Benzene, 1,2,4-trimethyl-

Other names:	1,2,4-Trimethylbenzene
	1,2,4-trimethylbenzene (pseudocumene)
	1,2,5-Trimethylbenzene
	1,3,4-Trimethylbenzene
	AS-TRIMETHYBENZENE
	Asymmetrical trimethylbenzene
	Benzene, 1,2,5-trimethyl-
	NSC 65600
	PSEUDOCUMENE
	Pseudocumol
	Psi-cumene
	as-Trimethylbenzene
	«psi»-Cumene
	Â«psiÂ»-Cumene
Inchi:	InChI=1S/C9H12/c1-7-4-5-8(2)9(3)6-7/h4-6H,1-3H3
InchiKey:	GWHJZXXIDMPWGX-UHFFFAOYSA-N
Formula:	C9H12
SMILES:	Cc1ccc(C)c(C)c1
Mol. weight [g/mol]:	120.19
CAS:	95-63-6

Physical Properties

Property code	Value	Unit	Source
af	0.3760		KDB
chl	-5190.60	kJ/mol	NIST Webbook
chl	-5194.80 ± 1.00	kJ/mol	NIST Webbook
cpl	213.02	J/mol×K	Thermodynamics of mixtures involving some (benzene derivatives + benzonitrile)
gf	117.00	kJ/mol	KDB
hcg	5194.77	kJ/mol	KDB
hcn	4930.677	kJ/mol	KDB
hf	-13.94	kJ/mol	KDB
hf	-13.90 ± 1.10	kJ/mol	NIST Webbook
hfl	-61.90 ± 1.10	kJ/mol	NIST Webbook
hfus	12.33	kJ/mol	Joback Method
hvap	47.94	kJ/mol	NIST Webbook

hvap	48.00	kJ/mol	NIST Webbook
hvap	47.93	kJ/mol	NIST Webbook
hvap	47.90	kJ/mol	NIST Webbook
hvap	47.90	kJ/mol	NIST Webbook
hvap	47.20	kJ/mol	NIST Webbook
hvap	48.00	kJ/mol	NIST Webbook
hvap	39.30	kJ/mol	NIST Webbook
ie	8.27 ± 0.01	eV	NIST Webbook
ie	8.27 ± 0.01	eV	NIST Webbook
ie	8.27	eV	NIST Webbook
ie	8.50 ± 0.03	eV	NIST Webbook
ie	8.27	eV	NIST Webbook
log10ws	-3.31		Estimated Solubility Method
log10ws	-3.31		Aqueous Solubility Prediction Method
logp	2.612		Crippen Method
mcvol	113.910	ml/mol	McGowan Method
pc	3260.00 ± 5.88	kPa	NIST Webbook
pc	1925.18 ± 151.99	kPa	NIST Webbook
pc	3382.60 ± 0.33	kPa	NIST Webbook
pc	3269.50 ± 0.32	kPa	NIST Webbook
pc	3269.40 ± 0.32	kPa	NIST Webbook
pc	3277.10 ± 0.32	kPa	NIST Webbook
pc	3232.00	kPa	KDB
pc	3232.00 ± 6.00	kPa	NIST Webbook
rinpol	982.20		NIST Webbook
rinpol	977.00		NIST Webbook
rinpol	975.00		NIST Webbook
rinpol	1001.00		NIST Webbook
rinpol	978.00		NIST Webbook
rinpol	971.00		NIST Webbook
rinpol	986.30		NIST Webbook
rinpol	978.00		NIST Webbook
rinpol	956.00		NIST Webbook
rinpol	1000.00		NIST Webbook
rinpol	978.00		NIST Webbook
rinpol	988.00		NIST Webbook
rinpol	978.00		NIST Webbook
rinpol	988.00		NIST Webbook
rinpol	978.00		NIST Webbook
rinpol	1012.00		NIST Webbook
rinpol	984.00		NIST Webbook
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rinpol	973.00		NIST Webbook

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rinpol	173.80	NIST Webbook
rinpol	990.00	NIST Webbook
rinpol	1005.50	NIST Webbook
rinpol	1012.30	NIST Webbook
rinpol	969.90	NIST Webbook
rinpol	975.30	NIST Webbook
rinpol	976.05	NIST Webbook
rinpol	990.10	NIST Webbook
rinpol	1006.00	NIST Webbook
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rinpol	1006.00	NIST Webbook
rinpol	995.00	NIST Webbook
rinpol	1004.20	NIST Webbook
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rinpol	976.20	NIST Webbook
rinpol	980.50	NIST Webbook
rinpol	991.90	NIST Webbook
rinpol	996.60	NIST Webbook
rinpol	987.00	NIST Webbook
rinpol	993.00	NIST Webbook
rinpol	1017.00	NIST Webbook
rinpol	987.00	NIST Webbook
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rinpol	984.00	NIST Webbook
rinpol	988.00	NIST Webbook
rinpol	994.00	NIST Webbook
rinpol	1001.00	NIST Webbook
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rinpol	988.40	NIST Webbook
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rinpol	982.50	NIST Webbook
rinpol	982.80	NIST Webbook
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rinpol	988.00	NIST Webbook
rinpol	974.90	NIST Webbook
rinpol	988.20	NIST Webbook
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rinpol	991.10	NIST Webbook
rinpol	992.80	NIST Webbook
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rinpol	966.00	NIST Webbook
rinpol	1000.00	NIST Webbook
rinpol	974.00	NIST Webbook
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ripol	1308.10		NIST Webbook
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ripol	1292.00		NIST Webbook
ripol	1312.40		NIST Webbook
ripol	1326.70		NIST Webbook
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ripol	1249.00		NIST Webbook
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ripol	1319.00		NIST Webbook
ripol	1291.00		NIST Webbook
ripol	1285.00		NIST Webbook
ripol	1275.00		NIST Webbook
ripol	1279.00		NIST Webbook
sg	395.76 ± 0.63	J/mol×K	NIST Webbook
sl	283.30	J/mol×K	NIST Webbook
sl	283.38	J/mol×K	NIST Webbook
tb	441.35 ± 0.25	K	NIST Webbook
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tb	442.50 ± 0.20	K	NIST Webbook
tb	441.20	K	NIST Webbook
tb	442.00 ± 3.00	K	NIST Webbook
tb	442.49 ± 0.15	K	NIST Webbook
tb	442.49 ± 0.20	K	NIST Webbook
tb	442.90 ± 0.70	K	NIST Webbook
tb	441.40 ± 0.50	K	NIST Webbook
tb	442.42 ± 0.30	K	NIST Webbook
tb	442.10 ± 1.00	K	NIST Webbook
tb	443.35 ± 0.40	K	NIST Webbook

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tb	442.30 ± 0.60	K	NIST Webbook
tb	442.33 ± 0.30	K	NIST Webbook
tb	442.55 ± 0.30	K	NIST Webbook
tb	442.45	K	Isobaric (vapour + liquid) equilibria for N-formylmorpholine with ethylbenzene, n-butylbenzene, iso-propylbenzene and 1,2,4-trimethylbenzene at 101.33 kPa
tb	439.00 ± 2.00	K	NIST Webbook
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tb	442.90 ± 5.00	K	NIST Webbook
tb	442.50 ± 0.15	K	NIST Webbook
tb	442.35 ± 0.30	K	NIST Webbook
tb	442.49 ± 0.15	K	NIST Webbook
tb	442.50 ± 0.20	K	NIST Webbook
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tb	442.49 ± 0.20	K	NIST Webbook
tb	442.55 ± 0.30	K	NIST Webbook
tb	442.60 ± 0.40	K	NIST Webbook
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tb	442.00 ± 2.00	K	NIST Webbook
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tb	442.50 ± 0.20	K	NIST Webbook
tb	442.00 ± 2.00	K	NIST Webbook
tb	442.70 ± 0.60	K	NIST Webbook
tc	649.10	K	KDB
tf	228.15 ± 2.00	K	NIST Webbook
tf	229.30	K	KDB
tf	229.25	K	Aqueous Solubility Prediction Method
tf	221.00 ± 4.00	K	NIST Webbook
tf	212.15 ± 0.50	K	NIST Webbook
tf	229.00 ± 0.20	K	NIST Webbook
tf	228.85 ± 0.20	K	NIST Webbook
tf	229.37 ± 0.20	K	NIST Webbook
tf	229.05 ± 0.40	K	NIST Webbook
tf	228.70 ± 0.60	K	NIST Webbook
tf	228.15 ± 0.20	K	NIST Webbook
tf	224.18 ± 0.20	K	NIST Webbook
tf	229.24 ± 0.08	K	NIST Webbook
tf	229.35 ± 0.07	K	NIST Webbook

tf	224.15 ± 0.07	K	NIST Webbook
tf	223.85 ± 0.40	K	NIST Webbook
tf	229.23 ± 0.10	K	NIST Webbook
tt	229.33 ± 0.03	K	NIST Webbook
tt	228.60 ± 0.30	K	NIST Webbook
vc	0.435	m3/kmol	KDB
zc	0.2605030		KDB

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	285.90	J/mol×K	651.95	Joback Method
cpg	265.25	J/mol×K	581.96	Joback Method
cpg	254.06	J/mol×K	546.96	Joback Method
cpg	242.27	J/mol×K	511.96	Joback Method
cpg	229.86	J/mol×K	476.96	Joback Method
cpg	216.81	J/mol×K	441.96	Joback Method
cpg	275.86	J/mol×K	616.95	Joback Method
cpl	212.10	J/mol×K	295.99	NIST Webbook
cpl	214.97	J/mol×K	298.15	NIST Webbook
cpl	210.41	J/mol×K	299.80	NIST Webbook
cpl	213.00	J/mol×K	298.00	NIST Webbook
cpl	212.10	J/mol×K	297.30	NIST Webbook
cpl	213.11	J/mol×K	298.15	NIST Webbook
dvisc	0.0002545	Pa×s	408.74	Joback Method
dvisc	0.0015760	Pa×s	242.65	Joback Method
dvisc	0.0009182	Pa×s	275.87	Joback Method
dvisc	0.0006008	Pa×s	309.09	Joback Method
dvisc	0.0004268	Pa×s	342.31	Joback Method
dvisc	0.0002083	Pa×s	441.96	Joback Method
dvisc	0.0003221	Pa×s	375.52	Joback Method
hfust	12.65	kJ/mol	228.60	NIST Webbook
hfust	13.19	kJ/mol	229.30	NIST Webbook
hvapt	44.10	kJ/mol	403.50	NIST Webbook
hvapt	46.50	kJ/mol	262.00	NIST Webbook
hvapt	39.25	kJ/mol	442.30	KDB
pvap	70.30	kPa	428.53	Phase equilibria on five binary systems containing 1-butanethiol and 3-methylthiophene in hydrocarbons

pvap	60.00	kPa	422.84	Phase equilibria on five binary systems containing 1-butanethiol and 3-methylthiophene in hydrocarbons
pvap	90.40	kPa	437.83	Phase equilibria on five binary systems containing 1-butanethiol and 3-methylthiophene in hydrocarbons
pvap	39.80	kPa	408.87	Phase equilibria on five binary systems containing 1-butanethiol and 3-methylthiophene in hydrocarbons
pvap	30.30	kPa	400.11	Phase equilibria on five binary systems containing 1-butanethiol and 3-methylthiophene in hydrocarbons
pvap	20.10	kPa	387.74	Phase equilibria on five binary systems containing 1-butanethiol and 3-methylthiophene in hydrocarbons
pvap	16.90	kPa	383.15	Phase equilibria on five binary systems containing 1-butanethiol and 3-methylthiophene in hydrocarbons
pvap	101.40	kPa	442.22	Phase equilibria on five binary systems containing 1-butanethiol and 3-methylthiophene in hydrocarbons
pvap	0.73	kPa	313.15	Vapor-liquid equilibria and excess enthalpies of the binary systems 1-pentanol or 2-pentanol and 1-hexene or 1,2,4-trimethylbenzene for the development of biofuels

pvap	50.30	kPa	416.75	Phase equilibria on five binary systems containing 1-butanethiol and 3-methylthiophene in hydrocarbons
pvap	80.30	kPa	433.42	Phase equilibria on five binary systems containing 1-butanethiol and 3-methylthiophene in hydrocarbons
rfi	1.50470		293.15	Isobaric Vapor Liquid Equilibrium Data for the System of 1-Methyl-2-Ethylbenzene + 1,2,4-Trimethylbenzene at 10 kPa
rfi	1.50237		298.15	KDB
rhol	880.00	kg/m3	289.00	KDB
rhol	871.64	kg/m3	298.15	Excess Molar Volumes and Surface Tensions of 1,2,4-Trimethylbenzene and 1,3,5-Trimethylbenzene with 1-Butanol, 2-Methyl-1-propanol, 2-Butanol, and 2-Methyl-2-propanol at 298.15 K
rhol	871.64	kg/m3	298.15	Excess Molar volumes and Surface Tensions of Trimethylbenzene with Tetrahydrofuran Tetrachloromethane and Dimethylsulfoxide at 298.15 K
rhol	875.78	kg/m3	293.15	Isobaric VLE data for 1-methyl-3-ethylbenzene or 1-methyl-4-ethylbenzene + 1,2,4-trimethylbenzene at 20 kPa
sfust	55.30	J/mol×K	228.60	NIST Webbook

srf	0.03	N/m	313.15	Densities and Surface Tensions of Trimethylbenzene + Dimethyl Carbonate or + Diethyl Carbonate at 298.15 K and 313.15 K
srf	0.03	N/m	298.15	Excess Molar Volumes and Surface Tensions of 1,2,4-Trimethylbenzene and 1,3,5-Trimethylbenzene with 1,1-Diethoxyethane and 2,2-Dimethoxypropane at (298.15, 308.15, and 313.15) K
srf	0.03	N/m	308.15	Excess Molar Volumes and Surface Tensions of 1,2,4-Trimethylbenzene and 1,3,5-Trimethylbenzene with 1,1-Diethoxyethane and 2,2-Dimethoxypropane at (298.15, 308.15, and 313.15) K
srf	0.03	N/m	313.15	Excess Molar Volumes and Surface Tensions of 1,2,4-Trimethylbenzene and 1,3,5-Trimethylbenzene with 1,1-Diethoxyethane and 2,2-Dimethoxypropane at (298.15, 308.15, and 313.15) K

srf	0.03	N/m	313.15	Excess Molar Volumes and Surface Tensions of 1,2,4-Trimethylbenzene and 1,3,5-Trimethylbenzene with 1,1-Diethoxyethane and 2,2-Dimethoxypropane at (298.15, 308.15, and 313.15) K
srf	0.03	N/m	308.15	Excess Molar Volumes and Surface Tensions of 1,2,4-Trimethylbenzene and 1,3,5-Trimethylbenzene with Isopropyl Acetate and Isobutyl Acetate at (298.15, 308.15, and 313.15) K
srf	0.03	N/m	293.20	KDB
srf	0.03	N/m	298.15	Densities, surface tensions, and derived surface thermodynamics properties of (trimethylbenzene + propyl acetate, or butyl acetate) from T = 298.15 K to 313.15 K
srf	0.03	N/m	298.15	Densities and Surface Tensions of Trimethylbenzene + Dimethyl Carbonate or + Diethyl Carbonate at 298.15 K and 313.15 K
srf	0.03	N/m	303.15	Densities, surface tensions, and derived surface thermodynamics properties of (trimethylbenzene + propyl acetate, or butyl acetate) from T = 298.15 K to 313.15 K

srf	0.03	N/m	308.15	Densities, surface tensions, and derived surface thermodynamics properties of (trimethylbenzene + propyl acetate, or butyl acetate) from T = 298.15 K to 313.15 K
srf	0.03	N/m	313.15	Densities, surface tensions, and derived surface thermodynamics properties of (trimethylbenzene + propyl acetate, or butyl acetate) from T = 298.15 K to 313.15 K
srf	0.03	N/m	298.15	Excess Molar Volumes and Surface Tensions of Trimethylbenzene + Ethylene Glycol Ester at 298.15 K and 313.15 K
srf	0.03	N/m	298.15	Excess Molar Volumes and Surface Tensions of 1,2,4-Trimethylbenzene and 1,3,5-Trimethylbenzene with Isopropyl Acetate and Isobutyl Acetate at (298.15, 308.15, and 313.15) K
srf	0.03	N/m	313.15	Excess Molar Volumes and Surface Tensions of Trimethylbenzene + Ethylene Glycol Ester at 298.15 K and 313.15 K
srf	0.03	N/m	313.15	Excess Molar Volumes and Surface Tensions of 1,2,4-Trimethylbenzene and 1,3,5-Trimethylbenzene with Isopropyl Acetate and Isobutyl Acetate at (298.15, 308.15, and 313.15) K

tcondl	0.12	W/m×K	331.09	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons	
tcondl	0.12	W/m×K	330.93	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons	
tcondl	0.12	W/m×K	313.13	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons	
tcondl	0.12	W/m×K	330.69	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons	
tcondl	0.12	W/m×K	312.98	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons	

tcondl	0.12	W/m×K	312.75	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons	
tcondl	0.13	W/m×K	295.91	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons	
tcondl	0.13	W/m×K	295.76	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons	
tcondl	0.13	W/m×K	283.68	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons	
tcondl	0.13	W/m×K	283.54	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons	

tcondl	0.13	W/m×K	283.32	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons	
tcondl	0.13	W/m×K	276.69	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons	
tcondl	0.13	W/m×K	276.54	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons	
tcondl	0.13	W/m×K	276.33	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons	
tcondl	0.13	W/m×K	257.93	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons	

tcondl	0.13	W/m×K	257.79	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons
tcondl	0.13	W/m×K	257.58	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons
tcondl	0.13	W/m×K	295.54	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.47784e+01
Coeff. B	-4.06027e+03
Coeff. C	-4.29020e+01
Temperature range (K), min.	323.10
Temperature range (K), max.	471.79

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/T + C*ln(T) + D*T^2

Coeff. A	6.15931e+01
Coeff. B	-7.42775e+03
Coeff. C	-6.69353e+00
Coeff. D	2.96938e-06
Temperature range (K), min.	229.38
Temperature range (K), max.	649.13

Datasets

Viscosity, Pa*s

Temperature, K - Liquid	Pressure, kPa - Liquid	Viscosity, Pa*s - Liquid
293.15	100.00	0.0008929
293.15	1000.00	0.0009065
293.15	5000.00	0.0009417
293.15	10000.00	0.0009769
293.15	20000.00	0.0010610
293.15	30000.00	0.0011479
293.15	40000.00	0.0012332
293.15	50000.00	0.0013362
293.15	60000.00	0.0014349
293.15	70000.00	0.0015664
293.15	80000.00	0.0016926
293.15	100000.00	0.0019518
293.15	120000.00	0.0022875
293.15	140000.00	0.0026681
313.15	100.00	0.0006989
313.15	1000.00	0.0007096
313.15	5000.00	0.0007359
313.15	10000.00	0.0007606
313.15	20000.00	0.0008203
313.15	30000.00	0.0008894
313.15	40000.00	0.0009528
313.15	50000.00	0.0010264
313.15	60000.00	0.0010996
313.15	70000.00	0.0011708
313.15	80000.00	0.0012493
313.15	100000.00	0.0014146
313.15	120000.00	0.0015986

313.15	140000.00	0.0018238
333.15	100.00	0.0005596
333.15	1000.00	0.0005646
333.15	5000.00	0.0005885
333.15	10000.00	0.0006066
333.15	20000.00	0.0006476
333.15	30000.00	0.0006942
333.15	40000.00	0.0007426
333.15	50000.00	0.0007922
333.15	60000.00	0.0008456
333.15	70000.00	0.0009004
333.15	80000.00	0.0009675
333.15	100000.00	0.0010938
333.15	120000.00	0.0012212
333.15	140000.00	0.0013427
353.15	100.00	0.0004527
353.15	1000.00	0.0004566
353.15	5000.00	0.0004711
353.15	10000.00	0.0004886
353.15	20000.00	0.0005283
353.15	30000.00	0.0005626
353.15	40000.00	0.0005993
353.15	50000.00	0.0006375
353.15	60000.00	0.0006768
353.15	70000.00	0.0007177
353.15	80000.00	0.0007606
353.15	100000.00	0.0008518
353.15	120000.00	0.0009515
353.15	140000.00	0.0010646

Reference *https://www.doi.org/10.1016/j.jct.2015.12.021*

Mass density, kg/m3

Temperature, K - Liquid	Pressure, kPa - Liquid	Mass density, kg/m3 - Liquid
273.15	100.00	891.7
273.15	1000.00	892.3
273.15	2000.00	892.9
273.15	5000.00	894.6
273.15	10000.00	897.4
273.15	15000.00	900.2

273.15	20000.00	902.8
273.15	30000.00	908.0
273.15	40000.00	912.9
273.15	50000.00	917.5
273.15	60000.00	921.9
273.15	70000.00	926.2
273.15	80000.00	930.3
273.15	90000.00	934.2
273.15	100000.00	938.0
273.15	110000.00	941.7
273.15	120000.00	945.2
273.15	130000.00	948.6
273.15	140000.00	952.0
283.15	100.00	883.3
283.15	1000.00	883.9
283.15	2000.00	884.5
283.15	5000.00	886.3
283.15	10000.00	889.3
283.15	15000.00	892.2
283.15	20000.00	895.0
283.15	30000.00	900.3
283.15	40000.00	905.4
283.15	50000.00	910.2
283.15	60000.00	914.8
283.15	70000.00	919.3
283.15	80000.00	923.5
283.15	90000.00	927.5
283.15	100000.00	931.4
283.15	110000.00	935.2
283.15	120000.00	938.9
283.15	130000.00	942.4
283.15	140000.00	945.8
293.15	100.00	875.1
293.15	1000.00	875.7
293.15	2000.00	876.3
293.15	5000.00	878.2
293.15	10000.00	881.4
293.15	15000.00	884.4
293.15	20000.00	887.3
293.15	30000.00	892.9
293.15	40000.00	898.2
293.15	50000.00	903.2
293.15	60000.00	908.0
293.15	70000.00	912.6

293.15	80000.00	916.9
293.15	90000.00	921.1
293.15	100000.00	925.1
293.15	110000.00	929.0
293.15	120000.00	932.8
293.15	130000.00	936.4
293.15	140000.00	939.9
303.15	100.00	867.0
303.15	1000.00	867.6
303.15	2000.00	868.3
303.15	5000.00	870.3
303.15	10000.00	873.6
303.15	15000.00	876.8
303.15	20000.00	879.8
303.15	30000.00	885.7
303.15	40000.00	891.2
303.15	50000.00	896.4
303.15	60000.00	901.4
303.15	70000.00	906.1
303.15	80000.00	910.6
303.15	90000.00	914.9
303.15	100000.00	919.1
303.15	110000.00	923.1
303.15	120000.00	927.0
303.15	130000.00	930.7
303.15	140000.00	934.3
313.15	100.00	859.0
313.15	1000.00	859.7
313.15	2000.00	860.4
313.15	5000.00	862.6
313.15	10000.00	866.0
313.15	15000.00	869.3
313.15	20000.00	872.6
313.15	30000.00	878.7
313.15	40000.00	884.5
313.15	50000.00	889.9
313.15	60000.00	895.0
313.15	70000.00	899.9
313.15	80000.00	904.6
313.15	90000.00	909.0
313.15	100000.00	913.3
313.15	110000.00	917.4
313.15	120000.00	921.4
313.15	130000.00	925.2

313.15	140000.00	928.9
323.15	100.00	851.3
323.15	1000.00	852.0
323.15	2000.00	852.7
323.15	5000.00	855.0
323.15	10000.00	858.6
323.15	15000.00	862.1
323.15	20000.00	865.5
323.15	30000.00	871.9
323.15	40000.00	877.9
323.15	50000.00	883.5
323.15	60000.00	888.9
323.15	70000.00	894.0
323.15	80000.00	898.8
323.15	90000.00	903.4
323.15	100000.00	907.8
323.15	110000.00	912.0
323.15	120000.00	916.1
323.15	130000.00	920.0
323.15	140000.00	923.8
333.15	100.00	843.6
333.15	1000.00	844.4
333.15	2000.00	845.2
333.15	5000.00	847.6
333.15	10000.00	851.4
333.15	15000.00	855.1
333.15	20000.00	858.6
333.15	30000.00	865.3
333.15	40000.00	871.6
333.15	50000.00	877.4
333.15	60000.00	883.0
333.15	70000.00	888.2
333.15	80000.00	893.2
333.15	90000.00	898.0
333.15	100000.00	902.5
333.15	110000.00	906.9
333.15	120000.00	911.1
333.15	130000.00	915.1
333.15	140000.00	919.0

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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
hcg:	Heat of Combustion, Gross form
hcn:	Heat of Combustion, Net Form
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
tcondl:	Liquid thermal conductivity
tf:	Normal melting (fusion) point
tt:	Triple Point Temperature
vc:	Critical Volume
zc:	Critical Compressibility