

Octanoic acid, ethyl ester

Other names:	CAPRYLIC ACID ETHYL ESTER ETHYL CAPRYLATE ETHYL N-CAPRYLATE ETHYL OCTANOATE Ethyl ester octanoic acid Ethyl ester of octanoic acid Ethyl n-octanoate Ethyl octoate Ethyl octylate n-Caprylic acid ethyl ester octanoic acid ethyl ester (ethyl octanoate)
Inchi:	InChI=1S/C10H20O2/c1-3-5-6-7-8-9-10(11)12-4-2/h3-9H2,1-2H3
InchiKey:	YYZUSRORWSJGET-UHFFFAOYSA-N
Formula:	C10H20O2
SMILES:	CCCCCCCC(=O)OCC
Mol. weight [g/mol]:	172.26
CAS:	106-32-1

Physical Properties

Property code	Value	Unit	Source
chl	-6130.00 ± 1.00	kJ/mol	NIST Webbook
gf	-200.60	kJ/mol	Joback Method
hf	-570.00 ± 2.00	kJ/mol	NIST Webbook
hfl	-629.50 ± 1.10	kJ/mol	NIST Webbook
hfus	24.44	kJ/mol	Joback Method
h vap	59.50	kJ/mol	NIST Webbook
h vap	59.00 ± 1.00	kJ/mol	NIST Webbook
h vap	59.50 ± 1.30	kJ/mol	NIST Webbook
log10ws	-3.39		Aqueous Solubility Prediction Method
log10ws	-3.39		Estimated Solubility Method
logp	2.910		Crippen Method
m cvol	159.200	ml/mol	McGowan Method
pc	2200.01	kPa	Joback Method
rinpol	1201.00		NIST Webbook
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tb	480.20	K	NIST Webbook
tb	487.00 ± 5.00	K	NIST Webbook
tb	481.70	K	KDB
tc	658.71 ± 6.00	K	NIST Webbook
tc	649.00 ± 3.00	K	NIST Webbook
tc	655.74	K	Development of a Predictive Equation of State for CO ₂ + Ethyl Ester Mixtures Based on Critical Points Measurements
tc	659.00	K	KDB
tf	230.00	K	KDB
tf	227.45	K	Aqueous Solubility Prediction Method
tf	228.40 ± 0.20	K	NIST Webbook
vc	0.620	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	421.59	J/mol×K	619.36	Joback Method
cpg	409.00	J/mol×K	590.64	Joback Method
cpg	368.11	J/mol×K	504.49	Joback Method
cpg	382.26	J/mol×K	533.21	Joback Method
cpg	395.89	J/mol×K	561.92	Joback Method
cpg	445.25	J/mol×K	676.79	Joback Method
cpg	433.67	J/mol×K	648.08	Joback Method
dvisc	0.0011930	Paxs	308.15	Densities and Viscosities of Binary Mixtures of Isoamyl Acetate, Ethyl Caproate, Ethyl Benzoate, Isoamyl Butyrate, Ethyl Phenylacetate, and Ethyl Caprylate with Ethanol at T = (288.15, 298.15, 308.15, and 318.15) K

dvisc	0.0016970	Paxs	288.15	Densities and Viscosities of Binary Mixtures of Isoamyl Acetate, Ethyl Caproate, Ethyl Benzoate, Isoamyl Butyrate, Ethyl Phenylacetate, and Ethyl Caprylate with Ethanol at T = (288.15, 298.15, 308.15, and 318.15) K
dvisc	0.0014110	Paxs	298.15	Densities and Viscosities of Binary Mixtures of Isoamyl Acetate, Ethyl Caproate, Ethyl Benzoate, Isoamyl Butyrate, Ethyl Phenylacetate, and Ethyl Caprylate with Ethanol at T = (288.15, 298.15, 308.15, and 318.15) K
dvisc	0.0010270	Paxs	318.15	Densities and Viscosities of Binary Mixtures of Isoamyl Acetate, Ethyl Caproate, Ethyl Benzoate, Isoamyl Butyrate, Ethyl Phenylacetate, and Ethyl Caprylate with Ethanol at T = (288.15, 298.15, 308.15, and 318.15) K
hvapt	53.20	kJ/mol	405.00	NIST Webbook
hvapt	52.50 ± 0.20	kJ/mol	397.00	NIST Webbook
pvap	25.22	kPa	432.22	Experimental Vapor Pressures of Five Saturated Fatty Acid Ethyl Ester (FAEE) Components of Biodiesel
pvap	18.04	kPa	422.12	Experimental Vapor Pressures of Five Saturated Fatty Acid Ethyl Ester (FAEE) Components of Biodiesel

pvap	34.49	kPa	442.26	Experimental Vapor Pressures of Five Saturated Fatty Acid Ethyl Ester (FAEE) Components of Biodiesel
pvap	46.42	kPa	452.30	Experimental Vapor Pressures of Five Saturated Fatty Acid Ethyl Ester (FAEE) Components of Biodiesel
pvap	12.67	kPa	412.13	Experimental Vapor Pressures of Five Saturated Fatty Acid Ethyl Ester (FAEE) Components of Biodiesel
pvap	8.72	kPa	402.13	Experimental Vapor Pressures of Five Saturated Fatty Acid Ethyl Ester (FAEE) Components of Biodiesel
pvap	3.87	kPa	382.13	Experimental Vapor Pressures of Five Saturated Fatty Acid Ethyl Ester (FAEE) Components of Biodiesel
pvap	2.43	kPa	372.06	Experimental Vapor Pressures of Five Saturated Fatty Acid Ethyl Ester (FAEE) Components of Biodiesel
pvap	1.49	kPa	362.10	Experimental Vapor Pressures of Five Saturated Fatty Acid Ethyl Ester (FAEE) Components of Biodiesel
pvap	0.87	kPa	351.90	Experimental Vapor Pressures of Five Saturated Fatty Acid Ethyl Ester (FAEE) Components of Biodiesel

pvap	0.15	kPa	323.31	Experimental Vapor Pressures of Five Saturated Fatty Acid Ethyl Ester (FAEE) Components of Biodiesel
pvap	0.08	kPa	313.20	Experimental Vapor Pressures of Five Saturated Fatty Acid Ethyl Ester (FAEE) Components of Biodiesel
pvap	0.04	kPa	303.09	Experimental Vapor Pressures of Five Saturated Fatty Acid Ethyl Ester (FAEE) Components of Biodiesel
pvap	0.02	kPa	293.05	Experimental Vapor Pressures of Five Saturated Fatty Acid Ethyl Ester (FAEE) Components of Biodiesel
pvap	6.27e-03	kPa	283.08	Experimental Vapor Pressures of Five Saturated Fatty Acid Ethyl Ester (FAEE) Components of Biodiesel
pvap	2.19e-03	kPa	273.26	Experimental Vapor Pressures of Five Saturated Fatty Acid Ethyl Ester (FAEE) Components of Biodiesel
pvap	5.90	kPa	392.19	Experimental Vapor Pressures of Five Saturated Fatty Acid Ethyl Ester (FAEE) Components of Biodiesel
rfi	1.39603		343.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.39823		338.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.40042		333.15	Thermophysical properties of fatty acid methyl and ethyl esters

rfi	1.40261	328.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.39386	348.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.40703	318.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.40926	313.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.41148	308.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.41367	303.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.41587	298.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.39170	353.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.41807	293.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.38955	358.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.42025	288.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.42461	278.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.42242	283.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.40481	323.15	Thermophysical properties of fatty acid methyl and ethyl esters

rhoI	845.06	kg/m3	318.15	Volumetric, viscometric, spectral studies and viscosity modelling of binary mixtures of esters and alcohols (diethyl succinate, or ethyl octanoate + isobutanol, or isopentanol) at varying temperatures
rhoI	853.68	kg/m3	308.15	Volumetric, viscometric, spectral studies and viscosity modelling of binary mixtures of esters and alcohols (diethyl succinate, or ethyl octanoate + isobutanol, or isopentanol) at varying temperatures
rhoI	857.98	kg/m3	303.15	Volumetric, viscometric, spectral studies and viscosity modelling of binary mixtures of esters and alcohols (diethyl succinate, or ethyl octanoate + isobutanol, or isopentanol) at varying temperatures
rhoI	862.28	kg/m3	298.15	Volumetric, viscometric, spectral studies and viscosity modelling of binary mixtures of esters and alcohols (diethyl succinate, or ethyl octanoate + isobutanol, or isopentanol) at varying temperatures

rho1	866.58	kg/m3	293.15	Volumetric, viscometric, spectral studies and viscosity modelling of binary mixtures of esters and alcohols (diethyl succinate, or ethyl octanoate + isobutanol, or isopentanol) at varying temperatures
rho1	870.88	kg/m3	288.15	Volumetric, viscometric, spectral studies and viscosity modelling of binary mixtures of esters and alcohols (diethyl succinate, or ethyl octanoate + isobutanol, or isopentanol) at varying temperatures
rho1	841.06	kg/m3	323.15	Measurement and correlation of density and viscosity of n-hexadecane with three fatty acid ethyl esters
rho1	845.39	kg/m3	318.15	Measurement and correlation of density and viscosity of n-hexadecane with three fatty acid ethyl esters
rho1	849.72	kg/m3	313.15	Measurement and correlation of density and viscosity of n-hexadecane with three fatty acid ethyl esters
rho1	854.04	kg/m3	308.15	Measurement and correlation of density and viscosity of n-hexadecane with three fatty acid ethyl esters
rho1	858.34	kg/m3	303.15	Measurement and correlation of density and viscosity of n-hexadecane with three fatty acid ethyl esters

rho1	862.64	kg/m3	298.15	Measurement and correlation of density and viscosity of n-hexadecane with three fatty acid ethyl esters
rho1	862.23	kg/m3	298.20	Modeling phase equilibria of ternary systems (water + formic acid + ester or alcohol) through UNIFAC-original, SERLAS, NRTL, NRTL-modified, and three-suffix Margules: Parameter estimation using genetic algorithm
rho1	849.37	kg/m3	313.15	Volumetric, viscometric, spectral studies and viscosity modelling of binary mixtures of esters and alcohols (diethyl succinate, or ethyl octanoate + isobutanol, or isopentanol) at varying temperatures
rho1	840.74	kg/m3	323.15	Volumetric, viscometric, spectral studies and viscosity modelling of binary mixtures of esters and alcohols (diethyl succinate, or ethyl octanoate + isobutanol, or isopentanol) at varying temperatures

rhoI	862.15	kg/m ³	298.15	Refractive Indices and Surface Tensions of Binary Mixtures of Isoamyl Acetate, Ethyl Caproate, Ethyl Benzoate, Isoamyl Butyrate, Ethyl Phenylacetate, and Ethyl Caprylate with Ethanol at (288.15, 298.15, 308.15, and 318.15) K
speedsl	1243.00	m/s	302.98	Speed of sound measurement and prediction of ethyl hexanoate and ethyl octanoate at temperatures from (293.15 to 473.15) K and pressures from (0.1 to 10) MPa
speedsl	1206.10	m/s	313.53	Speed of sound measurement and prediction of ethyl hexanoate and ethyl octanoate at temperatures from (293.15 to 473.15) K and pressures from (0.1 to 10) MPa
speedsl	1275.70	m/s	293.73	Speed of sound measurement and prediction of ethyl hexanoate and ethyl octanoate at temperatures from (293.15 to 473.15) K and pressures from (0.1 to 10) MPa
speedsl	1173.10	m/s	323.27	Speed of sound measurement and prediction of ethyl hexanoate and ethyl octanoate at temperatures from (293.15 to 473.15) K and pressures from (0.1 to 10) MPa

speedsl	1138.50	m/s	332.65	Speed of sound measurement and prediction of ethyl hexanoate and ethyl octanoate at temperatures from (293.15 to 473.15) K and pressures from (0.1 to 10) MPa
speedsl	1069.90	m/s	352.53	Speed of sound measurement and prediction of ethyl hexanoate and ethyl octanoate at temperatures from (293.15 to 473.15) K and pressures from (0.1 to 10) MPa
speedsl	1035.20	m/s	363.28	Speed of sound measurement and prediction of ethyl hexanoate and ethyl octanoate at temperatures from (293.15 to 473.15) K and pressures from (0.1 to 10) MPa
speedsl	1001.90	m/s	372.96	Speed of sound measurement and prediction of ethyl hexanoate and ethyl octanoate at temperatures from (293.15 to 473.15) K and pressures from (0.1 to 10) MPa
speedsl	969.30	m/s	383.00	Speed of sound measurement and prediction of ethyl hexanoate and ethyl octanoate at temperatures from (293.15 to 473.15) K and pressures from (0.1 to 10) MPa

speedsl	936.30	m/s	392.03	Speed of sound measurement and prediction of ethyl hexanoate and ethyl octanoate at temperatures from (293.15 to 473.15) K and pressures from (0.1 to 10) MPa
speedsl	901.40	m/s	403.14	Speed of sound measurement and prediction of ethyl hexanoate and ethyl octanoate at temperatures from (293.15 to 473.15) K and pressures from (0.1 to 10) MPa
speedsl	869.50	m/s	413.12	Speed of sound measurement and prediction of ethyl hexanoate and ethyl octanoate at temperatures from (293.15 to 473.15) K and pressures from (0.1 to 10) MPa
speedsl	835.70	m/s	423.11	Speed of sound measurement and prediction of ethyl hexanoate and ethyl octanoate at temperatures from (293.15 to 473.15) K and pressures from (0.1 to 10) MPa
speedsl	801.10	m/s	433.20	Speed of sound measurement and prediction of ethyl hexanoate and ethyl octanoate at temperatures from (293.15 to 473.15) K and pressures from (0.1 to 10) MPa

speedsl	770.70	m/s	443.05	Speed of sound measurement and prediction of ethyl hexanoate and ethyl octanoate at temperatures from (293.15 to 473.15) K and pressures from (0.1 to 10) MPa
speedsl	738.50	m/s	453.11	Speed of sound measurement and prediction of ethyl hexanoate and ethyl octanoate at temperatures from (293.15 to 473.15) K and pressures from (0.1 to 10) MPa
speedsl	705.50	m/s	463.17	Speed of sound measurement and prediction of ethyl hexanoate and ethyl octanoate at temperatures from (293.15 to 473.15) K and pressures from (0.1 to 10) MPa
speedsl	675.00	m/s	472.16	Speed of sound measurement and prediction of ethyl hexanoate and ethyl octanoate at temperatures from (293.15 to 473.15) K and pressures from (0.1 to 10) MPa
speedsl	1103.80	m/s	343.20	Speed of sound measurement and prediction of ethyl hexanoate and ethyl octanoate at temperatures from (293.15 to 473.15) K and pressures from (0.1 to 10) MPa
srf	0.02	N/m	358.15	Densities, Viscosities, Refractive Indices, and Surface Tensions for 12 Flavor Esters from T) 288.15 K to T) 358.15 K

srf	0.02	N/m	348.15	Densities, Viscosities, Refractive Indices, and Surface Tensions for 12 Flavor Esters from T) 288.15 K to T) 358.15 K
srf	0.02	N/m	338.15	Densities, Viscosities, Refractive Indices, and Surface Tensions for 12 Flavor Esters from T) 288.15 K to T) 358.15 K
srf	0.02	N/m	328.15	Densities, Viscosities, Refractive Indices, and Surface Tensions for 12 Flavor Esters from T) 288.15 K to T) 358.15 K
srf	0.02	N/m	318.15	Densities, Viscosities, Refractive Indices, and Surface Tensions for 12 Flavor Esters from T) 288.15 K to T) 358.15 K
srf	0.03	N/m	308.15	Densities, Viscosities, Refractive Indices, and Surface Tensions for 12 Flavor Esters from T) 288.15 K to T) 358.15 K
srf	0.03	N/m	298.15	Densities, Viscosities, Refractive Indices, and Surface Tensions for 12 Flavor Esters from T) 288.15 K to T) 358.15 K
srf	0.03	N/m	288.15	Densities, Viscosities, Refractive Indices, and Surface Tensions for 12 Flavor Esters from T) 288.15 K to T) 358.15 K

tcondl	0.14	W/m×K	294.53	Measurement on the thermal conductivity of five saturated fatty acid ethyl esters components of biodiesel
tcondl	0.13	W/m×K	320.37	Measurement on the thermal conductivity of five saturated fatty acid ethyl esters components of biodiesel
tcondl	0.13	W/m×K	330.40	Measurement on the thermal conductivity of five saturated fatty acid ethyl esters components of biodiesel
tcondl	0.13	W/m×K	340.34	Measurement on the thermal conductivity of five saturated fatty acid ethyl esters components of biodiesel
tcondl	0.13	W/m×K	350.38	Measurement on the thermal conductivity of five saturated fatty acid ethyl esters components of biodiesel
tcondl	0.12	W/m×K	360.32	Measurement on the thermal conductivity of five saturated fatty acid ethyl esters components of biodiesel
tcondl	0.12	W/m×K	370.25	Measurement on the thermal conductivity of five saturated fatty acid ethyl esters components of biodiesel

tcondl	0.12	W/m×K	380.17	Measurement on the thermal conductivity of five saturated fatty acid ethyl esters components of biodiesel
tcondl	0.12	W/m×K	390.39	Measurement on the thermal conductivity of five saturated fatty acid ethyl esters components of biodiesel
tcondl	0.14	W/m×K	310.45	Measurement on the thermal conductivity of five saturated fatty acid ethyl esters components of biodiesel
tcondl	0.14	W/m×K	307.05	Measurement on the thermal conductivity of five saturated fatty acid ethyl esters components of biodiesel
tcondl	0.14	W/m×K	300.47	Measurement on the thermal conductivity of five saturated fatty acid ethyl esters components of biodiesel
tcondl	0.15	W/m×K	254.76	Measurement on the thermal conductivity of five saturated fatty acid ethyl esters components of biodiesel
tcondl	0.15	W/m×K	264.72	Measurement on the thermal conductivity of five saturated fatty acid ethyl esters components of biodiesel

tcondl	0.14	W/m×K	274.70	Measurement on the thermal conductivity of five saturated fatty acid ethyl esters components of biodiesel
tcondl	0.14	W/m×K	284.63	Measurement on the thermal conductivity of five saturated fatty acid ethyl esters components of biodiesel
tcondl	0.11	W/m×K	400.37	Measurement on the thermal conductivity of five saturated fatty acid ethyl esters components of biodiesel

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.51722e+01
Coeff. B	-4.27593e+03
Coeff. C	-7.50490e+01
Temperature range (K), min.	362.32
Temperature range (K), max.	508.68

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/T + C*\ln(T) + D*T^2$
Coeff. A	1.80487e+01
Coeff. B	-6.39744e+03
Coeff. C	-6.14378e-04
Coeff. D	7.52005e-10
Temperature range (K), min.	330.15
Temperature range (K), max.	414.15

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
294.00	160.00	339.59
294.00	3020.00	339.17
294.10	5960.00	338.74
294.10	9040.00	338.30
294.10	12020.00	337.90
294.10	14980.00	337.54
294.10	17990.00	337.13
294.10	21060.00	336.71
294.10	23980.00	336.29
305.60	160.00	344.76
303.70	2940.00	344.30
303.70	6070.00	343.83
303.80	8950.00	343.35
303.80	12020.00	342.90
303.90	15040.00	342.50
304.00	18130.00	342.09
304.00	21050.00	341.67
304.00	24030.00	341.18
314.30	170.00	350.60
314.30	3140.00	350.17
314.30	6130.00	349.71
314.40	9110.00	349.29
314.40	12100.00	348.89
314.40	15030.00	348.53
314.50	18310.00	348.11
314.50	20910.00	347.72
314.50	24100.00	347.25
323.80	130.00	355.82
323.80	3030.00	355.40
323.80	6160.00	354.96
323.90	9300.00	354.54
323.90	12120.00	354.09
323.90	15230.00	353.71
323.90	18110.00	353.28

323.80	21030.00	352.89
323.90	24100.00	352.47
333.70	110.00	360.49
333.70	3060.00	360.06
333.70	6010.00	359.65
333.80	9110.00	359.17
333.80	11920.00	358.75
333.80	15070.00	358.37
333.80	18080.00	357.90
333.90	21120.00	357.47
333.90	24000.00	357.06
343.50	130.00	365.32
343.50	2950.00	364.93
343.50	6040.00	364.48
343.50	8990.00	364.02
343.60	12070.00	363.60
343.70	15050.00	363.15
343.80	18070.00	362.70
343.80	21010.00	362.30
343.80	24090.00	361.84
353.60	130.00	370.06
353.60	3030.00	369.66
353.60	6060.00	369.24
353.70	8990.00	368.80
353.70	11900.00	368.40
353.80	15040.00	367.99
353.90	18020.00	367.57
354.00	20960.00	367.14
354.00	24110.00	366.72

Reference

<https://www.doi.org/10.1021/acs.jced.8b00199>

Mass density, kg/m³

Temperature, K - Liquid	Pressure, kPa - Liquid	Mass density, kg/m ³ - Liquid
303.25	100.00	858.1
303.32	3120.00	861.3
303.30	6080.00	864.4
303.32	9130.00	867.8
303.26	12080.00	871.0
303.33	15080.00	874.1

313.05	100.00	849.5
313.12	3140.00	853.0
313.08	6150.00	856.1
313.10	9150.00	859.6
313.10	12100.00	862.7
313.11	15110.00	865.9
323.00	100.00	841.1
323.09	3130.00	844.7
323.10	6150.00	848.1
323.13	9110.00	851.4
323.14	12140.00	854.8
323.16	15050.00	858.1
333.00	100.00	832.2
333.14	3100.00	836.2
333.18	6080.00	839.7
333.18	9090.00	843.3
333.20	12100.00	846.9
333.21	15100.00	850.3
343.11	100.00	823.6
343.11	3120.00	827.8
343.14	6100.00	831.7
343.16	9070.00	835.0
343.10	12150.00	838.8
343.17	15000.00	842.1
353.10	100.00	814.5
353.21	3150.00	819.0
353.27	6150.00	823.0
353.16	9130.00	826.8
353.25	12140.00	830.7
353.24	15070.00	834.4

Reference

<https://www.doi.org/10.1021/acs.jced.7b00386>

Speed of sound, m/s

Temperature, K - Liquid	Pressure, kPa - Liquid	Speed of sound, m/s - Liquid
292.94	100.00	1281.78
292.92	15200.00	1358.96
292.92	30390.00	1426.66
292.91	45590.00	1484.68
292.91	60790.00	1539.15

292.91	75990.00	1589.96
292.91	91180.00	1638.26
292.90	101320.00	1668.8
298.22	100.00	1261.46
298.22	15200.00	1340.79
298.21	30390.00	1407.87
298.20	45590.00	1468.7
298.20	60790.00	1523.7
298.20	75990.00	1574.95
298.20	91180.00	1623.92
298.21	101320.00	1654.14
303.20	100.00	1242.48
303.14	15200.00	1324.21
303.14	30390.00	1391.85
303.13	45590.00	1453.63
303.13	60790.00	1509.14
303.13	75990.00	1561.43
303.13	91180.00	1610.08
303.13	101320.00	1639.9
308.17	100.00	1223.64
308.11	15200.00	1307.5
308.11	30390.00	1376.3
308.11	45590.00	1438.66
308.11	60790.00	1494.89
308.11	75990.00	1547.22
308.11	91180.00	1596.51
308.11	101320.00	1627.66
313.15	100.00	1204.97
313.11	15200.00	1290.2
313.11	30390.00	1360.2
313.11	45590.00	1423.12
313.09	60800.00	1480.45
313.10	75990.00	1533.04
313.09	91180.00	1582.85
313.10	101320.00	1614.81
318.32	100.00	1185.71
318.26	15200.00	1273.0
318.24	30390.00	1343.93
318.26	45590.00	1407.41
318.26	60800.00	1466.05
318.26	75990.00	1519.38
318.26	91180.00	1569.61
318.27	101320.00	1601.6

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Measurement and correlation of density and viscosity of n-hexadecane with the n-alkanes. Refractive indices, and surface tensions for 12 n-alkanes

<https://www.doi.org/10.1016/j.jct.2016.01.021>

Measurement and correlation of density and viscosity of n-hexadecane with the n-alkanes. Refractive indices, and surface tensions for 12 n-alkanes

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Measurement and correlation of density and viscosity of n-hexadecane with the n-alkanes. Refractive indices, and surface tensions for 12 n-alkanes

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Measurement and correlation of density and viscosity of n-hexadecane with the n-alkanes. Refractive indices, and surface tensions for 12 n-alkanes

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Measurement and correlation of density and viscosity of n-hexadecane with the n-alkanes. Refractive indices, and surface tensions for 12 n-alkanes

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Measurement and correlation of density and viscosity of n-hexadecane with the n-alkanes. Refractive indices, and surface tensions for 12 n-alkanes

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Measurement and correlation of density and viscosity of n-hexadecane with the n-alkanes. Refractive indices, and surface tensions for 12 n-alkanes

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

Legend

hf:	Enthalpy of formation at standard conditions
hfl:	Liquid phase enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion 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
rhol:	Liquid Density
rinpola:	Non-polar retention indices
ripola:	Polar retention indices
speedsl:	Speed of sound in fluid
srf:	Surface Tension
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tcondl:	Liquid thermal conductivity
tf:	Normal melting (fusion) point
vc:	Critical Volume

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