

# Hexane, 1-chloro-

<b>Other names:</b>	1-Chlorohexane 1-Hexyl chloride Hexyl chloride N-HEXYL CHLORIDE
<b>Inchi:</b>	InChI=1S/C6H13Cl/c1-2-3-4-5-6-7/h2-6H2,1H3
<b>InchiKey:</b>	MLRVZFYXUZQSRU-UHFFFAOYSA-N
<b>Formula:</b>	C6H13Cl
<b>SMILES:</b>	CCCCCCCl
<b>Mol. weight [g/mol]:</b>	120.62
<b>CAS:</b>	544-10-5

## Physical Properties

Property code	Value	Unit	Source
gf	-12.29	kJ/mol	Joback Method
hf	-182.91	kJ/mol	Joback Method
hfus	15.49	kJ/mol	Joback Method
hvap	42.80 ± 0.10	kJ/mol	NIST Webbook
hvap	42.00	kJ/mol	NIST Webbook
hvap	42.82 ± 0.06	kJ/mol	NIST Webbook
hvap	42.86	kJ/mol	NIST Webbook
hvap	42.83	kJ/mol	NIST Webbook
hvap	42.80 ± 0.10	kJ/mol	NIST Webbook
ie	10.28 ± 0.05	eV	NIST Webbook
ie	10.31	eV	NIST Webbook
log10ws	-3.12		Aqueous Solubility Prediction Method
log10ws	-3.12		Estimated Solubility Method
logp	2.805		Crippen Method
mcpvol	107.640	ml/mol	McGowan Method
nfpaf	%!d(float64=3)		KDB
pc	2982.79	kPa	Joback Method
rinpol	842.90		NIST Webbook
rinpol	848.00		NIST Webbook
rinpol	844.00		NIST Webbook
rinpol	844.00		NIST Webbook
rinpol	844.00		NIST Webbook
rinpol	845.00		NIST Webbook

rinpol	845.00		NIST Webbook
rinpol	853.00		NIST Webbook
rinpol	850.00		NIST Webbook
rinpol	847.00		NIST Webbook
rinpol	840.10		NIST Webbook
rinpol	838.80		NIST Webbook
rinpol	839.50		NIST Webbook
rinpol	837.40		NIST Webbook
rinpol	835.00		NIST Webbook
rinpol	833.70		NIST Webbook
rinpol	836.70		NIST Webbook
rinpol	840.90		NIST Webbook
rinpol	843.70		NIST Webbook
rinpol	850.00		NIST Webbook
rinpol	844.00		NIST Webbook
rinpol	842.90		NIST Webbook
rinpol	844.60		NIST Webbook
rinpol	858.20		NIST Webbook
rinpol	859.70		NIST Webbook
rinpol	857.00		NIST Webbook
rinpol	833.30		NIST Webbook
rinpol	838.30		NIST Webbook
rinpol	835.00		NIST Webbook
rinpol	858.00		NIST Webbook
rinpol	835.90		NIST Webbook
rinpol	857.10		NIST Webbook
rinpol	840.00		NIST Webbook
rinpol	858.00		NIST Webbook
rinpol	844.00		NIST Webbook
rinpol	848.00		NIST Webbook
rinpol	857.00		NIST Webbook
rinpol	846.00		NIST Webbook
rinpol	844.00		NIST Webbook
ripol	1050.00		NIST Webbook
ripol	1050.00		NIST Webbook
ripol	1049.00		NIST Webbook
ripol	1047.00		NIST Webbook
ripol	1050.00		NIST Webbook
ripol	1041.00		NIST Webbook
ripol	1041.00		NIST Webbook
ripol	1034.00		NIST Webbook
tb	407.45	K	KDB
tb	407.70	K	NIST Webbook
tb	407.45 ± 0.30	K	NIST Webbook

tb	408.22 ± 0.08	K	NIST Webbook
tb	408.10	K	NIST Webbook
tc	594.60	K	NIST Webbook
tf	179.15 ± 1.20	K	NIST Webbook
vc	0.420	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	196.32	J/mol×K	402.82	Joback Method
cpg	185.96	J/mol×K	374.11	Joback Method
cpg	242.42	J/mol×K	546.35	Joback Method
cpg	233.93	J/mol×K	517.64	Joback Method
cpg	225.08	J/mol×K	488.94	Joback Method
cpg	215.87	J/mol×K	460.23	Joback Method
cpg	206.29	J/mol×K	431.52	Joback Method
cpl	233.18	J/mol×K	349.15	Heat Capacities of 1-chloroalkanes and 1-bromoalkanes within the temperature range from 284.15 K to 353.15 K. A group additivity and molecular connectivity analysis
cpl	216.20	J/mol×K	298.15	NIST Webbook
cpl	235.17	J/mol×K	353.15	Heat Capacities of 1-chloroalkanes and 1-bromoalkanes within the temperature range from 284.15 K to 353.15 K. A group additivity and molecular connectivity analysis

cpl	202.64	J/mol×K	293.15	Temperature Dependence of the Thermophysical Properties of 1-Chlorohexane, 1-Iodohexane, 1-Iodoheptane, and 1-Chlorononane at Saturation Condition
cpl	204.33	J/mol×K	298.15	Temperature Dependence of the Thermophysical Properties of 1-Chlorohexane, 1-Iodohexane, 1-Iodoheptane, and 1-Chlorononane at Saturation Condition
cpl	205.90	J/mol×K	303.15	Temperature Dependence of the Thermophysical Properties of 1-Chlorohexane, 1-Iodohexane, 1-Iodoheptane, and 1-Chlorononane at Saturation Condition
cpl	207.47	J/mol×K	308.15	Temperature Dependence of the Thermophysical Properties of 1-Chlorohexane, 1-Iodohexane, 1-Iodoheptane, and 1-Chlorononane at Saturation Condition
cpl	208.91	J/mol×K	313.15	Temperature Dependence of the Thermophysical Properties of 1-Chlorohexane, 1-Iodohexane, 1-Iodoheptane, and 1-Chlorononane at Saturation Condition

cpl	210.48	J/mol×K	318.15	Temperature Dependence of the Thermophysical Properties of 1-Chlorohexane, 1-Iodohexane, 1-Iodoheptane, and 1-Chlorononane at Saturation Condition
cpl	212.05	J/mol×K	323.15	Temperature Dependence of the Thermophysical Properties of 1-Chlorohexane, 1-Iodohexane, 1-Iodoheptane, and 1-Chlorononane at Saturation Condition
cpl	213.62	J/mol×K	328.15	Temperature Dependence of the Thermophysical Properties of 1-Chlorohexane, 1-Iodohexane, 1-Iodoheptane, and 1-Chlorononane at Saturation Condition
cpl	215.07	J/mol×K	333.15	Temperature Dependence of the Thermophysical Properties of 1-Chlorohexane, 1-Iodohexane, 1-Iodoheptane, and 1-Chlorononane at Saturation Condition
cpl	216.63	J/mol×K	338.15	Temperature Dependence of the Thermophysical Properties of 1-Chlorohexane, 1-Iodohexane, 1-Iodoheptane, and 1-Chlorononane at Saturation Condition

cpl	217.96	J/mol×K	343.15	Temperature Dependence of the Thermophysical Properties of 1-Chlorohexane, 1-Iodohexane, 1-Iodoheptane, and 1-Chlorononane at Saturation Condition
cpl	219.05	J/mol×K	348.15	Temperature Dependence of the Thermophysical Properties of 1-Chlorohexane, 1-Iodohexane, 1-Iodoheptane, and 1-Chlorononane at Saturation Condition
cpl	220.98	J/mol×K	353.15	Temperature Dependence of the Thermophysical Properties of 1-Chlorohexane, 1-Iodohexane, 1-Iodoheptane, and 1-Chlorononane at Saturation Condition
cpl	222.42	J/mol×K	358.15	Temperature Dependence of the Thermophysical Properties of 1-Chlorohexane, 1-Iodohexane, 1-Iodoheptane, and 1-Chlorononane at Saturation Condition
cpl	234.56	J/mol×K	351.65	Heat Capacities of 1-chloroalkanes and 1-bromoalkanes within the temperature range from 284.15 K to 353.15 K. A group additivity and molecular connectivity analysis

cpl	225.32	J/mol×K	368.15	Temperature Dependence of the Thermophysical Properties of 1-Chlorohexane, 1-Iodohexane, 1-Iodoheptane, and 1-Chlorononane at Saturation Condition
cpl	226.65	J/mol×K	373.15	Temperature Dependence of the Thermophysical Properties of 1-Chlorohexane, 1-Iodohexane, 1-Iodoheptane, and 1-Chlorononane at Saturation Condition
cpl	212.36	J/mol×K	284.15	Heat Capacities of 1-chloroalkanes and 1-bromoalkanes within the temperature range from 284.15 K to 353.15 K. A group additivity and molecular connectivity analysis
cpl	213.23	J/mol×K	286.65	Heat Capacities of 1-chloroalkanes and 1-bromoalkanes within the temperature range from 284.15 K to 353.15 K. A group additivity and molecular connectivity analysis

cpl	213.91	J/mol×K	289.15	Heat Capacities of 1-chloroalkanes and 1-bromoalkanes within the temperature range from 284.15 K to 353.15 K. A group additivity and molecular connectivity analysis
cpl	214.63	J/mol×K	291.65	Heat Capacities of 1-chloroalkanes and 1-bromoalkanes within the temperature range from 284.15 K to 353.15 K. A group additivity and molecular connectivity analysis
cpl	215.40	J/mol×K	294.15	Heat Capacities of 1-chloroalkanes and 1-bromoalkanes within the temperature range from 284.15 K to 353.15 K. A group additivity and molecular connectivity analysis
cpl	216.12	J/mol×K	296.65	Heat Capacities of 1-chloroalkanes and 1-bromoalkanes within the temperature range from 284.15 K to 353.15 K. A group additivity and molecular connectivity analysis



cpl	216.95	J/mol×K	299.15	Heat Capacities of 1-chloroalkanes and 1-bromoalkanes within the temperature range from 284.15 K to 353.15 K. A group additivity and molecular connectivity analysis
cpl	217.75	J/mol×K	301.65	Heat Capacities of 1-chloroalkanes and 1-bromoalkanes within the temperature range from 284.15 K to 353.15 K. A group additivity and molecular connectivity analysis
cpl	218.44	J/mol×K	304.15	Heat Capacities of 1-chloroalkanes and 1-bromoalkanes within the temperature range from 284.15 K to 353.15 K. A group additivity and molecular connectivity analysis
cpl	219.22	J/mol×K	306.65	Heat Capacities of 1-chloroalkanes and 1-bromoalkanes within the temperature range from 284.15 K to 353.15 K. A group additivity and molecular connectivity analysis

cpl	219.99	J/mol×K	309.15	Heat Capacities of 1-chloroalkanes and 1-bromoalkanes within the temperature range from 284.15 K to 353.15 K. A group additivity and molecular connectivity analysis
cpl	221.00	J/mol×K	311.65	Heat Capacities of 1-chloroalkanes and 1-bromoalkanes within the temperature range from 284.15 K to 353.15 K. A group additivity and molecular connectivity analysis
cpl	221.78	J/mol×K	314.15	Heat Capacities of 1-chloroalkanes and 1-bromoalkanes within the temperature range from 284.15 K to 353.15 K. A group additivity and molecular connectivity analysis
cpl	222.49	J/mol×K	316.65	Heat Capacities of 1-chloroalkanes and 1-bromoalkanes within the temperature range from 284.15 K to 353.15 K. A group additivity and molecular connectivity analysis

cpl	223.43	J/mol×K	319.15	Heat Capacities of 1-chloroalkanes and 1-bromoalkanes within the temperature range from 284.15 K to 353.15 K. A group additivity and molecular connectivity analysis
cpl	224.31	J/mol×K	321.65	Heat Capacities of 1-chloroalkanes and 1-bromoalkanes within the temperature range from 284.15 K to 353.15 K. A group additivity and molecular connectivity analysis
cpl	224.70	J/mol×K	324.15	Heat Capacities of 1-chloroalkanes and 1-bromoalkanes within the temperature range from 284.15 K to 353.15 K. A group additivity and molecular connectivity analysis
cpl	226.02	J/mol×K	326.65	Heat Capacities of 1-chloroalkanes and 1-bromoalkanes within the temperature range from 284.15 K to 353.15 K. A group additivity and molecular connectivity analysis

cpl	227.13	J/mol×K	329.15	Heat Capacities of 1-chloroalkanes and 1-bromoalkanes within the temperature range from 284.15 K to 353.15 K. A group additivity and molecular connectivity analysis
cpl	228.86	J/mol×K	331.65	Heat Capacities of 1-chloroalkanes and 1-bromoalkanes within the temperature range from 284.15 K to 353.15 K. A group additivity and molecular connectivity analysis
cpl	228.99	J/mol×K	334.15	Heat Capacities of 1-chloroalkanes and 1-bromoalkanes within the temperature range from 284.15 K to 353.15 K. A group additivity and molecular connectivity analysis
cpl	229.44	J/mol×K	336.65	Heat Capacities of 1-chloroalkanes and 1-bromoalkanes within the temperature range from 284.15 K to 353.15 K. A group additivity and molecular connectivity analysis

cpl	230.06	J/mol×K	339.15	Heat Capacities of 1-chloroalkanes and 1-bromoalkanes within the temperature range from 284.15 K to 353.15 K. A group additivity and molecular connectivity analysis
cpl	231.22	J/mol×K	341.65	Heat Capacities of 1-chloroalkanes and 1-bromoalkanes within the temperature range from 284.15 K to 353.15 K. A group additivity and molecular connectivity analysis
cpl	231.83	J/mol×K	344.15	Heat Capacities of 1-chloroalkanes and 1-bromoalkanes within the temperature range from 284.15 K to 353.15 K. A group additivity and molecular connectivity analysis
cpl	232.32	J/mol×K	346.65	Heat Capacities of 1-chloroalkanes and 1-bromoalkanes within the temperature range from 284.15 K to 353.15 K. A group additivity and molecular connectivity analysis

cpl	223.87	J/molxK	363.15	Temperature Dependence of the Thermophysical Properties of 1-Chlorohexane, 1-Iodohexane, 1-Iodoheptane, and 1-Chlorononane at Saturation Condition
dvisc	0.0006283	Paxs	308.15	Viscosities and Densities of Binary Mixtures of Hexane with 1-Chlorohexane between 293.15 K and 333.15 K
dvisc	0.0007704	Paxs	293.15	Viscosities and Densities of Binary Mixtures of Hexane with 1-Chlorohexane between 293.15 K and 333.15 K
dvisc	0.0007173	Paxs	298.15	Viscosities and Densities of Binary Mixtures of Hexane with 1-Chlorohexane between 293.15 K and 333.15 K
dvisc	0.0005019	Paxs	328.15	Viscosities and Densities of Binary Mixtures of Hexane with 1-Chlorohexane between 293.15 K and 333.15 K
dvisc	0.0005285	Paxs	323.15	Viscosities and Densities of Binary Mixtures of Hexane with 1-Chlorohexane between 293.15 K and 333.15 K
dvisc	0.0006702	Paxs	303.15	Viscosities and Densities of Binary Mixtures of Hexane with 1-Chlorohexane between 293.15 K and 333.15 K
dvisc	0.0005580	Paxs	318.15	Viscosities and Densities of Binary Mixtures of Hexane with 1-Chlorohexane between 293.15 K and 333.15 K

dvisc	0.0005910	Paxs	313.15	Viscosities and Densities of Binary Mixtures of Hexane with 1-Chlorohexane between 293.15 K and 333.15 K
dvisc	0.0004778	Paxs	333.15	Viscosities and Densities of Binary Mixtures of Hexane with 1-Chlorohexane between 293.15 K and 333.15 K
hvapt	35.67	kJ/mol	408.10	NIST Webbook
hvapt	40.00 ± 0.10	kJ/mol	343.00	NIST Webbook
hvapt	40.50 ± 0.10	kJ/mol	328.00	NIST Webbook
hvapt	43.50	kJ/mol	348.50	NIST Webbook
hvapt	41.10	kJ/mol	347.50	NIST Webbook
hvapt	39.00 ± 0.10	kJ/mol	358.00	NIST Webbook
hvapt	38.40 ± 0.10	kJ/mol	368.00	NIST Webbook
kvisc	0.0000007	m <sup>2</sup> /s	313.15	Experimental and predicted viscosities of binary mixtures of cyclic ethers with 1-chloropentane or 1-chlorohexane at 283.15, 298.15, and 313.15K
kvisc	0.0000009	m <sup>2</sup> /s	283.15	Experimental and predicted viscosities of binary mixtures of cyclic ethers with 1-chloropentane or 1-chlorohexane at 283.15, 298.15, and 313.15K
kvisc	0.0000008	m <sup>2</sup> /s	298.15	Experimental and predicted viscosities of binary mixtures of cyclic ethers with 1-chloropentane or 1-chlorohexane at 283.15, 298.15, and 313.15K

pvap	2.86	kPa	313.15	(Vapour + liquid) equilibria and excess molar enthalpies for binary mixtures containing N,N-dialkylamides and 1-chloroalkanes
pvap	5.96	kPa	328.15	Isothermal (vapour + liquid) equilibrium of (cyclic ethers + chlorohexane) mixtures: Experimental results and SAFT modelling
pvap	2.86	kPa	313.15	Excess enthalpies and isothermal (vapour + liquid) equilibria of (1-methyl-2-pyrrolidone + 1-chloroalkane or +,?-dichloroalkane) mixtures
pvap	1.25	kPa	298.15	Isothermal (vapour + liquid) equilibrium of (cyclic ethers + chlorohexane) mixtures: Experimental results and SAFT modelling
rfi	1.41710		298.15	Densities, Excess Molar Volumes, Viscosities, and Refractive Indices of Binary Mixtures of n-Butyl Acetate with 1-Chloroalkanes (C4 C8) at 298.15 K
rfi	1.41720		298.15	(P,Vm,T) Measurements of (octane + 1-chlorohexane) at temperatures from 298.15 K to 328.15 K and at pressures up to 40 MPa



rfi	1.41680		303.15	Densities, speeds of sound, isentropic compressibilities, refractive indexes, and viscosities of tetrahydrofuran with haloalkane or alkyl ethanoate at T = 303.15 K
rhoI	873.38	kg/m <sup>3</sup>	298.15	Experimental and predicted data of excess molar enthalpies and excess molar volumes for the ternary system (1,3-dichlorobenzene + benzene + 1-chlorohexane) at T = 298.15 K
rhoI	873.50	kg/m <sup>3</sup>	298.15	Vapour liquid equilibrium of cyclic ethers with 1-chlorohexane: Experimental results and UNIFAC predictions
speedsI	958.90	m/s	363.15	Speed of Sound of Hexane + 1-Chlorohexane, Hexane + 1-Iodohexane, and 1-Chlorohexane + 1-Iodohexane at Saturation Condition
speedsI	922.90	m/s	373.15	Speed of Sound of Hexane + 1-Chlorohexane, Hexane + 1-Iodohexane, and 1-Chlorohexane + 1-Iodohexane at Saturation Condition
speedsI	940.60	m/s	368.15	Speed of Sound of Hexane + 1-Chlorohexane, Hexane + 1-Iodohexane, and 1-Chlorohexane + 1-Iodohexane at Saturation Condition

speedsl	976.90	m/s	358.15	Speed of Sound of Hexane + 1-Chlorohexane, Hexane + 1-Iodohexane, and 1-Chlorohexane + 1-Iodohexane at Saturation Condition
speedsl	995.00	m/s	353.15	Speed of Sound of Hexane + 1-Chlorohexane, Hexane + 1-Iodohexane, and 1-Chlorohexane + 1-Iodohexane at Saturation Condition
speedsl	1013.30	m/s	348.15	Speed of Sound of Hexane + 1-Chlorohexane, Hexane + 1-Iodohexane, and 1-Chlorohexane + 1-Iodohexane at Saturation Condition
speedsl	1031.70	m/s	343.15	Speed of Sound of Hexane + 1-Chlorohexane, Hexane + 1-Iodohexane, and 1-Chlorohexane + 1-Iodohexane at Saturation Condition
speedsl	1050.20	m/s	338.15	Speed of Sound of Hexane + 1-Chlorohexane, Hexane + 1-Iodohexane, and 1-Chlorohexane + 1-Iodohexane at Saturation Condition
speedsl	1068.80	m/s	333.15	Speed of Sound of Hexane + 1-Chlorohexane, Hexane + 1-Iodohexane, and 1-Chlorohexane + 1-Iodohexane at Saturation Condition

speedsl	1087.00	m/s	328.15	Speed of Sound of Hexane + 1-Chlorohexane, Hexane + 1-Iodohexane, and 1-Chlorohexane + 1-Iodohexane at Saturation Condition
speedsl	1106.00	m/s	323.15	Speed of Sound of Hexane + 1-Chlorohexane, Hexane + 1-Iodohexane, and 1-Chlorohexane + 1-Iodohexane at Saturation Condition
speedsl	1128.10	m/s	318.15	Speed of Sound of Hexane + 1-Chlorohexane, Hexane + 1-Iodohexane, and 1-Chlorohexane + 1-Iodohexane at Saturation Condition
speedsl	1143.70	m/s	313.15	Speed of Sound of Hexane + 1-Chlorohexane, Hexane + 1-Iodohexane, and 1-Chlorohexane + 1-Iodohexane at Saturation Condition
speedsl	1165.20	m/s	308.15	Speed of Sound of Hexane + 1-Chlorohexane, Hexane + 1-Iodohexane, and 1-Chlorohexane + 1-Iodohexane at Saturation Condition
speedsl	1200.10	m/s	298.15	Speed of Sound of Hexane + 1-Chlorohexane, Hexane + 1-Iodohexane, and 1-Chlorohexane + 1-Iodohexane at Saturation Condition

speedsl	1219.10	m/s	293.15	Speed of Sound of Hexane + 1-Chlorohexane, Hexane + 1-Iodohexane, and 1-Chlorohexane + 1-Iodohexane at Saturation Condition
speedsl	1181.90	m/s	303.15	Speed of Sound of Hexane + 1-Chlorohexane, Hexane + 1-Iodohexane, and 1-Chlorohexane + 1-Iodohexane at Saturation Condition

## Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.55612e+01
Coeff. B	-3.86347e+03
Coeff. C	-5.46410e+01
Temperature range (K), min.	307.59
Temperature range (K), max.	431.58

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/T + C \cdot \ln(T) + D \cdot T^2$
Coeff. A	1.03644e+02
Coeff. B	-8.56728e+03
Coeff. C	-1.32703e+01
Coeff. D	1.04706e-05
Temperature range (K), min.	288.15
Temperature range (K), max.	409.15

# Datasets

## Speed of sound, m/s

Temperature, K - Liquid	Pressure, kPa - Liquid	Speed of sound, m/s - Liquid
293.15	100.00	1219.1
293.15	5000.00	1240.5
293.15	9910.00	1264.5
293.15	19720.00	1310.0
293.15	29530.00	1352.6
293.15	39340.00	1392.6
293.15	49150.00	1430.1
293.15	58960.00	1465.7
293.15	68770.00	1499.3
293.15	78580.00	1531.5
293.15	88390.00	1562.3
293.15	98200.00	1591.9
293.15	108000.00	1620.6
293.15	117800.00	1648.2
293.15	127600.00	1675.2
293.15	137400.00	1701.5
293.15	147200.00	1727.1
293.15	157100.00	1752.2
293.15	166900.00	1776.7
293.15	176700.00	1800.6
293.15	186500.00	1824.0
293.15	196300.00	1846.5
313.15	100.00	1140.7
313.15	5000.00	1166.4
313.15	9910.00	1191.8
313.15	19720.00	1240.1
313.15	29530.00	1285.3
313.15	39340.00	1327.6
313.15	49150.00	1367.4
313.15	58960.00	1405.0
313.15	68770.00	1440.6
313.15	78580.00	1474.6
313.15	88390.00	1507.0
313.15	98200.00	1538.0
313.15	108000.00	1567.9

313.15	117800.00	1596.7
313.15	127600.00	1624.5
313.15	137400.00	1651.4
313.15	147200.00	1677.5
313.15	157100.00	1702.6
313.15	166900.00	1726.9
313.15	176700.00	1750.3
313.15	186500.00	1772.6
313.15	196300.00	1793.6
333.15	100.00	1068.8
333.15	5000.00	1097.1
333.15	9910.00	1124.4
333.15	19720.00	1176.0
333.15	29530.00	1224.0
333.15	39340.00	1268.8
333.15	49150.00	1310.8
333.15	58960.00	1350.4
333.15	68770.00	1387.7
333.15	78580.00	1423.2
333.15	88390.00	1457.0
333.15	98200.00	1489.4
333.15	108000.00	1520.4
333.15	117800.00	1550.3
333.15	127600.00	1579.1
333.15	137400.00	1607.0
333.15	147200.00	1633.9
333.15	157100.00	1659.9
333.15	166900.00	1684.9
333.15	176700.00	1708.9
333.15	186500.00	1731.8
333.15	196300.00	1753.5
353.15	100.00	995.0
353.15	5000.00	1026.2
353.15	9910.00	1055.4
353.15	19720.00	1110.7
353.15	29530.00	1162.0
353.15	39340.00	1209.8
353.15	49150.00	1254.5
353.15	58960.00	1296.3
353.15	68770.00	1335.8
353.15	78580.00	1373.0
353.15	88390.00	1408.3
353.15	98200.00	1441.9
353.15	108000.00	1474.0

353.15	117800.00	1504.7
353.15	127600.00	1534.3
353.15	137400.00	1562.7
353.15	147200.00	1590.1
353.15	157100.00	1616.4
353.15	166900.00	1641.8
353.15	176700.00	1666.1
353.15	186500.00	1689.4
353.15	196300.00	1711.4
373.15	100.00	922.9
373.15	5000.00	957.0
373.15	9910.00	989.6
373.15	19720.00	1050.4
373.15	29530.00	1105.8
373.15	39340.00	1156.5
373.15	49150.00	1203.2
373.15	58960.00	1246.3
373.15	68770.00	1286.9
373.15	78580.00	1324.8
373.15	88390.00	1360.8
373.15	98200.00	1395.1
373.15	108000.00	1427.9
373.15	117800.00	1459.6
373.15	127600.00	1490.1
373.15	137400.00	1519.6
373.15	147200.00	1548.1
373.15	157100.00	1575.5
373.15	166900.00	1601.7
373.15	176700.00	1626.5
373.15	186500.00	1649.5
373.15	196300.00	1670.6
393.15	100.00	853.3
393.15	5000.00	893.8
393.15	9910.00	928.6
393.15	19720.00	993.2
393.15	29530.00	1051.8
393.15	39340.00	1105.2
393.15	49150.00	1154.2
393.15	58960.00	1199.4
393.15	68770.00	1241.4
393.15	78580.00	1280.8
393.15	88390.00	1318.0
393.15	98200.00	1353.3
393.15	108000.00	1387.2

393.15	117800.00	1419.7
393.15	127600.00	1451.2
393.15	137400.00	1481.6
393.15	147200.00	1511.1
393.15	157100.00	1539.5
393.15	166900.00	1566.9
393.15	176700.00	1592.8
393.15	186500.00	1617.2
393.15	196300.00	1639.7
413.15	100.00	784.0
413.15	5000.00	829.4
413.15	9910.00	867.7
413.15	19720.00	938.1
413.15	29530.00	1001.1
413.15	39340.00	1057.7
413.15	49150.00	1109.0
413.15	58960.00	1155.8
413.15	68770.00	1198.9
413.15	78580.00	1239.1
413.15	88390.00	1276.9
413.15	98200.00	1312.8
413.15	108000.00	1347.4
413.15	117800.00	1380.6
413.15	127600.00	1413.0
413.15	137400.00	1444.5
413.15	147200.00	1475.2
413.15	157100.00	1504.9
413.15	166900.00	1533.7
413.15	176700.00	1560.9
413.15	186500.00	1586.4
413.15	196300.00	1609.7

Reference

<https://www.doi.org/10.1021/je0503204>

## Mass density, kg/m<sup>3</sup>

Temperature, K - Liquid	Pressure, kPa - Liquid	Mass density, kg/m <sup>3</sup> - Liquid
288.15	100.00	882.7
288.15	2000.00	884.4
288.15	4100.00	886.0
288.15	5900.00	887.5



288.15	8100.00	889.2
288.15	10100.00	890.7
288.15	12200.00	892.3
288.15	14200.00	893.8
288.15	16200.00	895.2
288.15	18200.00	896.7
288.15	20200.00	898.3
298.15	100.00	873.1
298.15	2000.00	874.8
298.15	4100.00	876.6
298.15	6100.00	878.3
298.15	8100.00	879.9
298.15	10200.00	881.7
298.15	12100.00	883.3
298.15	14200.00	885.0
298.15	16400.00	886.6
298.15	18400.00	888.1
298.15	20200.00	889.6
308.15	100.00	864.3
308.15	2000.00	866.1
308.15	4100.00	868.0
308.15	6100.00	869.7
308.15	8100.00	871.5
308.15	10200.00	873.3
308.15	12100.00	875.0
308.15	14200.00	876.7
308.15	16200.00	878.3
308.15	18300.00	879.9
308.15	20200.00	881.5
318.15	100.00	855.1
318.15	2000.00	857.0
318.15	4000.00	858.9
318.15	6100.00	860.9
318.15	8100.00	862.7
318.15	10100.00	864.6
318.15	11900.00	866.1
318.15	14100.00	868.1
318.15	16100.00	869.9
318.15	18000.00	871.4
318.15	20000.00	872.8

Reference

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**Temperature, K**

**Pressure, kPa**

**Mass density, kg/m3**

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## Legend

<b>cp<sub>g</sub>:</b>	Ideal gas heat capacity
<b>cp<sub>l</sub>:</b>	Liquid phase heat capacity
<b>d<sub>visc</sub>:</b>	Dynamic viscosity
<b>g<sub>f</sub>:</b>	Standard Gibbs free energy of formation
<b>h<sub>f</sub>:</b>	Enthalpy of formation at standard conditions
<b>h<sub>fus</sub>:</b>	Enthalpy of fusion at standard conditions
<b>h<sub>vap</sub>:</b>	Enthalpy of vaporization at standard conditions
<b>h<sub>vapt</sub>:</b>	Enthalpy of vaporization at a given temperature
<b>ie:</b>	Ionization energy
<b>k<sub>visc</sub>:</b>	Kinematic viscosity
<b>log<sub>10</sub>ws:</b>	Log <sub>10</sub> of Water solubility in mol/l
<b>log<sub>p</sub>:</b>	Octanol/Water partition coefficient
<b>mc<sub>vol</sub>:</b>	McGowan's characteristic volume
<b>nf<sub>paf</sub>:</b>	NFPA Fire Rating
<b>pc:</b>	Critical Pressure
<b>p<sub>vap</sub>:</b>	Vapor pressure
<b>r<sub>fi</sub>:</b>	Refractive Index
<b>r<sub>hol</sub>:</b>	Liquid Density
<b>r<sub>inpol</sub>:</b>	Non-polar retention indices
<b>r<sub>ipol</sub>:</b>	Polar retention indices
<b>speed<sub>sl</sub>:</b>	Speed of sound in fluid
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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