethylpentane with Several Alkylated Cyclohexanes from (293.15 to 343.15) K
rhol	784.35	kg/m3	313.15	Densities, Viscosities, Refractive Indices, and Surface Tensions of Binary Mixtures of 2,2,4-Trimethylpentane with Several Alkylated Cyclohexanes from (293.15 to 343.15) K
rhol	788.12	kg/m3	308.15	Densities, Viscosities, Refractive Indices, and Surface Tensions of Binary Mixtures of 2,2,4-Trimethylpentane with Several Alkylated Cyclohexanes from (293.15 to 343.15) K

rhol	791.88	kg/m3	303.15	Densities, Viscosities, Refractive Indices, and Surface Tensions of Binary Mixtures of 2,2,4-Trimethylpentane with Several Alkylated Cyclohexanes from (293.15 to 343.15) K
rhol	795.63	kg/m3	298.15	Densities, Viscosities, Refractive Indices, and Surface Tensions of Binary Mixtures of 2,2,4-Trimethylpentane with Several Alkylated Cyclohexanes from (293.15 to 343.15) K
rhol	799.37	kg/m3	293.15	Densities, Viscosities, Refractive Indices, and Surface Tensions of Binary Mixtures of 2,2,4-Trimethylpentane with Several Alkylated Cyclohexanes from (293.15 to 343.15) K
rhol	784.43	kg/m3	313.15	Density, Viscosity, Surface Tension, and Refractive Index for Binary Mixtures of 1,3-Dimethyladamantane with Four C10 Alkanes
sfust	71.36	J/mol×K	198.42	NIST Webbook
srf	0.03	N/m	293.20	KDB

Correlations

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

Coeff. A	1.39050e+01
Coeff. B	-3.63952e+03
Coeff. C	-6.10930e+01
Temperature range (K), min.	328.36
Temperature range (K), max.	484.61

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/T + C*ln(T) + D*T^2
Coeff. A	7.54321e+01
Coeff. B	-8.39938e+03
Coeff. C	-8.64335e+00
Coeff. D	2.74293e-06
Temperature range (K), min.	198.42
Temperature range (K), max.	667.00

Sources

Joback Method:	https://en.wikipedia.org/wiki/Joback_method
Phase equilibria of (CO2 + butylbenzene) and (CO2 + butylcyclohexane) at temperatures between (313.15 and 423.15) K and at pressures up to 21 MPa:	https://www.doi.org/10.1016/j.fluid.2014.12.022
Density, Viscosity, Surface Tension, and Refractive Index for Binary Mixtures of 1-Ethyladamantane with Four C10 Alkanes:	https://www.doi.org/10.1021/je4008926
Densities and Viscosities for the Ternary System of Cyclopentanethiol (1) + n-Dodecane (2) + Butylcyclohexane (3) and Corresponding Binaries at T = (293.15 to 343.15) K:	https://www.doi.org/10.1021/acs.jced.7b00201
Critical Point Measurements for Five n-Alkylcyclohexanes (C6 to C10) by the Pulse-Heating Method:	http://link.springer.com/article/10.1007/BF02311772
KDB Vapor Pressure Data:	https://www.doi.org/10.1021/je0256535
Densities, Viscosities, Refractive Indices, and Surface Tensions of Binary Mixtures of 2,2,4-Trimethylpentane with Several Alkylated Cyclohexanes from (293.15 to 343.15) K:	https://www.cheric.org/research/kdb/hcprop/showprop.php?cmpid=584
NIST Webbook:	https://www.doi.org/10.1021/acs.jced.5b00105
KDB:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1678939&Units=SI
Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Selected Ternary Mixtures of n-Butylcyclohexane + a Linear Alkane (n-Hexadecane or n-Tetradecane) + an Aromatic Compound (Toluene, n-Butylbenzene, or 1-Methylnaphthalene):	https://www.cheric.org/files/research/kdb/mol/mol584.mol
Density, Viscosity, Refractive Index, and Freezing Point for Binary Mixtures of n-Butylcyclohexyl with Alkylcyclohexane, Aromatic Compound, Some Alkenes, Amines, and Cyclic Hydrocarbons:	https://www.doi.org/10.1021/acs.jced.7b00466
Gas-Liquid Critical Temperatures of Alkylbenzenes:	https://www.doi.org/10.1021/je500275j
The Yaws Handbook of Vapor Pressure:	https://www.chemeo.com/doc/models/crippen_log10ws
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/je0341357
Densities, Viscosities, Speeds of Sound, Bulk Moduli, Surface Tensions, Crippen Methods:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure
Flash Points of Quaternary Mixtures of n-Dodecane (1), n-Butylcyclohexane (2), n-Butylbenzene (3), and 2,2,4,6,6,8,8-Heptamethylnonane (4) at 0.1 MPa as Potential Surrogate Mixtures for Military Jet Fuel, JP-5:	https://www.doi.org/10.1021/je400835u
Excess Molar Volume along with Viscosity and Refractive Index for Binary Systems of Tricyclo[5.2.1.0(2,6)]decane with Five Cycloalkanes:	https://www.doi.org/10.1021/acs.jced.8b01233
	http://pubs.acs.org/doi/abs/10.1021/ci990307l
	https://www.doi.org/10.1021/je400529k

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
hf:	Enthalpy of formation at standard conditions
hfl:	Liquid phase enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hfust:	Enthalpy of fusion at a given temperature
hvap:	Enthalpy of vaporization at standard conditions
hvapt:	Enthalpy of vaporization at a given temperature
ie:	Ionization energy
log10ws:	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
rhol:	Liquid Density
rinpol:	Non-polar retention indices
ripol:	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
tc:	Critical Temperature
tf:	Normal melting (fusion) point
tt:	Triple Point Temperature
vc:	Critical Volume