2,5,8,11,14-Pentaoxapentadecane

Other names:	Ansul Ether 181AT Bis[2-(2-methoxyethoxy)ethyl] ether CH3O[CH2CH2O]4CH3 E 181 (ether) Ether, bis[2-(2-methoxyethoxy)ethyl] Glyme-5 NSC 65624 Nissan Uniox MM 200 Tetraethylene glycol dimethyl ether bis(2-(2-methoxyethoxy)ethyl) ether dimethoxytetraethylene glycol dimethoxytetraglycol tetraethylene glycol, dimethyl ether tetraglyme
Inchi:	InChI=1S/C10H22O5/c1-11-3-5-13-7-9-15-10-8-14-6-4-12-2/h3-10H2,1-2H3
InchiKey:	ZUHZGEOKBKGPSW-UHFFFAOYSA-N
Formula:	C10H22O5
SMILES:	COCCOCCOCCOCCOC
Mol. weight [g/mol]:	222.28
CAS:	143-24-8

Physical Properties

Property code	Value	Unit	Source
af	0.7212		Cheméo Relay (1.0)
affp	953.80	kJ/mol	NIST Webbook
basg	897.80	kJ/mol	NIST Webbook
gf	-491.68	kJ/mol	Joback Method
hf	-855.35	kJ/mol	Cheméo Relay (1.0)
hfus	27.60	kJ/mol	Joback Method
hvap	76.90 ± 2.60	kJ/mol	NIST Webbook
ie	9.49	eV	Cheméo Relay (1.0)
log10ws	-0.13		Cheméo Relay (1.0)
logp	0.329		Crippen Method
mcvol	181.110	ml/mol	McGowan Method
pc	1952.68	kPa	Joback Method
tb	548.15	K	NIST Webbook
tb	549.00	K	NIST Webbook

tc	726.60	K	DIPPR Project 851 - Thirty Years of Vapor-Liquid Critical Point Measurements and Experimental Technique Development
tf	243.45	K	NIST Webbook
vc	0.700	m3/kmol	Cheméo Relay (1.0)

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	449.87	J/mol×K	540.30	Joback Method
cpg	464.04	J/mol×K	567.38	Joback Method
cpg	477.85	J/mol×K	594.46	Joback Method
cpg	491.28	J/mol×K	621.54	Joback Method
cpg	529.06	J/mol×K	702.78	Joback Method
cpg	516.90	J/mol×K	675.70	Joback Method
cpg	504.30	J/mol×K	648.62	Joback Method
cpl	457.10	J/mol×K	298.15	NIST Webbook
dvisc	0.0014500	Pa×s	343.15	Density, viscosity and solubility of carbon dioxide in glymes
dvisc	0.0033800	Pa×s	298.15	Densities, Viscosities, and Derived Functions of Binary Mixtures: (Tetraethylene Glycol Dimethyl Ether + Water) from 298.15 K to 343.15 K
dvisc	0.0014200	Pa×s	343.15	Densities, Viscosities, and Derived Functions of Binary Mixtures: (Tetraethylene Glycol Dimethyl Ether + Water) from 298.15 K to 343.15 K

dvisc	0.0016900	Pa×s	333.15	Densities, Viscosities, and Derived Functions of Binary Mixtures: (Tetraethylene Glycol Dimethyl Ether + Water) from 298.15 K to 343.15 K	
dvisc	0.0020040	Pa×s	323.15	Densities, Viscosities, and Derived Functions of Binary Mixtures: (Tetraethylene Glycol Dimethyl Ether + Water) from 298.15 K to 343.15 K	
dvisc	0.0024200	Pa×s	313.15	Densities, Viscosities, and Derived Functions of Binary Mixtures: (Tetraethylene Glycol Dimethyl Ether + Water) from 298.15 K to 343.15 K	
dvisc	0.0011000	Pa×s	363.15	Density, viscosity and solubility of carbon dioxide in glymes	
dvisc	0.0012600	Pa×s	353.15	Density, viscosity and solubility of carbon dioxide in glymes	
dvisc	0.0017000	Pa×s	333.15	Density, viscosity and solubility of carbon dioxide in glymes	
dvisc	0.0069800	Pa×s	273.15	Density, viscosity and solubility of carbon dioxide in glymes	
dvisc	0.0059100	Pa×s	278.15	Density, viscosity and solubility of carbon dioxide in glymes	
dvisc	0.0050600	Pa×s	283.15	Density, viscosity and solubility of carbon dioxide in glymes	
dvisc	0.0043700	Pa×s	288.15	Density, viscosity and solubility of carbon dioxide in glymes	
dvisc	0.0038400	Pa×s	293.15	Density, viscosity and solubility of carbon dioxide in glymes	

dvisc	0.0034000	Pa×s	298.15	Density, viscosity and solubility of carbon dioxide in glymes	
dvisc	0.0029900	Pa×s	303.15	Density, viscosity and solubility of carbon dioxide in glymes	
dvisc	0.0024500	Pa×s	313.15	Density, viscosity and solubility of carbon dioxide in glymes	
dvisc	0.0020200	Pa×s	323.15	Density, viscosity and solubility of carbon dioxide in glymes	
epr	7.55		308.15	Permittivity and density of the systems (monoglyme, diglyme, triglyme, or tetraglyme + n-heptane) at several temperatures	
epr	8.04		288.15	Permittivity and density of the systems (monoglyme, diglyme, triglyme, or tetraglyme + n-heptane) at several temperatures	
epr	7.78		298.15	Permittivity and density of the systems (monoglyme, diglyme, triglyme, or tetraglyme + n-heptane) at several temperatures	
hvapt	58.00	kJ/mol	486.00	NIST Webbook	
rfi	1.43260		293.15	DIELECTRIC AND REFRACTIVE INDEX MEASUREMENTS FOR THE SYSTEMS 1-PENTANOL + 2,5,8,11,14-PENTAOXAPENTADECANE, OR FOR 2,5,8,11,14-PENTAOXAPENTADECANE + OCTANE AT (293.15-303.15) K.	

rfi	1.43060	298.15	DIELECTRIC AND REFRACTIVE INDEX MEASUREMENTS FOR THE SYSTEMS 1-PENTANOL + 2,5,8,11,14-PENTAOXAPENTADECANE, OR FOR 2,5,8,11,14-PENTAOXAPENTADECANE + OCTANE AT (293.15-303.15) K.
rfi	1.43030	298.15	Liquid Densities and Refractive Indices of Binary Mixtures for the Dimethyl Ether of a Glycol + Ethanol from T=288.15 K to 318.15 K
rfi	1.42860	303.15	DIELECTRIC AND REFRACTIVE INDEX MEASUREMENTS FOR THE SYSTEMS 1-PENTANOL + 2,5,8,11,14-PENTAOXAPENTADECANE, OR FOR 2,5,8,11,14-PENTAOXAPENTADECANE + OCTANE AT (293.15-303.15) K.
rfi	1.43440	288.15	Liquid Densities and Refractive Indices of Binary Mixtures for the Dimethyl Ether of a Glycol + Ethanol from T=288.15 K to 318.15 K
rfi	1.42210	318.15	Liquid Densities and Refractive Indices of Binary Mixtures for the Dimethyl Ether of a Glycol + Ethanol from T=288.15 K to 318.15 K
rfi	1.42620	308.15	Liquid Densities and Refractive Indices of Binary Mixtures for the Dimethyl Ether of a Glycol + Ethanol from T=288.15 K to 318.15 K

rhol	1006.36	kg/m3	298.15	Volumetric and viscometric properties of binary liquid mixtures as potential solvents for flue gas desulfurization processes	
rhol	961.90	kg/m3	348.15	Thermophysical properties of glycols and glymes	
rhol	1015.63	kg/m3	288.15	Volumetric Properties, Viscosities, and Refractive Indices of the Binary Systems 1-Butanol + PEG 200, + PEG 400, and + TEGDME	
rhol	1011.00	kg/m3	293.15	Volumetric Properties, Viscosities, and Refractive Indices of the Binary Systems 1-Butanol + PEG 200, + PEG 400, and + TEGDME	
rhol	1006.36	kg/m3	298.15	Volumetric Properties, Viscosities, and Refractive Indices of the Binary Systems 1-Butanol + PEG 200, + PEG 400, and + TEGDME	
rhol	1001.73	kg/m3	303.15	Volumetric Properties, Viscosities, and Refractive Indices of the Binary Systems 1-Butanol + PEG 200, + PEG 400, and + TEGDME	
rhol	997.10	kg/m3	308.15	Volumetric Properties, Viscosities, and Refractive Indices of the Binary Systems 1-Butanol + PEG 200, + PEG 400, and + TEGDME	

rhol	992.48	kg/m3	313.15	Volumetric Properties, Viscosities, and Refractive Indices of the Binary Systems 1-Butanol + PEG 200, + PEG 400, and + TEGDME	
rhol	987.86	kg/m3	318.15	Volumetric Properties, Viscosities, and Refractive Indices of the Binary Systems 1-Butanol + PEG 200, + PEG 400, and + TEGDME	
rhol	983.23	kg/m3	323.15	Volumetric Properties, Viscosities, and Refractive Indices of the Binary Systems 1-Butanol + PEG 200, + PEG 400, and + TEGDME	
rhol	978.61	kg/m3	328.15	Volumetric Properties, Viscosities, and Refractive Indices of the Binary Systems 1-Butanol + PEG 200, + PEG 400, and + TEGDME	
rhol	973.99	kg/m3	333.15	Volumetric Properties, Viscosities, and Refractive Indices of the Binary Systems 1-Butanol + PEG 200, + PEG 400, and + TEGDME	
rhol	1016.70	kg/m3	288.15	Volumetric and viscometric behavior of the binary systems ethyl lactate + 1,2- propanediol, + 1,3-propanediol, + tetrahydrofuran and + tetraethylene glycol dimethyl ether. New UNIFAC-VISCO and ASOG-VISCO parameters determination	

rhol	1012.06	kg/m3	293.15	Volumetric and viscometric behavior of the binary systems ethyl lactate + 1,2- propanediol, + 1,3-propanediol, + tetrahydrofuran and + tetraethylene glycol dimethyl ether. New UNIFAC-VISCO and ASOG-VISCO parameters determination
rhol	1007.42	kg/m3	298.15	Volumetric and viscometric behavior of the binary systems ethyl lactate + 1,2- propanediol, + 1,3-propanediol, + tetrahydrofuran and + tetraethylene glycol dimethyl ether. New UNIFAC-VISCO and ASOG-VISCO parameters determination
rhol	1002.79	kg/m3	303.15	Volumetric and viscometric behavior of the binary systems ethyl lactate + 1,2- propanediol, + 1,3-propanediol, + tetrahydrofuran and + tetraethylene glycol dimethyl ether. New UNIFAC-VISCO and ASOG-VISCO parameters determination

rhol	998.15	kg/m3	308.15	Volumetric and viscometric behavior of the binary systems ethyl lactate + 1,2- propanediol, + 1,3-propanediol, + tetrahydrofuran and + tetraethylene glycol dimethyl ether. New UNIFAC-VISCO and ASOG-VISCO parameters determination
rhol	993.52	kg/m3	313.15	Volumetric and viscometric behavior of the binary systems ethyl lactate + 1,2- propanediol, + 1,3-propanediol, + tetrahydrofuran and + tetraethylene glycol dimethyl ether. New UNIFAC-VISCO and ASOG-VISCO parameters determination
rhol	988.89	kg/m3	318.15	Volumetric and viscometric behavior of the binary systems ethyl lactate + 1,2- propanediol, + 1,3-propanediol, + tetrahydrofuran and + tetraethylene glycol dimethyl ether. New UNIFAC-VISCO and ASOG-VISCO parameters determination

rhol	984.26	kg/m3	323.15	Volumetric and viscometric behavior of the binary systems ethyl lactate + 1,2- propanediol, + 1,3-propanediol, + tetrahydrofuran and + tetraethylene glycol dimethyl ether. New UNIFAC-VISCO and ASOG-VISCO parameters determination	
rhol	1015.86	kg/m3	288.15	On permittivity and density of the systems (tetraglyme + dimethyl or diethyl carbonate) and the formulation of De in terms of volume or mole fraction	
rhol	1007.16	kg/m3	298.15	On permittivity and density of the systems (tetraglyme + dimethyl or diethyl carbonate) and the formulation of De in terms of volume or mole fraction	
rhol	997.43	kg/m3	308.15	On permittivity and density of the systems (tetraglyme + dimethyl or diethyl carbonate) and the formulation of De in terms of volume or mole fraction	
rhol	987.93	kg/m3	318.15	On permittivity and density of the systems (tetraglyme + dimethyl or diethyl carbonate) and the formulation of De in terms of volume or mole fraction	

rhol	979.31	kg/m3	328.15	On permittivity and density of the systems (tetraglyme + dimethyl or diethyl carbonate) and the formulation of De in terms of volume or mole fraction
rhol	1015.63	kg/m3	288.15	Volumetric and viscometric properties of binary liquid mixtures as potential solvents for flue gas desulfurization processes
rhol	1011.00	kg/m3	293.15	Volumetric and viscometric properties of binary liquid mixtures as potential solvents for flue gas desulfurization processes
rhol	1006.20	kg/m3	298.15	Liquid-Liquid Equilibrium of Ternary Mixtures Formed by Some Oligooxaethylenes with Ethanol and Hexadecane
rhol	1001.73	kg/m3	303.15	Volumetric and viscometric properties of binary liquid mixtures as potential solvents for flue gas desulfurization processes
rhol	997.10	kg/m3	308.15	Volumetric and viscometric properties of binary liquid mixtures as potential solvents for flue gas desulfurization processes
rhol	992.48	kg/m3	313.15	Volumetric and viscometric properties of binary liquid mixtures as potential solvents for flue gas desulfurization processes

rhol	987.86	kg/m3	318.15	Volumetric and viscometric properties of binary liquid mixtures as potential solvents for flue gas desulfurization processes
rhol	983.23	kg/m3	323.15	Volumetric and viscometric properties of binary liquid mixtures as potential solvents for flue gas desulfurization processes
rhol	978.61	kg/m3	328.15	Volumetric and viscometric properties of binary liquid mixtures as potential solvents for flue gas desulfurization processes
rhol	973.99	kg/m3	333.15	Volumetric and viscometric properties of binary liquid mixtures as potential solvents for flue gas desulfurization processes
rhol	1017.00	kg/m3	288.15	Thermophysical properties of glycols and glymes
rhol	1012.30	kg/m3	293.15	Thermophysical properties of glycols and glymes
rhol	1007.60	kg/m3	298.15	Thermophysical properties of glycols and glymes
rhol	1003.10	kg/m3	303.15	Thermophysical properties of glycols and glymes
rhol	998.80	kg/m3	308.15	Thermophysical properties of glycols and glymes
rhol	994.10	kg/m3	313.15	Thermophysical properties of glycols and glymes

rhol	989.50	kg/m3	318.15	Thermophysical properties of glycols and glymes
rhol	984.90	kg/m3	323.15	Thermophysical properties of glycols and glymes
rhol	980.20	kg/m3	328.15	Thermophysical properties of glycols and glymes
rhol	975.60	kg/m3	333.15	Thermophysical properties of glycols and glymes
rhol	971.00	kg/m3	338.15	Thermophysical properties of glycols and glymes
rhol	966.50	kg/m3	343.15	Thermophysical properties of glycols and glymes
rhol	983.23	kg/m3	323.15	Volumetric and Viscometric Behavior of Binary Systems 2-Butanol + PEG 200, + PEG 400, + Tetraethylene Glycol Dimethyl Ether, and + N-Methyl-2-pyrrolidone
rhol	957.30	kg/m3	353.15	Thermophysical properties of glycols and glymes
rhol	952.70	kg/m3	358.15	Thermophysical properties of glycols and glymes
rhol	948.10	kg/m3	363.15	Thermophysical properties of glycols and glymes
rhol	943.50	kg/m3	368.15	Thermophysical properties of glycols and glymes
rhol	938.90	kg/m3	373.15	Thermophysical properties of glycols and glymes
rhol	1020.70	kg/m3	283.15	Thermophysical properties of glycols and glymes

rhol	1016.10	kg/m3	288.15	Thermophysical properties of glycols and glymes	
rhol	1011.50	kg/m3	293.15	Thermophysical properties of glycols and glymes	
rhol	1006.80	kg/m3	298.15	Thermophysical properties of glycols and glymes	
rhol	1002.20	kg/m3	303.15	Thermophysical properties of glycols and glymes	
rhol	997.60	kg/m3	308.15	Thermophysical properties of glycols and glymes	
rhol	993.00	kg/m3	313.15	Thermophysical properties of glycols and glymes	
rhol	983.70	kg/m3	323.15	Thermophysical properties of glycols and glymes	
rhol	974.50	kg/m3	333.15	Thermophysical properties of glycols and glymes	
rhol	965.30	kg/m3	343.15	Thermophysical properties of glycols and glymes	
rhol	1020.30	kg/m3	283.15	The Viscosity and Density of Ionic Liquid + Tetraglyme Mixtures and the Effect of Tetraglyme on CO2 Solubility	
rhol	1015.60	kg/m3	288.15	The Viscosity and Density of Ionic Liquid + Tetraglyme Mixtures and the Effect of Tetraglyme on CO2 Solubility	
rhol	1011.00	kg/m3	293.15	The Viscosity and Density of Ionic Liquid + Tetraglyme Mixtures and the Effect of Tetraglyme on CO2 Solubility	

rhol	1009.20	kg/m3	295.15	The Viscosity and Density of Ionic Liquid + Tetraglyme Mixtures and the Effect of Tetraglyme on CO2 Solubility
rhol	1006.40	kg/m3	298.15	The Viscosity and Density of Ionic Liquid + Tetraglyme Mixtures and the Effect of Tetraglyme on CO2 Solubility
rhol	1001.80	kg/m3	303.15	The Viscosity and Density of Ionic Liquid + Tetraglyme Mixtures and the Effect of Tetraglyme on CO2 Solubility
rhol	997.20	kg/m3	308.15	The Viscosity and Density of Ionic Liquid + Tetraglyme Mixtures and the Effect of Tetraglyme on CO2 Solubility
rhol	992.60	kg/m3	313.15	The Viscosity and Density of Ionic Liquid + Tetraglyme Mixtures and the Effect of Tetraglyme on CO2 Solubility
rhol	988.00	kg/m3	318.15	The Viscosity and Density of Ionic Liquid + Tetraglyme Mixtures and the Effect of Tetraglyme on CO2 Solubility
rhol	983.40	kg/m3	323.15	The Viscosity and Density of Ionic Liquid + Tetraglyme Mixtures and the Effect of Tetraglyme on CO2 Solubility

rhol	978.80	kg/m3	328.15	The Viscosity and Density of Ionic Liquid + Tetraglyme Mixtures and the Effect of Tetraglyme on CO2 Solubility
rhol	974.20	kg/m3	333.15	The Viscosity and Density of Ionic Liquid + Tetraglyme Mixtures and the Effect of Tetraglyme on CO2 Solubility
rhol	969.60	kg/m3	338.15	The Viscosity and Density of Ionic Liquid + Tetraglyme Mixtures and the Effect of Tetraglyme on CO2 Solubility
rhol	965.00	kg/m3	343.15	The Viscosity and Density of Ionic Liquid + Tetraglyme Mixtures and the Effect of Tetraglyme on CO2 Solubility
rhol	960.40	kg/m3	348.15	The Viscosity and Density of Ionic Liquid + Tetraglyme Mixtures and the Effect of Tetraglyme on CO2 Solubility
rhol	955.80	kg/m3	353.15	The Viscosity and Density of Ionic Liquid + Tetraglyme Mixtures and the Effect of Tetraglyme on CO2 Solubility
rhol	1007.12	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	1015.63	kg/m3	288.15	Volumetric and Viscometric Behavior of Binary Systems 2-Butanol + PEG 200, + PEG 400, + Tetraethylene Glycol Dimethyl Ether, and + N-Methyl-2-pyrrolidone
rhol	1011.00	kg/m3	293.15	Volumetric and Viscometric Behavior of Binary Systems 2-Butanol + PEG 200, + PEG 400, + Tetraethylene Glycol Dimethyl Ether, and + N-Methyl-2-pyrrolidone
rhol	1006.36	kg/m3	298.15	Volumetric and Viscometric Behavior of Binary Systems 2-Butanol + PEG 200, + PEG 400, + Tetraethylene Glycol Dimethyl Ether, and + N-Methyl-2-pyrrolidone
rhol	1001.73	kg/m3	303.15	Volumetric and Viscometric Behavior of Binary Systems 2-Butanol + PEG 200, + PEG 400, + Tetraethylene Glycol Dimethyl Ether, and + N-Methyl-2-pyrrolidone
rhol	997.10	kg/m3	308.15	Volumetric and Viscometric Behavior of Binary Systems 2-Butanol + PEG 200, + PEG 400, + Tetraethylene Glycol Dimethyl Ether, and + N-Methyl-2-pyrrolidone
rhol	992.48	kg/m3	313.15	Volumetric and Viscometric Behavior of Binary Systems 2-Butanol + PEG 200, + PEG 400, + Tetraethylene Glycol Dimethyl Ether, and + N-Methyl-2-pyrrolidone

rhol	987.86	kg/m3	318.15	Volumetric and Viscometric Behavior of Binary Systems 2-Butanol + PEG 200, + PEG 400, + Tetraethylene Glycol Dimethyl Ether, and + N-Methyl-2-pyrrolidone
srf	0.03	N/m	308.15	Volumetric and Surface Properties of Aqueous Mixtures of Polyethers at T = (298.15, 308.15, and 318.15) K
srf	0.03	N/m	298.15	Volumetric and Surface Properties of Aqueous Mixtures of Polyethers at T = (298.15, 308.15, and 318.15) K
srf	0.03	N/m	318.15	Volumetric and Surface Properties of Aqueous Mixtures of Polyethers at T = (298.15, 308.15, and 318.15) K
tcondl	0.15	W/m×K	302.75	Thermal Conductivity Measurement of Polyglycol Alkyl Ethers at Temperatures from (303.15 to 393.15) K
tcondl	0.14	W/m×K	332.54	Thermal Conductivity Measurement of Polyglycol Alkyl Ethers at Temperatures from (303.15 to 393.15) K
tcondl	0.13	W/m×K	362.39	Thermal Conductivity Measurement of Polyglycol Alkyl Ethers at Temperatures from (303.15 to 393.15) K

tcondl	0.13	W/m×K	392.16	Thermal Conductivity Measurement of Polyglycol Alkyl Ethers at Temperatures from (303.15 to 393.15) K

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.70035e+01
Coeff. B	-6.17570e+03
Coeff. C	-5.03140e+01
Temperature range (K), min.	419.76
Temperature range (K), max.	578.51

Datasets

Speed of sound, m/s

Temperature, K - Liquid	Pressure, kPa - Liquid	Speed of sound, m/s - Liquid
293.15	100.00	1400.2
293.15	10000.00	1439.3
293.15	20000.00	1477.3
293.15	30000.00	1512.3
293.15	40000.00	1546.2
293.15	50000.00	1578.2
293.15	60000.00	1609.1
293.15	70000.00	1638.4
293.15	80000.00	1666.8
293.15	90000.00	1694.2
293.15	100000.00	1720.6
303.15	100.00	1361.6
303.15	10000.00	1402.8

303.15	20000.00	1441.7
303.15	30000.00	1478.2
303.15	40000.00	1513.0
303.15	50000.00	1546.1
303.15	60000.00	1577.7
303.15	70000.00	1607.6
303.15	80000.00	1637.0
303.15	90000.00	1664.9
303.15	100000.00	1692.0
313.15	100.00	1324.5
313.15	10000.00	1367.0
313.15	20000.00	1407.3
313.15	30000.00	1444.9
313.15	40000.00	1480.9
313.15	50000.00	1514.8
313.15	60000.00	1547.2
313.15	70000.00	1578.1
313.15	80000.00	1607.8
313.15	90000.00	1636.4
313.15	100000.00	1663.9
323.15	100.00	1288.0
323.15	10000.00	1332.1
323.15	20000.00	1373.8
323.15	30000.00	1412.5
323.15	40000.00	1449.5
323.15	50000.00	1484.2
323.15	60000.00	1517.4
323.15	70000.00	1548.8
323.15	80000.00	1579.3
323.15	90000.00	1608.6
323.15	100000.00	1636.7
333.15	100.00	1252.0
333.15	10000.00	1297.9
333.15	20000.00	1340.7
333.15	30000.00	1380.8
333.15	40000.00	1418.3
333.15	50000.00	1454.2
333.15	60000.00	1488.4
333.15	70000.00	1520.7
333.15	80000.00	1551.9
333.15	90000.00	1581.5
333.15	100000.00	1610.2
343.15	100.00	1216.6
343.15	10000.00	1264.2

343.15	20000.00	1308.6
343.15	30000.00	1349.9
343.15	40000.00	1388.8
343.15	50000.00	1425.3
343.15	60000.00	1460.1
343.15	70000.00	1493.1
343.15	80000.00	1524.7
343.15	90000.00	1555.3
343.15	100000.00	1584.4
353.15	100.00	1181.6
353.15	10000.00	1231.2
353.15	20000.00	1276.9
353.15	30000.00	1319.8
353.15	40000.00	1359.8
353.15	50000.00	1397.1
353.15	60000.00	1432.8
353.15	70000.00	1466.5
353.15	80000.00	1498.9
353.15	90000.00	1529.8
353.15	100000.00	1559.5

Reference *https://www.doi.org/10.1021/je034036t*

Mass density, kg/m3

Pressure, kPa - Liquid	Temperature, K - Liquid	Mass density, kg/m3 - Liquid
100.00	278.15	1025.1
100.00	283.15	1020.4
100.00	293.15	1011.1
100.00	303.15	1002.1
100.00	313.15	992.9
100.00	323.15	983.6
100.00	333.15	974.1
100.00	343.15	965.0
100.00	353.15	955.7
1000.00	278.15	1025.6
1000.00	283.15	1020.9
1000.00	293.15	1011.6
1000.00	303.15	1002.7
1000.00	313.15	993.5
1000.00	323.15	984.3

1000.00	333.15	974.8
1000.00	343.15	965.8
1000.00	353.15	956.5
2500.00	278.15	1026.5
2500.00	283.15	1021.8
2500.00	293.15	1012.6
2500.00	303.15	1003.7
2500.00	313.15	994.6
2500.00	323.15	985.3
2500.00	333.15	976.0
2500.00	343.15	967.0
2500.00	353.15	957.8
5000.00	278.15	1027.9
5000.00	283.15	1023.3
5000.00	293.15	1014.1
5000.00	303.15	1005.3
5000.00	313.15	996.3
5000.00	323.15	987.1
5000.00	333.15	977.9
5000.00	343.15	969.0
5000.00	353.15	959.9
7500.00	278.15	1029.3
7500.00	283.15	1024.7
7500.00	293.15	1015.6
7500.00	303.15	1006.9
7500.00	313.15	997.9
7500.00	323.15	988.9
7500.00	333.15	979.8
7500.00	343.15	971.0
7500.00	353.15	962.0
10000.00	278.15	1030.7
10000.00	283.15	1026.1
10000.00	293.15	1017.1
10000.00	303.15	1008.5
10000.00	313.15	999.6
10000.00	323.15	990.6
10000.00	333.15	981.6
10000.00	343.15	972.9
10000.00	353.15	964.0
15000.00	278.15	1033.4
15000.00	283.15	1028.9
15000.00	293.15	1020.0
15000.00	303.15	1011.5
15000.00	313.15	1002.8

15000.00	323.15	994.0
15000.00	333.15	985.1
15000.00	343.15	976.6
15000.00	353.15	967.9
20000.00	278.15	1036.1
20000.00	283.15	1031.6
20000.00	293.15	1022.9
20000.00	303.15	1014.5
20000.00	313.15	1006.0
20000.00	323.15	997.3
20000.00	333.15	988.5
20000.00	343.15	980.2
20000.00	353.15	971.7
25000.00	278.15	1038.7
25000.00	283.15	1034.3
25000.00	293.15	1025.6
25000.00	303.15	1017.4
25000.00	313.15	1009.0
25000.00	323.15	1000.5
25000.00	333.15	991.8
25000.00	343.15	983.7
25000.00	353.15	975.3

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Legend

af:	Acentric Factor
affp:	Proton affinity
basg:	Gas basicity
cpg:	Ideal gas heat capacity
cpl:	Liquid phase heat capacity
dvisc:	Dynamic viscosity
epr:	Dielectric Constant (Relative permittivity)
gf:	Standard Gibbs free energy of formation
hf:	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

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
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