Cyclopentane

Other names:	PENTAMETHYLENE
	UN 1146
Inchi:	InChI=1S/C5H10/c1-2-4-5-3-1/h1-5H2
InchiKey:	RGSFGYAAUTVSQA-UHFFFAOYSA-N
Formula:	C5H10
SMILES:	C1CCCC1
Mol. weight [g/mol]:	70.13
CAS:	287-92-3

Physical Properties

Property code	Value	Unit	Source
af	0.1960		KDB
aigt	653.15	K	KDB
ap	289.950	K	KDB
chl	-3291.40 ± 0.60	kJ/mol	NIST Webbook
chl	-3291.20 ± 1.30	kJ/mol	NIST Webbook
chl	-3290.90 ± 0.71	kJ/mol	NIST Webbook
dm	0.00	debye	KDB
fll	1.10	% in Air	KDB
flu	8.70	% in Air	KDB
fpo	266.48	K	KDB
gf	38.60	kJ/mol	KDB
gyrad	3.1200		KDB
hcg	3290.93	kJ/mol	KDB
hcn	3070.889	kJ/mol	KDB
hf	-76.90	kJ/mol	NIST Webbook
hf	-76.40 ± 0.79	kJ/mol	NIST Webbook
hf	-77.29	kJ/mol	KDB
hf	-77.24 ± 0.75	kJ/mol	NIST Webbook
hfl	-105.90 ± 0.75	kJ/mol	NIST Webbook
hfl	-105.60 ± 1.80	kJ/mol	NIST Webbook
hfus	1.57	kJ/mol	Joback Method
hvap	27.29	kJ/mol	Joback Method
ie	10.53 ± 0.05	eV	NIST Webbook
ie	10.35	eV	NIST Webbook
ie	9.83 ± 0.05	eV	NIST Webbook
ie	10.33 ± 0.15	eV	NIST Webbook

ie	10.50	eV	NIST Webbook
ie	10.55 ± 0.03	eV	NIST Webbook
ie	10.70 ± 0.10	eV	NIST Webbook
ie	10.33 ± 0.15	eV	NIST Webbook
ie	10.54 ± 0.05	eV	NIST Webbook
ie	11.01	eV	NIST Webbook
ie	10.48	eV	NIST Webbook
ie	10.40	eV	NIST Webbook
ie	10.49	eV	NIST Webbook
ie	10.91 ± 0.07	eV	NIST Webbook
ie	10.50 ± 0.01	eV	NIST Webbook
ie	10.49	eV	NIST Webbook
ie	10.30 ± 0.10	eV	NIST Webbook
log10ws	-2.64		Aqueous Solubility Prediction Method
log10ws	-2.64		Estimated Solubility Method
logp	1.950		Crippen Method
mcvol	70.450	ml/mol	McGowan Method
nfpaf	%!d(float64=3)		KDB
nfpah	%!d(float64=1)		KDB
pc	4514.03 ± 5.06	kPa	NIST Webbook
pc	4430.00 ± 50.66	kPa	NIST Webbook
pc	4510.00 ± 40.00	kPa	NIST Webbook
pc	4510.00	kPa	KDB
pc	4508.00 ± 40.53	kPa	NIST Webbook
rhoc	270.01 ± 2.81	kg/m3	NIST Webbook
rhoc	270.01 ± 4.21	kg/m3	NIST Webbook
rhoc	270.01 ± 2.10	kg/m3	NIST Webbook
rinpol	599.00		NIST Webbook
rinpol	566.00		NIST Webbook
rinpol	565.00		NIST Webbook
rinpol	568.00		NIST Webbook
rinpol	568.80		NIST Webbook
rinpol	565.55		NIST Webbook
rinpol	563.30		NIST Webbook
rinpol	575.90		NIST Webbook
rinpol	573.00		NIST Webbook
rinpol	576.00		NIST Webbook
rinpol	567.00		NIST Webbook
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rinpol	566.00		NIST Webbook
rinpol	568.00		NIST Webbook
rinpol	573.00		NIST Webbook
rinpol	588.00		NIST Webbook

rinpol	566.00	NIST Webbook
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rinpol	574.00	NIST Webbook
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rinpol	587.00	NIST Webbook
rinpol	571.00	NIST Webbook
rinpol	557.00	NIST Webbook
rinpol	576.00	NIST Webbook
rinpol	566.50	NIST Webbook
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rinpol	553.70	NIST Webbook
rinpol	580.29	NIST Webbook
rinpol	563.20	NIST Webbook
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rinpol	554.24	NIST Webbook

rinpol	554.00	NIST Webbook
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rinpol	560.00	NIST Webbook
rinpol	560.00	NIST Webbook
rinpol	582.00	NIST Webbook
rinpol	562.00	NIST Webbook
rinpol	554.50	NIST Webbook
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rinpol	554.33	NIST Webbook

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rinpol	568.00	NIST Webbook
rinpol	566.00	NIST Webbook
rinpol	565.00	NIST Webbook
rinpol	563.00	NIST Webbook
rinpol	574.50	NIST Webbook
rinpol	569.90	NIST Webbook
rinpol	569.40	NIST Webbook
rinpol	566.10	NIST Webbook
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rinpol	568.00	NIST Webbook
rinpol	567.80	NIST Webbook
rinpol	562.00	NIST Webbook
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rinpol	572.00	NIST Webbook
rinpol	568.00	NIST Webbook
rinpol	568.00	NIST Webbook
rinpol	568.00	NIST Webbook
ripol	698.00	NIST Webbook
ripol	700.00	NIST Webbook

ripol	720.00		NIST Webbook
ripol	700.00		NIST Webbook
ripol	694.00		NIST Webbook
ripol	694.00		NIST Webbook
ripol	710.00		NIST Webbook
ripol	720.00		NIST Webbook
sl	204.47	J/mol×K	NIST Webbook
sl	204.14	J/mol×K	NIST Webbook
sl	206.70	J/mol×K	NIST Webbook
tb	322.40	K	KDB
tc	511.70 ± 0.20	K	NIST Webbook
tc	511.60	K	NIST Webbook
tc	511.70 ± 0.20	K	NIST Webbook
tc	511.70	K	KDB
tc	511.75 ± 0.05	K	NIST Webbook
tc	511.60 ± 0.15	K	NIST Webbook
tf	179.25 ± 0.07	K	NIST Webbook
tf	178.85 ± 0.30	K	NIST Webbook
tf	178.15 ± 0.50	K	NIST Webbook
tf	178.35 ± 0.50	K	NIST Webbook
tf	180.05 ± 0.50	K	NIST Webbook
tf	179.30	K	KDB
tf	179.20	K	Aqueous Solubility Prediction Method
tf	176.64 ± 0.30	K	NIST Webbook
tf	179.60 ± 0.30	K	NIST Webbook
tf	179.55 ± 0.30	K	NIST Webbook
tf	178.85 ± 0.30	K	NIST Webbook
tf	179.25 ± 0.40	K	NIST Webbook
tf	179.26 ± 0.40	K	NIST Webbook
tf	179.69 ± 0.10	K	NIST Webbook
tf	179.26 ± 0.07	K	NIST Webbook
tf	179.38 ± 0.05	K	NIST Webbook
tf	179.25 ± 0.06	K	NIST Webbook
tf	179.26 ± 0.05	K	NIST Webbook
tf	179.28 ± 0.04	K	NIST Webbook
tf	179.35 ± 0.20	K	NIST Webbook
tf	179.35 ± 0.20	K	NIST Webbook
tf	179.23 ± 0.01	K	NIST Webbook
tf	179.23 ± 0.05	K	NIST Webbook
tf	178.85 ± 0.20	K	NIST Webbook
tf	179.38 ± 0.05	K	NIST Webbook
tf	179.23 ± 0.40	K	NIST Webbook
tf	179.68 ± 0.30	K	NIST Webbook
tf	179.31 ± 0.20	K	NIST Webbook

tf	177.06 ± 0.20	K	NIST Webbook
tf	178.85 ± 0.30	K	NIST Webbook
tt	179.71 ± 0.01	K	NIST Webbook
tt	179.71 ± 0.05	K	NIST Webbook
tt	179.69 ± 0.08	K	NIST Webbook
tt	179.00 ± 0.20	K	NIST Webbook
vc	0.259	m3/kmol	NIST Webbook
vc	0.259	m3/kmol	KDB
zc	0.2745520		KDB
zra	0.27		KDB

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	93.96 ± 0.19	J/mol×K	329.05	NIST Webbook
cpg	150.70 ± 1.70	J/mol×K	503.00	NIST Webbook
cpg	139.47 ± 0.28	J/mol×K	463.10	NIST Webbook
cpg	138.70 ± 1.30	J/mol×K	463.00	NIST Webbook
cpg	126.30 ± 1.30	J/mol×K	424.00	NIST Webbook
cpg	117.09 ± 0.23	J/mol×K	395.05	NIST Webbook
cpg	117.30 ± 1.30	J/mol×K	395.00	NIST Webbook
cpg	108.16 ± 0.84	J/mol×K	372.00	NIST Webbook
cpg	102.01 ± 0.84	J/mol×K	353.00	NIST Webbook
cpg	160.10 ± 1.70	J/mol×K	539.00	NIST Webbook
cpl	126.17	J/mol×K	293.15	NIST Webbook
cpl	126.74	J/mol×K	298.15	NIST Webbook
cpl	127.44	J/mol×K	300.00	NIST Webbook
cpl	126.78	J/mol×K	298.15	NIST Webbook
cpl	128.83	J/mol×K	298.15	NIST Webbook
cpl	125.90	J/mol×K	293.70	NIST Webbook
cpl	126.87	J/mol×K	298.15	NIST Webbook
cpl	127.28	J/mol×K	298.15	NIST Webbook
dvisc	0.0002690	Pa×s	343.15	Saturated Liquid Viscosity of Cyclopentane and Isopentane

dvisc	0.0003940	Pa×s	303.15	Density, Viscosity, and Speed of Sound of Dialkyl Carbonates with Cyclopentane and Methyl Cyclohexane at Several Temperatures	
dvisc	0.0004150	Pa×s	298.15	Density, Viscosity, and Speed of Sound of Dialkyl Carbonates with Cyclopentane and Methyl Cyclohexane at Several Temperatures	
dvisc	0.0004380	Pa×s	293.15	Density, Viscosity, and Speed of Sound of Dialkyl Carbonates with Cyclopentane and Methyl Cyclohexane at Several Temperatures	
dvisc	0.0004173	Pa×s	298.15	Temperature and Density Dependence of the Viscosity of Cyclopentane	
dvisc	0.0004405	Pa×s	293.15	Temperature and Density Dependence of the Viscosity of Cyclopentane	
dvisc	0.0004657	Pa×s	288.15	Temperature and Density Dependence of the Viscosity of Cyclopentane	
dvisc	0.0004932	Pa×s	283.15	Temperature and Density Dependence of the Viscosity of Cyclopentane	
dvisc	0.0005230	Pa×s	278.15	Temperature and Density Dependence of the Viscosity of Cyclopentane	
dvisc	0.0002502	Pa×s	353.15	Saturated Liquid Viscosity of Cyclopentane and Isopentane	

dvisc	0.0002590	Pa×s	348.15	Saturated Liquid Viscosity of Cyclopentane and Isopentane
dvisc	0.0003740	Pa×s	308.15	Density, Viscosity, and Speed of Sound of Dialkyl Carbonates with Cyclopentane and Methyl Cyclohexane at Several Temperatures
dvisc	0.0002793	Pa×s	338.15	Saturated Liquid Viscosity of Cyclopentane and Isopentane
dvisc	0.0002912	Pa×s	333.15	Saturated Liquid Viscosity of Cyclopentane and Isopentane
dvisc	0.0003048	Pa×s	328.15	Saturated Liquid Viscosity of Cyclopentane and Isopentane
dvisc	0.0003190	Pa×s	323.15	Saturated Liquid Viscosity of Cyclopentane and Isopentane
dvisc	0.0003350	Pa×s	318.15	Saturated Liquid Viscosity of Cyclopentane and Isopentane
dvisc	0.0003521	Pa×s	313.15	Saturated Liquid Viscosity of Cyclopentane and Isopentane
dvisc	0.0003714	Pa×s	308.15	Saturated Liquid Viscosity of Cyclopentane and Isopentane
dvisc	0.0003923	Pa×s	303.15	Saturated Liquid Viscosity of Cyclopentane and Isopentane
dvisc	0.0004148	Pa×s	298.15	Saturated Liquid Viscosity of Cyclopentane and Isopentane
dvisc	0.0004382	Pa×s	293.15	Saturated Liquid Viscosity of Cyclopentane and Isopentane
dvisc	0.0004646	Pa×s	288.15	Saturated Liquid Viscosity of Cyclopentane and Isopentane

dvisc	0.0004922	Pa×s	283.15	Saturated Liquid Viscosity of Cyclopentane and Isopentane	
dvisc	0.0005224	Pa×s	278.15	Saturated Liquid Viscosity of Cyclopentane and Isopentane	
dvisc	0.0005567	Pa×s	273.15	Saturated Liquid Viscosity of Cyclopentane and Isopentane	
dvisc	0.0003550	Pa×s	313.15	Density, Viscosity, and Speed of Sound of Dialkyl Carbonates with Cyclopentane and Methyl Cyclohexane at Several Temperatures	
dvisc	0.0006347	Pa×s	263.15	Saturated Liquid Viscosity of Cyclopentane and Isopentane	
dvisc	0.0006786	Pa×s	258.15	Saturated Liquid Viscosity of Cyclopentane and Isopentane	
dvisc	0.0007268	Pa×s	253.15	Saturated Liquid Viscosity of Cyclopentane and Isopentane	
dvisc	0.0003940	Pa×s	303.15	Dynamic viscosities of binary mixtures of cycloalkanes with primary alcohols at T = (293.15, 298.15, and 303.15) K: New UNIFAC-VISCO interaction parameters	
dvisc	0.0004160	Pa×s	298.15	Dynamic viscosities of binary mixtures of cycloalkanes with primary alcohols at T = (293.15, 298.15, and 303.15) K: New UNIFAC-VISCO interaction parameters	

dvisc	0.0004390	Pa×s	293.15	Dynamic Viscosities of the Binary Systems Cyclohexane and Cyclopentane with Acetone, Butanone, or 2-Pentanone at Three Temperatures T) (293.15, 298.15, and 303.15) K	
dvisc	0.0004160	Pa×s	298.15	Dynamic Viscosities of the Binary Systems Cyclohexane and Cyclopentane with Acetone, Butanone, or 2-Pentanone at Three Temperatures T) (293.15, 298.15, and 303.15) K	
dvisc	0.0005930	Pa×s	268.15	Saturated Liquid Viscosity of Cyclopentane and Isopentane	
dvisc	0.0004380	Pa×s	293.15	Viscosities, Densities, and Speed of Sound of the Cycloalkanes with Secondary Alcohols at T = (293.15, 298.15, and 303.15) K: New UNIFAC-VISCO Interaction Parameters	
dvisc	0.0004390	Pa×s	293.15	Viscosities, Densities, and Speed of Sound of the Cycloalkanes with Secondary Alcohols at T = (293.15, 298.15, and 303.15) K: New UNIFAC-VISCO Interaction Parameters	

dvisc	0.0004160	Pa×s	298.15	Viscosities, Densities, and Speed of Sound of the Cycloalkanes with Secondary Alcohols at T = (293.15, 298.15, and 303.15) K: New UNIFAC-VISCO Interaction Parameters
dvisc	0.0003940	Pa×s	303.15	Viscosities, Densities, and Speed of Sound of the Cycloalkanes with Secondary Alcohols at T = (293.15, 298.15, and 303.15) K: New UNIFAC-VISCO Interaction Parameters
dvisc	0.0004390	Pa×s	293.15	Dynamic viscosities of binary mixtures of cycloalkanes with primary alcohols at T = (293.15, 298.15, and 303.15) K: New UNIFAC-VISCO interaction parameters
dvisc	0.0003940	Pa×s	303.15	Dynamic Viscosities of the Binary Systems Cyclohexane and Cyclopentane with Acetone, Butanone, or 2-Pentanone at Three Temperatures T) (293.15, 298.15, and 303.15) K
hfust	4.90	kJ/mol	122.00	NIST Webbook
hfust	0.34	kJ/mol	138.00	NIST Webbook
hfust	0.60	kJ/mol	179.70	NIST Webbook
hfust	0.60	kJ/mol	179.70	NIST Webbook
hsubt	42.60	kJ/mol	122.00	NIST Webbook
hvapt	27.30 ± 0.10	kJ/mol	322.00	NIST Webbook
hvapt	27.50	kJ/mol	481.50	NIST Webbook
hvapt	27.20	kJ/mol	418.00	NIST Webbook
hvapt	28.00	kJ/mol	353.00	NIST Webbook
hvapt	29.00	kJ/mol	306.00	NIST Webbook

hvapt	27.40	kJ/mol	323.00	NIST Webbook
hvapt	27.30	kJ/mol	322.40	KDB
hvapt	27.30	kJ/mol	322.40	NIST Webbook
hvapt	29.21	kJ/mol	298.15	NIST Webbook
hvapt	29.20	kJ/mol	305.50	NIST Webbook
hvapt	27.90 ± 0.10	kJ/mol	310.00	NIST Webbook
rfi	1.40363		298.15	KDB
rfi	1.40640		293.15	Isobaric Vapor Liquid Equilibrium for Nine Binary Systems of Cracking C5 Fraction at 250 kPa
rfi	1.40292		298.15	Density, Speed of Sound, and Refractive Index for Binary Mixtures Containing Cycloalkanes with o-Xylene, m-Xylene, p-Xylene, and Mesitylene at T = (298.15 and 313.15) K
rfi	1.39456		313.15	Density, Speed of Sound, and Refractive Index for Binary Mixtures Containing Cycloalkanes with o-Xylene, m-Xylene, p-Xylene, and Mesitylene at T = (298.15 and 313.15) K
rhol	747.70	kg/m3	288.15	Phase equilibrium relations for binary mixed hydrate systemscomposed of carbon dioxide and cyclopentane derivatives
rhol	762.30	kg/m3	273.15	Phase equilibrium relations for binary mixed hydrate systemscomposed of carbon dioxide and cyclopentane derivatives
rhol	745.00	kg/m3	293.00	KDB

rhol	757.50	kg/m3	278.15	Phase equilibrium relations for binary mixed hydrate systemscomposed of carbon dioxide and cyclopentane derivatives
rhol	737.80	kg/m3	298.15	Phase equilibrium relations for binary mixed hydrate systemscomposed of carbon dioxide and cyclopentane derivatives
rhol	740.00	kg/m3	298.15	Density, Speed of Sound, and Refractive Index for Binary Mixtures Containing Cycloalkanes and Aromatic Compounds at T = 313.15 K
rhol	726.57	kg/m3	308.15	Densities and Excess Molar Volumes of Cyclopentane (1) + 1-Alkanol (2) Systems at (298.15 and 308.15) K
rhol	733.63	kg/m3	298.15	Densities and Excess Molar Volumes of Cyclopentane (1) + 1-Alkanol (2) Systems at (298.15 and 308.15) K
rhol	745.70	kg/m3	293.15	Correlation of Experimental Liquid Liquid Equilibrium Data for Ternary Systems Using NRTL and GMDH-Type Neural Network
rhol	752.60	kg/m3	283.15	Phase equilibrium relations for binary mixed hydrate systemscomposed of carbon dioxide and cyclopentane derivatives

rhol	742.80	kg/m3	293.15	Phase equilibrium relations for binary mixed hydrate systemscomposed of carbon dioxide and cyclopentane derivatives
rhol	739.74	kg/m3	298.15	Experimental and predicted vapour liquid equilibrium of 1,4-dioxane with cycloalkanes and benzene
sfust	2.49	J/mol×K	138.00	NIST Webbook
sfust	3.35	J/mol×K	179.70	NIST Webbook
sfust	40.13	J/mol×K	122.00	NIST Webbook
speedsl	1129.90	m/s	313.15	Speeds of Sound and Isentropic Compressibilities for Binary Mixtures of a Cyclic Diether with a Cyclic Compound at Three Temperatures
speedsl	1206.60	m/s	298.15	Speeds of Sound and Isentropic Compressibilities for Binary Mixtures of a Cyclic Diether with a Cyclic Compound at Three Temperatures
speedsl	1283.50	m/s	283.15	Speeds of Sound and Isentropic Compressibilities for Binary Mixtures of a Cyclic Diether with a Cyclic Compound at Three Temperatures
srf	0.02	N/m	313.15	Thermophysical study of 1,4-dioxane with cycloalkane mixtures
srf	0.02	N/m	283.15	Thermophysical study of 1,4-dioxane with cycloalkane mixtures
srf	0.02	N/m	293.20	KDB

srf	0.02	N/m	298.15	Thermophysical study of 1,4-dioxane with cycloalkane mixtures
svapt	97.98	J/mol×K	298.15	NIST Webbook
tcondl	0.13	W/m×K	293.97	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons
tcondl	0.14	W/m×K	257.27	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons
tcondl	0.13	W/m×K	276.13	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	276.47	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons
tcondl	0.13	W/m×K	293.63	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons
tcondl	0.13	W/m×K	293.83	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons
tcondl	0.14	W/m×K	257.08	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons
tcondl	0.13	W/m×K	300.67	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons

tcondl	0.13	W/m×K	300.87	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons	
tcondl	0.13	W/m×K	301.01	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons	
tcondl	0.12	W/m×K	316.21	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons	
tcondl	0.12	W/m×K	316.40	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons	
tcondl	0.12	W/m×K	316.54	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons	

tcondl	0.14	W/m×K	257.40	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	1.42014e+01
Coeff. B	-2.76893e+03
Coeff. C	-3.34600e+01
Temperature range (K), min.	232.47
Temperature range (K), max.	344.93

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/T + C*ln(T) + D*T^2
Coeff. A	6.44024e+01
Coeff. B	-5.38926e+03
Coeff. C	-7.58416e+00
Coeff. D	7.08554e-06
Temperature range (K), min.	179.28
Temperature range (K), max.	511.76

Datasets

Speed of sound, m/s

Temperature, K - Liquid	Pressure, kPa - Liquid	Speed of sound, m/s - Liquid

258.15	100.00	1419.058
258.15	5072.00	1446.07
258.15	10244.00	1473.008
258.15	15262.00	1498.119
258.15	20158.00	1521.653
258.15	25083.00	1544.511
258.15	30141.00	1567.131
273.15	100.00	1336.626
273.15	5169.00	1366.736
273.15	10059.00	1394.32
273.15	15219.00	1422.015
273.15	20251.00	1447.913
273.15	25184.00	1472.273
273.15	30227.00	1496.252
293.15	105.00	1230.093
293.15	5059.00	1262.962
293.15	10088.00	1294.375
293.15	15198.00	1324.591
293.15	20121.00	1352.283
293.15	25192.00	1379.573
293.15	30134.00	1404.98
313.15	107.00	1126.831
313.15	5113.00	1164.014
313.15	10058.00	1198.273
313.15	15132.00	1231.306
313.15	20097.00	1261.807
313.15	25098.00	1290.997
313.15	30162.00	1319.175
333.15	149.00	1026.636
333.15	5035.00	1067.634
333.15	10139.00	1106.967
333.15	15108.00	1142.542
333.15	20130.00	1176.238
333.15	25152.00	1207.969
333.15	30170.00	1238.041
353.15	261.00	929.399
353.15	5019.00	974.633
353.15	10069.00	1018.218
353.15	15107.00	1058.051
353.15	20063.00	1094.384
353.15	25009.00	1128.301
353.15	30157.00	1161.49

Reference *https://www.doi.org/10.1021/je5010164*

Viscosity, Pa*s

Temperature, K - Liquid	Pressure, kPa - Liquid	Viscosity, Pa*s - Liquid
273.15	100.00	0.0005628
273.15	10000.00	0.0006148
273.15	30000.00	0.0007203
273.15	40000.00	0.0007767
293.15	100.00	0.0004413
293.15	10000.00	0.0004827
293.15	30000.00	0.0005708
293.15	40000.00	0.0006167
298.15	100.00	0.0004167
298.15	10000.00	0.0004583
298.15	30000.00	0.0005409
298.15	40000.00	0.0005846
313.15	10000.00	0.0003920
313.15	30000.00	0.0004646
313.15	45000.00	0.0005222
333.15	10000.00	0.0003247
333.15	30000.00	0.0003882
333.15	45000.00	0.0004364
353.15	15000.00	0.0002868
353.15	30000.00	0.0003291
353.15	45000.00	0.0003727

Reference *https://www.doi.org/10.1021/je060416d*

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Activity coefficients at infinite dilution and physicochemical properties for organic solutes and water in the ionic liquid 1-(2-methoxyethyl)-1-methylpyrrolidinium bis(trifluoromethylsulfonyl)-amide:	https://www.doi.org/10.1016/j.jct.2012.03.015
Measurements of activity coefficient at infinite dilution for organic solutes in tetramethylammonium chloride + ethylene glycol deep eutectic solvent using gas-liquid chromatography:	https://www.doi.org/10.1016/j.fluid.2018.01.019
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

Legend

af:	Acentric Factor
aigt:	Autoignition Temperature
ap:	Aniline Point
chl:	Standard liquid enthalpy of combustion
cpg:	Ideal gas heat capacity
cpl:	Liquid phase heat capacity
dm:	Dipole Moment
dvisc:	Dynamic viscosity
fll:	Lower Flammability Limit
flu:	Upper Flammability Limit
fpo:	Flash Point (Open Cup Method)

gf:	Standard Gibbs free energy of formation
gyrad:	Radius of Gyration
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
hsubt:	Enthalpy of sublimation 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
nfpaf:	NFPA Fire Rating
nfpah:	NFPA Health Rating
pc:	Critical Pressure
pvap:	Vapor pressure
rfi:	Refractive Index
rhoc:	Critical density
rhol:	Liquid Density
rinpol:	Non-polar retention indices
ripol:	Polar retention indices
sfust:	Entropy of fusion at a given temperature
sl:	Liquid phase molar entropy at standard conditions
speedsl:	Speed of sound in fluid
srf:	Surface Tension
svapt:	Entropy of vaporization at a given temperature
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
zra:	Rackett Parameter