Aniline

Other names:	Aminobenzene
	Aminophen
	Anilin
	Anilina
	Aniline Oil
	Aniline reagent
	Anyvim
	Benzenamine
	Benzene, amino-
	Benzeneamine
	Benzidam
	Blue Oil
	C.I. 76000
	C.I. Oxidation base 1
	Cyanol
	Huile D'aniline
	Krystallin
	Kyanol
	NCI-C03736
	Phenylamine
	Rcra waste number U012
	UN 1547
Inchi:	InChI=1S/C6H7N/c7-6-4-2-1-3-5-6/h1-5H,7H2
InchiKey:	PAYRUJLWNCNPSJ-UHFFFAOYSA-N
Formula:	C6H7N
SMILES:	Nc1ccccc1
Mol. weight [g/mol]:	93.13
CAS:	62-53-3

Physical Properties

Property code	Value	Unit	Source
af	0.3840		KDB
affp	882.50	kJ/mol	NIST Webbook
aigt	1043.15	K	KDB
basg	850.60	kJ/mol	NIST Webbook
chl	-3411.00	kJ/mol	NIST Webbook

chl	-3393.10 ± 1.00	kJ/mol	NIST Webbook
chl	-3392.00	kJ/mol	NIST Webbook
chl	-3392.30	kJ/mol	NIST Webbook
chl	-3391.00 ± 13.00	kJ/mol	NIST Webbook
chs	-3391.00	kJ/mol	NIST Webbook
dm	1.60	debye	KDB
fll	1.30	% in Air	KDB
fpc	348.71	K	KDB
fpo	343.15	K	KDB
gf	166.80	kJ/mol	KDB
gyrad	3.3930		KDB
hf	81.00 ± 3.00	kJ/mol	NIST Webbook
hf	83.20	kJ/mol	NIST Webbook
hf	85.40	kJ/mol	NIST Webbook
hf	86.92	kJ/mol	KDB
hf	87.03 ± 0.88	kJ/mol	NIST Webbook
hf	82.40	kJ/mol	NIST Webbook
hfl	31.30 ± 0.84	kJ/mol	NIST Webbook
hfl	30.00	kJ/mol	NIST Webbook
hfl	33.00	kJ/mol	NIST Webbook
hfl	30.80	kJ/mol	NIST Webbook
hfus	10.53	kJ/mol	Joback Method
hvap	41.87	kJ/mol	Joback Method
ie	7.65 ± 0.02	eV	NIST Webbook
ie	7.70 ± 0.01	eV	NIST Webbook
ie	8.35	eV	NIST Webbook
ie	7.61 ± 0.05	eV	NIST Webbook
ie	7.68	eV	NIST Webbook
ie	7.67 ± 0.03	eV	NIST Webbook
ie	7.70	eV	NIST Webbook
ie	7.70 ± 0.02	eV	NIST Webbook
ie	7.69 ± 0.02	eV	NIST Webbook
ie	8.05	eV	NIST Webbook
ie	8.02	eV	NIST Webbook
ie	8.04	eV	NIST Webbook
ie	8.05	eV	NIST Webbook
ie	8.03	eV	NIST Webbook
ie	8.10 ± 0.10	eV	NIST Webbook
ie	8.10	eV	NIST Webbook
ie	8.02	eV	NIST Webbook
ie	8.05	eV	NIST Webbook
ie	7.89 ± 0.03	eV	NIST Webbook
ie	7.80	eV	NIST Webbook
ie	8.27 ± 0.05	eV	NIST Webbook

ie	8.00	eV	NIST Webbook
ie	7.63	eV	NIST Webbook
ie	7.66	eV	NIST Webbook
ie	7.48	eV	NIST Webbook
ie	7.72 ± 0.00	eV	NIST Webbook
ie	7.72 ± 0.00	eV	NIST Webbook
ie	8.05	eV	NIST Webbook
ie	7.71 ± 0.01	eV	NIST Webbook
ie	7.72 ± 0.00	eV	NIST Webbook
ie	7.71	eV	NIST Webbook
ie	7.60 ± 0.10	eV	NIST Webbook
ie	7.89	eV	NIST Webbook
ie	7.74 ± 0.01	eV	NIST Webbook
log10ws	-0.41		Estimated Solubility Method
log10ws	-0.41		Aqueous Solubility Prediction Method
logp	1.269		Crippen Method
mcvol	81.620	ml/mol	McGowan Method
nfpaf	%!d(float64=2)		KDB
nfpah	%!d(float64=3)		KDB
pc	5294.23 ± 1.00	kPa	NIST Webbook
pc	5299.30 ± 101.32	kPa	NIST Webbook
pc	5304.36 ± 1.00	kPa	NIST Webbook
pc	5300.00 ± 91.19	kPa	NIST Webbook
pc	5310.00 ± 91.19	kPa	NIST Webbook
pc	5319.56 ± 101.32	kPa	NIST Webbook
pc	4890.00	kPa	KDB
rhoc	324.08 ± 4.66	kg/m3	NIST Webbook
rinpol	963.00		NIST Webbook
rinpol	947.00		NIST Webbook
rinpol	954.00		NIST Webbook
rinpol	955.00		NIST Webbook
rinpol	977.00		NIST Webbook
rinpol	979.00		NIST Webbook
rinpol	971.00		NIST Webbook
rinpol	955.00		NIST Webbook
rinpol	945.60		NIST Webbook
rinpol	980.00		NIST Webbook
rinpol	939.20		NIST Webbook
rinpol	999.00		NIST Webbook
rinpol	995.00		NIST Webbook
rinpol	995.00		NIST Webbook
rinpol	983.00		NIST Webbook
rinpol	939.00		NIST Webbook

rinpol	968.00		NIST Webbook
rinpol	968.00		NIST Webbook
rinpol	967.00		NIST Webbook
rinpol	966.00		NIST Webbook
rinpol	950.00		NIST Webbook
rinpol	939.10		NIST Webbook
rinpol	952.00		NIST Webbook
rinpol	958.00		NIST Webbook
rinpol	947.00		NIST Webbook
rinpol	946.00		NIST Webbook
rinpol	945.00		NIST Webbook
rinpol	946.00		NIST Webbook
rinpol	155.33		NIST Webbook
rinpol	963.00		NIST Webbook
rinpol	979.00		NIST Webbook
rinpol	155.33		NIST Webbook
rinpol	939.20		NIST Webbook
rinpol	952.60		NIST Webbook
rinpol	964.00		NIST Webbook
ripol	1752.00		NIST Webbook
ripol	1740.00		NIST Webbook
ripol	1710.00		NIST Webbook
ripol	1766.70		NIST Webbook
ripol	1761.00		NIST Webbook
ripol	1759.00		NIST Webbook
ripol	1710.00		NIST Webbook
ripol	1747.00		NIST Webbook
ripol	1754.00		NIST Webbook
ripol	1717.00		NIST Webbook
ripol	1764.50		NIST Webbook
sl	191.30	J/mol×K	NIST Webbook
sl	191.60	J/mol×K	NIST Webbook
tb	457.30 ± 0.40	K	NIST Webbook
tb	458.00 ± 0.10	K	NIST Webbook
tb	457.00 ± 1.00	K	NIST Webbook
tb	456.00 ± 0.30	K	NIST Webbook
tb	457.60 ± 0.40	K	NIST Webbook
tb	457.60 ± 0.40	K	NIST Webbook
tb	457.60 ± 0.50	K	NIST Webbook
tb	457.00 ± 1.50	K	NIST Webbook
tb	456.00 ± 2.00	K	NIST Webbook
tb	455.90 ± 0.30	K	NIST Webbook
tb	455.00 ± 5.00	K	NIST Webbook
tb	455.10 ± 11.11	K	NIST Webbook

tb	457.50 ± 0.30	K	NIST Webbook
tb	457.40 ± 0.60	K	NIST Webbook
tb	457.70 ± 0.30	K	NIST Webbook
tb	457.60 ± 0.40	K	NIST Webbook
tb	455.00 ± 1.50	K	NIST Webbook
tb	457.50 ± 0.30	K	NIST Webbook
tb	457.08 ± 0.07	K	NIST Webbook
tb	457.50 ± 0.40	K	NIST Webbook
tb	455.70 ± 2.00	K	NIST Webbook
tb	457.10 ± 0.40	K	NIST Webbook
tb	457.50 ± 0.40	K	NIST Webbook
tb	457.10 ± 9.20	K	NIST Webbook
tb	457.60 ± 0.40	K	NIST Webbook
tb	457.06 ± 0.15	K	NIST Webbook
tb	457.70 ± 0.40	K	NIST Webbook
tb	457.50 ± 0.50	K	NIST Webbook
tb	457.60 ± 0.40	K	NIST Webbook
tb	457.50 ± 0.30	K	NIST Webbook
tb	457.00 ± 0.30	K	NIST Webbook
tb	457.40 ± 0.60	K	NIST Webbook
tb	457.25 ± 0.30	K	NIST Webbook
tb	457.10 ± 0.40	K	NIST Webbook
tb	457.70 ± 0.50	K	NIST Webbook
tb	457.20	K	NIST Webbook
tb	457.20	K	NIST Webbook
tb	455.00 ± 1.00	K	NIST Webbook
tb	457.32	K	KDB
tb	457.50 ± 0.50	K	NIST Webbook
tb	457.60 ± 0.30	K	NIST Webbook
tb	457.60 ± 0.40	K	NIST Webbook
tb	457.20 ± 0.30	K	NIST Webbook
tb	457.82 ± 0.20	K	NIST Webbook
tb	457.70 ± 0.40	K	NIST Webbook
tb	457.50 ± 0.30	K	NIST Webbook
tb	457.60 ± 0.30	K	NIST Webbook
tc	699.00	K	KDB
tf	266.85 ± 0.05	K	NIST Webbook
tf	267.05 ± 0.30	K	NIST Webbook
tf	266.65 ± 0.20	K	NIST Webbook
tf	267.00 ± 0.15	K	NIST Webbook
tf	267.25 ± 0.50	K	NIST Webbook
tf	267.15 ± 0.05	K	NIST Webbook
tf	267.12 ± 0.10	K	NIST Webbook
tf	267.20 ± 0.50	K	NIST Webbook

tf	267.05 ± 0.30	K	NIST Webbook
tf	279.25 ± 0.40	K	NIST Webbook
tf	267.13 ± 0.07	K	NIST Webbook
tf	267.11 ± 0.10	K	NIST Webbook
tf	265.00 ± 1.00	K	NIST Webbook
tf	267.65 ± 0.40	K	NIST Webbook
tf	267.00	K	NIST Webbook
tf	267.00 ± 1.50	K	NIST Webbook
tf	267.10 ± 0.05	K	NIST Webbook
tf	266.99 ± 0.20	K	NIST Webbook
tf	266.95 ± 0.25	K	NIST Webbook
tf	279.33 ± 0.30	K	NIST Webbook
tf	266.95 ± 0.30	K	NIST Webbook
tf	267.05 ± 0.20	K	NIST Webbook
tf	265.00 ± 2.00	K	NIST Webbook
tf	267.13	K	KDB
tf	266.91 ± 0.10	K	NIST Webbook
tt	267.30 ± 0.20	K	NIST Webbook
tt	266.90 ± 0.10	K	NIST Webbook
tt	267.13 ± 0.02	K	NIST Webbook
vc	0.287	m3/kmol	KDB
zc	0.2600000 ± 0.0030000		NIST Webbook
zc	0.2414780		KDB
zra	0.26		KDB

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	159.56	J/mol×K	474.24	Joback Method
cpg	202.11	J/mol×K	666.01	Joback Method
cpg	194.81	J/mol×K	627.66	Joback Method
cpg	186.94	J/mol×K	589.30	Joback Method
cpg	178.46	J/mol×K	550.95	Joback Method
cpg	149.06	J/mol×K	435.89	Joback Method
cpg	169.35	J/mol×K	512.60	Joback Method
cpl	192.00	J/mol×K	293.00	NIST Webbook
cpl	190.92	J/mol×K	298.20	NIST Webbook
cpl	194.10	J/mol×K	298.00	NIST Webbook
cpl	191.01	J/mol×K	298.15	NIST Webbook
cpl	193.70	J/mol×K	298.00	NIST Webbook
cpl	192.05	J/mol×K	298.15	NIST Webbook

cpl	197.50	J/mol×K	323.00	NIST Webbook
cpl	193.38	J/mol×K	298.20	NIST Webbook
cpl	183.70	J/mol×K	288.00	NIST Webbook
cpl	178.80	J/mol×K	298.15	NIST Webbook
cpl	192.50	J/mol×K	298.00	NIST Webbook
cpl	109.20	J/mol×K	267.30	NIST Webbook
dvisc	0.0019500	Pa×s	323.15	Thermodynamic and theoretical investigations on [Emim][Bf4]/[Bmim][Bf4] and aniline binary mixtures
dvisc	0.0024700	Pa×s	313.15	Thermodynamic and theoretical investigations on [Emim][Bf4]/[Bmim][Bf4] and aniline binary mixtures
dvisc	0.0043800	Pa×s	293.15	Thermodynamic and theoretical investigations on [Emim][Bf4]/[Bmim][Bf4] and aniline binary mixtures
dvisc	0.0031900	Pa×s	303.15	Excess Molar Volumes and Deviations in Viscosity of Binary Mixtures of N,N-Dimethylformamide with Aniline and Benzonitrile at (298.15, 303.15, 308.15, and 313.15) K
dvisc	0.0028000	Pa×s	308.15	Excess Molar Volumes and Deviations in Viscosity of Binary Mixtures of N,N-Dimethylformamide with Aniline and Benzonitrile at (298.15, 303.15, 308.15, and 313.15) K
dvisc	0.0024200	Pa×s	313.15	Excess Molar Volumes and Deviations in Viscosity of Binary Mixtures of N,N-Dimethylformamide with Aniline and Benzonitrile at (298.15, 303.15, 308.15, and 313.15) K

dvisc	0.0036900	Pa×s	298.15	Excess Molar Volumes and Deviations in Viscosity of Binary Mixtures of N,N-Dimethylformamide with Aniline and Benzonitrile at (298.15, 303.15, 308.15, and 313.15) K
dvisc	0.0032400	Pa×s	303.15	Thermodynamic and theoretical investigations on [Emim][Bf4]/[Bmim][Bf4] and aniline binary mixtures
hfust	10.54	kJ/mol	267.10	NIST Webbook
hfust	10.54	kJ/mol	267.10	NIST Webbook
hfust	10.92	kJ/mol	267.30	NIST Webbook
hfust	10.56	kJ/mol	266.80	NIST Webbook
hfust	10.54	kJ/mol	267.13	NIST Webbook
hvapt	53.00	kJ/mol	333.00	NIST Webbook
hvapt	54.00	kJ/mol	380.50	NIST Webbook
hvapt	52.90	kJ/mol	293.00	NIST Webbook
hvapt	51.40	kJ/mol	349.50	NIST Webbook
hvapt	42.44	kJ/mol	457.20	NIST Webbook
hvapt	48.60	kJ/mol	415.50	NIST Webbook
hvapt	52.20	kJ/mol	305.50	NIST Webbook
hvapt	45.80	kJ/mol	506.00	NIST Webbook
hvapt	42.20 ± 0.40	kJ/mol	424.50	NIST Webbook
hvapt	45.20 ± 0.20	kJ/mol	424.50	NIST Webbook
hvapt	48.00 ± 0.20	kJ/mol	424.50	NIST Webbook
hvapt	51.00 ± 0.20	kJ/mol	424.50	NIST Webbook
hvapt	41.84	kJ/mol	457.20	KDB
hvapt	46.30	kJ/mol	489.00	NIST Webbook
hvapt	53.60	kJ/mol	394.50	NIST Webbook
pvap	0.88	kPa	333.15	An equipment for dynamic measurements of vapour liquid equilibria and results in binary systems containing cyclohexylamine

pvap	3.82	kPa	363.15	An equipment for dynamic measurements of vapour liquid equilibria and results in binary systems containing cyclohexylamine
pvap	96.15	kPa	455.40	Vapor Liquid Equilibrium Data for Binary Mixtures of Acetic Acid + Anisole, Acetone + Anisole, and Isopropanol + Anisole at Pressure 96.15 kPa
pvap	85.00	kPa	450.25	Experimental Vapor-Liquid Equilibria and Thermodynamic Modeling of the Methanol + n-Heptane and 1-Butanol + Aniline Binary Systems
pvap	0.09	kPa	298.15	Thermodynamic Properties of Binary Mixtures of Tetrahydropyran with Anilines at 308.15 K
rfi	1.59620		293.15	Vapor liquid equilibria in ternary systems of associating components (water, aniline, cyclohexylamine) and hydrocarbons (octane or toluene)
rfi	1.58360		298.15	Activity coefficients and excess Gibbs energy of binary mixtures of N,N-dimethyl formamide with selected compounds at 95.5 kPa

rfi	1.58620		293.15	Activity Coefficients at Infinite Dilution of Cylcohexylamine + Octane, Toluene, Ethylbenzene, or Aniline and Excess Molar Volumes in Binary Mixtures of Cyclohexylamine + Heptane, Octane, Nonane, Decane, Undecane, Aniline, or Water
rfi	1.58620		293.15	Ternary Liquid-Liquid(-Liquid) Equilibria of Aniline + Cyclohexylamine + Water, Aniline + Cyclohexylamine + Octane, Aniline + Water + Toluene, and Aniline + Water + Octane
rhol	1022.00	kg/m3	293.00	KDB
rhol	995.50	kg/m3	323.15	Studies on Thermodynamic and Transport Properties of Binary Mixtures Containing Alcohols and Aniline
rhol	1017.46	kg/m3	298.15	Thermodynamics of Ketone + Amine Mixtures. Part VIII. Molar Excess Enthalpies at 298.15 K for n-Alkanone + Aniline or + N-Methylaniline Systems
rhol	1021.70	kg/m3	293.15	Excess Heat Capacities of Binary and Ternary Mixtures Containing 1-Ethyl-3-methylimidazolium Tetrafluoroborate and Anilines

rhol	1017.50	kg/m3	298.15	Excess Heat Capacities of Binary and Ternary Mixtures Containing 1-Ethyl-3-methylimidazolium Tetrafluoroborate and Anilines
rhol	1013.10	kg/m3	303.15	Excess Heat Capacities of Binary and Ternary Mixtures Containing 1-Ethyl-3-methylimidazolium Tetrafluoroborate and Anilines
rhol	1008.70	kg/m3	308.15	Excess Heat Capacities of Binary and Ternary Mixtures Containing 1-Ethyl-3-methylimidazolium Tetrafluoroborate and Anilines
rhol	1017.39	kg/m3	298.15	Cloud Point Phenomena in the (Aniline or N,N-Dimethylaniline + Water) Solutions, and Cosolvent Effects of Liquid Poly(ethylene glycol) Addition: Experimental Measurements and Modeling
rhol	1017.38	kg/m3	298.15	Liquid-Liquid Equilibria for Binary System of Ethanol + Hexadecane at Elevated Temperature and the Ternary Systems of Ethanol + Heterocyclic Nitrogen Compounds + Hexadecane at 298.15 K

rhol	1017.42	kg/m3	298.15	Binary Liquid-Liquid Equilibrium (LLE) for N-Methylformamide (NMF) + Hexadecane between (288.15 and 318.15) K and Ternary LLE for Systems of NMF + Heterocyclic Nitrogen Compounds + Hexadecane at 298.15 K
rhol	1000.40	kg/m3	318.15	Studies on Thermodynamic and Transport Properties of Binary Mixtures Containing Alcohols and Aniline
rhol	1004.70	kg/m3	313.15	Studies on Thermodynamic and Transport Properties of Binary Mixtures Containing Alcohols and Aniline
rhol	1021.71	kg/m3	293.15	Densities and Volumetric Properties of Binary Mixtures of Aniline with 1-Propanol, 2-Propanol, 2-Methyl-1-Propanol, and 2-Methyl-2-Propanol at Temperatures from 293.15 to 318.15 K
rhol	1017.44	kg/m3	298.15	Densities and Volumetric Properties of Binary Mixtures of Aniline with 1-Propanol, 2-Propanol, 2-Methyl-1-Propanol, and 2-Methyl-2-Propanol at Temperatures from 293.15 to 318.15 K

rhol	1013.17	kg/m3	303.15	Densities and Volumetric Properties of Binary Mixtures of Aniline with 1-Propanol, 2-Propanol, 2-Methyl-1-Propanol, and 2-Methyl-2-Propanol at Temperatures from 293.15 to 318.15 K
rhol	1008.90	kg/m3	308.15	Densities and Volumetric Properties of Binary Mixtures of Aniline with 1-Propanol, 2-Propanol, 2-Methyl-1-Propanol, and 2-Methyl-2-Propanol at Temperatures from 293.15 to 318.15 K
rhol	1004.63	kg/m3	313.15	Densities and Volumetric Properties of Binary Mixtures of Aniline with 1-Propanol, 2-Propanol, 2-Methyl-1-Propanol, and 2-Methyl-2-Propanol at Temperatures from 293.15 to 318.15 K
rhol	1000.36	kg/m3	318.15	Densities and Volumetric Properties of Binary Mixtures of Aniline with 1-Propanol, 2-Propanol, 2-Methyl-1-Propanol, and 2-Methyl-2-Propanol at Temperatures from 293.15 to 318.15 K
rhol	1017.30	kg/m3	298.15	Bubble point measurements of binary mixtures formed by 1-hexanol with selected nitro-compounds and substituted benzenes at 95.6 kPa

rhol	1012.78	kg/m3	303.15	Study on thermo physical properties of binary mixture containing aromatic alcohol with aromatic, substituted aromatic amines at different temperatures interms of FT-IR, 1H NMR spectroscopic and DFT method	
rhol	1008.64	kg/m3	308.15	Study on thermo physical properties of binary mixture containing aromatic alcohol with aromatic, substituted aromatic amines at different temperatures interms of FT-IR, 1H NMR spectroscopic and DFT method	
rhol	1004.49	kg/m3	313.15	Study on thermo physical properties of binary mixture containing aromatic alcohol with aromatic, substituted aromatic amines at different temperatures interms of FT-IR, 1H NMR spectroscopic and DFT method	
rhol	1000.36	kg/m3	318.15	Study on thermo physical properties of binary mixture containing aromatic alcohol with aromatic, substituted aromatic amines at different temperatures interms of FT-IR, 1H NMR spectroscopic and DFT method	

rhol	996.43	kg/m3	323.15	Study on thermo physical properties of binary mixture containing aromatic alcohol with aromatic, substituted aromatic amines at different temperatures interms of FT-IR, 1H NMR spectroscopic and DFT method	
rhol	1025.93	kg/m3	288.15	Volumetric properties of dichloromethane with aniline or nitrobenzene at different temperatures: A theoretical and experimental study	
rhol	1021.04	kg/m3	293.15	Volumetric properties of dichloromethane with aniline or nitrobenzene at different temperatures: A theoretical and experimental study	
rhol	1017.10	kg/m3	298.15	Volumetric properties of dichloromethane with aniline or nitrobenzene at different temperatures: A theoretical and experimental study	
rhol	1012.84	kg/m3	303.15	Volumetric properties of dichloromethane with aniline or nitrobenzene at different temperatures: A theoretical and experimental study	

rhol	1013.00	kg/m3	303.15	Volumetric and transport properties of binary liquid mixtures of sulfolane with aniline, N,N-dimethylaniline and N,N-diethylaniline at different temperatures and atmospheric pressure
rhol	1008.70	kg/m3	308.15	Volumetric and transport properties of binary liquid mixtures of sulfolane with aniline, N,N-dimethylaniline and N,N-diethylaniline at different temperatures and atmospheric pressure
rhol	1004.40	kg/m3	313.15	Volumetric and transport properties of binary liquid mixtures of sulfolane with aniline, N,N-dimethylaniline and N,N-diethylaniline at different temperatures and atmospheric pressure
rhol	1013.20	kg/m3	303.15	Studies on Thermodynamic and Transport Properties of Binary Mixtures Containing Alcohols and Aniline
rhol	1013.04	kg/m3	303.15	Thermodynamic and volumetric behavior of green solvent 1-butyl-3-methylimidazolium tetrafluoroborate with aniline from T = (293.15 to 323.15) K at atmospheric pressure

rhol	1004.36	kg/m3	313.15	Thermodynamic and volumetric behavior of green solvent 1-butyl-3-methylimidazolium tetrafluoroborate with aniline from T = (293.15 to 323.15) K at atmospheric pressure
rhol	995.66	kg/m3	323.15	Thermodynamic and volumetric behavior of green solvent 1-butyl-3-methylimidazolium tetrafluoroborate with aniline from T = (293.15 to 323.15) K at atmospheric pressure
rhol	1017.10	kg/m3	298.15	Thermophysical and optical studies of molecular interactions in binary mixtures of diethyl carbonate with aromatic compounds at temperatures from 298.15 to 323.15 K
rhol	1012.70	kg/m3	303.15	Thermophysical and optical studies of molecular interactions in binary mixtures of diethyl carbonate with aromatic compounds at temperatures from 298.15 to 323.15 K
rhol	1008.40	kg/m3	308.15	Thermophysical and optical studies of molecular interactions in binary mixtures of diethyl carbonate with aromatic compounds at temperatures from 298.15 to 323.15 K

rhol	1004.10	kg/m3	313.15	Thermophysical and optical studies of molecular interactions in binary mixtures of diethyl carbonate with aromatic compounds at temperatures from 298.15 to 323.15 K
rhol	999.70	kg/m3	318.15	Thermophysical and optical studies of molecular interactions in binary mixtures of diethyl carbonate with aromatic compounds at temperatures from 298.15 to 323.15 K
rhol	995.40	kg/m3	323.15	Thermophysical and optical studies of molecular interactions in binary mixtures of diethyl carbonate with aromatic compounds at temperatures from 298.15 to 323.15 K
rhol	1012.81	kg/m3	303.15	Comparative studies of intermolecular interaction of aromatic amines with ethyl lactate at different temperatures
rhol	1008.91	kg/m3	308.15	Comparative studies of intermolecular interaction of aromatic amines with ethyl lactate at different temperatures
rhol	1004.59	kg/m3	313.15	Comparative studies of intermolecular interaction of aromatic amines with ethyl lactate at different temperatures

rhol	1000.21	kg/m3	318.15	Comparative studies of intermolecular interaction of aromatic amines with ethyl lactate at different temperatures
rhol	1026.10	kg/m3	288.15	Excess molar volumes and viscosity behaviour of binary mixtures of aniline/or N,N-dimethylaniline with imidazolium ionic liquids having triflate or bistriflamide anion
rhol	1021.70	kg/m3	293.15	Excess molar volumes and viscosity behaviour of binary mixtures of aniline/or N,N-dimethylaniline with imidazolium ionic liquids having triflate or bistriflamide anion
rhol	1017.40	kg/m3	298.15	Excess molar volumes and viscosity behaviour of binary mixtures of aniline/or N,N-dimethylaniline with imidazolium ionic liquids having triflate or bistriflamide anion
rhol	1013.00	kg/m3	303.15	Excess molar volumes and viscosity behaviour of binary mixtures of aniline/or N,N-dimethylaniline with imidazolium ionic liquids having triflate or bistriflamide anion

rhol	1008.70	kg/m3	308.15	Excess molar volumes and viscosity behaviour of binary mixtures of aniline/or N,N-dimethylaniline with imidazolium ionic liquids having triflate or bistriflamide anion
rhol	1004.40	kg/m3	313.15	Excess molar volumes and viscosity behaviour of binary mixtures of aniline/or N,N-dimethylaniline with imidazolium ionic liquids having triflate or bistriflamide anion
rhol	1000.00	kg/m3	318.15	Excess molar volumes and viscosity behaviour of binary mixtures of aniline/or N,N-dimethylaniline with imidazolium ionic liquids having triflate or bistriflamide anion
rhol	995.70	kg/m3	323.15	Excess molar volumes and viscosity behaviour of binary mixtures of aniline/or N,N-dimethylaniline with imidazolium ionic liquids having triflate or bistriflamide anion
rhol	991.40	kg/m3	328.15	Excess molar volumes and viscosity behaviour of binary mixtures of aniline/or N,N-dimethylaniline with imidazolium ionic liquids having triflate or bistriflamide anion

rhol	987.00	kg/m3	333.15	Excess molar volumes and viscosity behaviour of binary mixtures of aniline/or N,N-dimethylaniline with imidazolium ionic liquids having triflate or bistriflamide anion
rhol	1017.20	kg/m3	298.15	Thermodynamic properties of liquid mixtures containing 1,3-dioxolane and anilines: Excess molar volumes, excess molar enthalpies, excess Gibb's free energy and isentropic compressibilities changes of mixing
rhol	1021.70	kg/m3	293.15	Studies on Thermodynamic and Transport Properties of Binary Mixtures Containing Alcohols and Aniline
rhol	1017.40	kg/m3	298.15	Studies on Thermodynamic and Transport Properties of Binary Mixtures Containing Alcohols and Aniline
rhol	1021.69	kg/m3	293.15	Thermodynamic and volumetric behavior of green solvent 1-butyl-3-methylimidazolium tetrafluoroborate with aniline from T = (293.15 to 323.15) K at atmospheric pressure
rhol	1009.00	kg/m3	308.15	Studies on Thermodynamic and Transport Properties of Binary Mixtures Containing Alcohols and Aniline

rhol	1017.42	kg/m3	298.15	(Liquid + Liquid) Equilibrium for (N,N-Dimethylformamide (DMF) + Hexadecane) at Temperatures between (293.15 and 313.15) K and Ternary Mixtures of (DMF + Hexadecane) with Either Quinoline, or Pyridine, or Pyrrole, or Aniline, or Indole at T = 298.15 K
sfust	39.57	J/mol×K	266.80	NIST Webbook
speedsl	1615.00	m/s	303.15	Thermodynamic and acoustic properties of binary mixtures of oxolane with aniline and substituted anilines at 303.15, 313.15 and 323.15 K
speedsl	1583.00	m/s	313.15	Thermodynamic and acoustic properties of binary mixtures of oxolane with aniline and substituted anilines at 303.15, 313.15 and 323.15 K
speedsl	1558.00	m/s	323.15	Thermodynamic and acoustic properties of binary mixtures of oxolane with aniline and substituted anilines at 303.15, 313.15 and 323.15 K
speedsl	1657.01	m/s	293.15	Thermodynamics of Ketone + Amine Mixtures. Part III. Volumetric and Speed of Sound Data at (293.15, 298.15, and 303.15) K for 2-Butanone + Aniline, + N-Methylaniline, or + Pyridine Systems

speedsl	1637.80	m/s	298.15	Thermodynamics of Ketone + Amine Mixtures. Part III. Volumetric and Speed of Sound Data at (293.15, 298.15, and 303.15) K for 2-Butanone + Aniline, + N-Methylaniline, or + Pyridine Systems	
speedsl	1619.30	m/s	303.15	Thermodynamics of Ketone + Amine Mixtures. Part III. Volumetric and Speed of Sound Data at (293.15, 298.15, and 303.15) K for 2-Butanone + Aniline, + N-Methylaniline, or + Pyridine Systems	
speedsl	1615.00	m/s	303.15	Thermodynamic and Acoustic Properties of Binary Mixtures of Ethers. 2. Diisopropyl Ether with Arylamines at (303.15, 313.15, and 323.15) K and Application of ERAS Model to Aniline Mixtures with Diisopropyl Ether and Oxolane	
speedsl	1581.00	m/s	313.15	Thermodynamic and Acoustic Properties of Binary Mixtures of Ethers. 2. Diisopropyl Ether with Arylamines at (303.15, 313.15, and 323.15) K and Application of ERAS Model to Aniline Mixtures with Diisopropyl Ether and Oxolane	

speedsl	1548.00	m/s	323.15	Thermodynamic and Acoustic Properties of Binary Mixtures of Ethers. 2. Diisopropyl Ether with Arylamines at (303.15, 313.15, and 323.15) K and Application of ERAS Model to Aniline Mixtures with Diisopropyl Ether and Oxolane
srf	0.04	N/m	293.20	KDB

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.48032e+01
Coeff. B	-3.84464e+03
Coeff. C	-7.95140e+01
Temperature range (K), min.	344.38
Temperature range (K), max.	484.57

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/T + C*ln(T) + D*T^2
Coeff. A	1.66081e+02
Coeff. B	-1.30797e+04
Coeff. C	-2.21132e+01
Coeff. D	1.23327e-05
Temperature range (K), min.	267.13
Temperature range (K), max.	699.00

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Excess molar volumes and viscosity behaviour of binary mixtures of aniline/or N,N-dimethylaniline with imidazolium ionic liquids having triflate or bistriflamide anion:	https://www.doi.org/10.1016/j.jct.2017.02.007
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High-Pressure Solubility Data of Methane in Aniline and Aqueous Aniline Systems:	https://www.doi.org/10.1021/je7000528
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Liquid-Liquid Equilibria for Binary System of Ethanol + Hexadecane at Different Temperatures and Ternary Systems of Ethanol + Heterocyclic Nitrogen Compounds + Hexadecane at 298.15 K:	https://www.doi.org/10.1021/je700233p
Densities and Volumetric Properties of Binary Mixtures of Aniline with 1-Propanol, 2-Propanol, 2-Methyl-1-Propanol, and 2-Methyl-2-Propanol at Temperatures from (293.15 to 323.15) K at Atmospheric Pressure:	https://www.doi.org/10.1007/s10765-007-0204-0
Thermodynamic and volumetric behavior of green solvent 1-ethyl-3-methylimidazolium tetrafluoroborate with aniline from T = (293.15 to 323.15) K at atmospheric pressure:	https://www.doi.org/10.1016/j.jct.2016.04.024
Activity Coefficients at Infinite Dilution of Cyclohexylamine + Octane, Toluene, [illegible] and Excess Molar Volumes in Binary Mixtures of Cyclohexylamine + Heptane, Octane, Nonane, Decane, Undecane, or Dodecane:	https://www.doi.org/10.1021/je050316s
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[illegible] systems of two associating components (water, aniline and cyclohexylamine) and a hydrocarbon (cyclohexane or methylcyclohexane):	https://www.doi.org/10.1016/j.fluid.2014.02.023
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Legend

af:	Acentric Factor
affp:	Proton affinity
aigt:	Autoignition Temperature
basg:	Gas basicity
chl:	Standard liquid enthalpy of combustion
chs:	Standard solid enthalpy of combustion
cpg:	Ideal gas heat capacity
cpl:	Liquid phase heat capacity
dm:	Dipole Moment
dvisc:	Dynamic viscosity
fll:	Lower Flammability Limit
fpc:	Flash Point (Closed Cup Method)
fpo:	Flash Point (Open Cup Method)
gf:	Standard Gibbs free energy of formation
gyrad:	Radius of Gyration
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
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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
tt:	Triple Point Temperature
vc:	Critical Volume
zc:	Critical Compressibility
zra:	Rackett Parameter