Diethanolamine

Other names:	2,2'-Dihydroxydiethylamine
	2,2'-IMINOBIS-ETHANOL
	2,2'-Iminobis[ethanol]
	2,2'-Iminodi-1-ethanol
	2,2'-Iminodiethanol
	2,2'-azanediylbis(ethan-1-ol)
	2-[(2-Hydroxyethyl)amino]ethanol
	Bis(2-hydroxyethyl)amine
	Bis(hydroxyethyl)amine
	DEA
	DIETHYLOLAMINE
	Dabco DEOA-LF
	Di(2-hydroxyethyl)amine
	Diaethanolamin
	Diethanol, 2,2'-imino-
	Diethanolamin
	Diethylamine, 2,2'-dihydroxy-
	Diolamine
	Ethanol, 2,2'-iminobis-
	Ethanol, 2,2'-iminodi-
	Iminodiethanol
	N,N'-Iminodiethanol
	N,N-Bis(2-hydroxyethyl)amine
	N,N-Diethanolamine
	NCI-C55174
	NSC 4959
	Niax DEOA-LF
Inchi:	InChI=1S/C4H11NO2/c6-3-1-5-2-4-7/h5-7H,1-4H2
InchiKey:	ZBCBWPMODOFKDW-UHFFFAOYSA-N
Formula:	C4H11NO2
SMILES:	OCCNCCO
Mol. weight [g/mol]:	105.14
CAS:	111-42-2

Physical Properties

Property code	Value	Unit	Source

affp	953.00	kJ/mol	NIST Webbook
basg	920.00	kJ/mol	NIST Webbook
chs	-2652.30 ± 2.50	kJ/mol	NIST Webbook
dvisc	0.5665700	Pa×s	Densities, Viscosities, and Refractive Indices of Aqueous Alkanolamine Solutions as Potential Carbon Dioxide Removal Reagents
gf	-201.45	kJ/mol	Joback Method
hf	-397.10 ± 2.90	kJ/mol	NIST Webbook
hfs	-493.80 ± 2.60	kJ/mol	NIST Webbook
hfus	19.39	kJ/mol	Joback Method
hsub	96.70 ± 1.20	kJ/mol	NIST Webbook
hsub	105.90 ± 2.00	kJ/mol	NIST Webbook
hvap	64.29	kJ/mol	Joback Method
log10ws	0.79		Crippen Method
logp	-1.439		Crippen Method
mcvol	88.940	ml/mol	McGowan Method
nfpaf	%!d(float64=1)		KDB
nfpah	%!d(float64=1)		KDB
pc	5065.79	kPa	Joback Method
ripol	2141.00		NIST Webbook
ripol	2180.00		NIST Webbook
ripol	2200.00		NIST Webbook
ripol	2200.00		NIST Webbook
tb	542.46	K	Experimental and predicted vapor-liquid equilibrium for binary systems with diethanolamine, m-cresol and p-cresol at 20.0 kPa
tb	541.55	K	NIST Webbook
tb	544.20	K	NIST Webbook
tc	687.52	K	Joback Method
tf	300.15	K	Thermodynamic and Kinetic Studies of CO2 Capture by Glycol and Amine-Based Deep Eutectic Solvents
tf	301.15	K	NIST Webbook
tf	301.10 ± 0.07	K	NIST Webbook
tf	301.20 ± 0.60	K	NIST Webbook
vc	0.333	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	249.93	J/mol×K	687.52	Joback Method
cpg	219.00	J/mol×K	552.46	Joback Method
cpg	225.71	J/mol×K	579.47	Joback Method
cpg	232.16	J/mol×K	606.48	Joback Method
cpg	238.34	J/mol×K	633.49	Joback Method
cpg	244.26	J/mol×K	660.50	Joback Method
cpg	212.00	J/mol×K	525.45	Joback Method
cps	137.00	J/mol×K	298.15	NIST Webbook
dvisc	0.1835000	Pa×s	313.15	Viscometric and volumetric behaviour of binary mixtures of sulfolane and N-methylpyrrolidone with monoethanolamine and diethanolamine in the range 303 373 K
dvisc	0.3805000	Pa×s	303.15	Viscometric and volumetric behaviour of binary mixtures of sulfolane and N-methylpyrrolidone with monoethanolamine and diethanolamine in the range 303 373 K
dvisc	0.0231350	Pa×s	353.15	Viscometric and volumetric behaviour of binary mixtures of sulfolane and N-methylpyrrolidone with monoethanolamine and diethanolamine in the range 303 373 K

dvisc	0.0337900	Pa×s	343.15	Viscometric and volumetric behaviour of binary mixtures of sulfolane and N-methylpyrrolidone with monoethanolamine and diethanolamine in the range 303 373 K
dvisc	0.1006000	Pa×s	323.15	Viscometric and volumetric behaviour of binary mixtures of sulfolane and N-methylpyrrolidone with monoethanolamine and diethanolamine in the range 303 373 K
dvisc	0.0613600	Pa×s	333.15	Viscometric and volumetric behaviour of binary mixtures of sulfolane and N-methylpyrrolidone with monoethanolamine and diethanolamine in the range 303 373 K
dvisc	0.0148080	Pa×s	363.15	Viscometric and volumetric behaviour of binary mixtures of sulfolane and N-methylpyrrolidone with monoethanolamine and diethanolamine in the range 303 373 K
dvisc	0.0104110	Pa×s	373.15	Viscometric and volumetric behaviour of binary mixtures of sulfolane and N-methylpyrrolidone with monoethanolamine and diethanolamine in the range 303 373 K

dvisc	0.0080110	Pa×s	383.15	Viscometric and volumetric behaviour of binary mixtures of sulfolane and N-methylpyrrolidone with monoethanolamine and diethanolamine in the range 303 373 K
dvisc	0.0059850	Pa×s	393.15	Viscometric and volumetric behaviour of binary mixtures of sulfolane and N-methylpyrrolidone with monoethanolamine and diethanolamine in the range 303 373 K
dvisc	0.0045840	Pa×s	403.15	Viscometric and volumetric behaviour of binary mixtures of sulfolane and N-methylpyrrolidone with monoethanolamine and diethanolamine in the range 303 373 K
dvisc	0.0036090	Pa×s	413.15	Viscometric and volumetric behaviour of binary mixtures of sulfolane and N-methylpyrrolidone with monoethanolamine and diethanolamine in the range 303 373 K
dvisc	0.0025220	Pa×s	423.15	Viscometric and volumetric behaviour of binary mixtures of sulfolane and N-methylpyrrolidone with monoethanolamine and diethanolamine in the range 303 373 K
hvapt	70.60	kJ/mol	490.00	NIST Webbook
hvapt	69.00	kJ/mol	522.50	NIST Webbook
hvapt	77.00	kJ/mol	415.00	NIST Webbook

hvapt	74.40	kJ/mol	482.50	NIST Webbook
pvap	4.94	kPa	452.40	Vapor Pressures of Several Commercially Used Alkanolamines
pvap	1.44	kPa	427.50	Vapor Pressures of Several Commercially Used Alkanolamines
pvap	1.94	kPa	433.00	Vapor Pressures of Several Commercially Used Alkanolamines
pvap	2.94	kPa	441.40	Vapor Pressures of Several Commercially Used Alkanolamines
pvap	3.94	kPa	447.40	Vapor Pressures of Several Commercially Used Alkanolamines
rhol	1097.40	kg/m3	293.15	Volumetric and viscometric behaviour of the binary systems of N-methyldiethanolamine and diethanolamine with 1-butyl-3-methylimidazolium acetate at various temperatures
rhol	1107.05	kg/m3	278.14	Densities and Excess Molar Volumes for Binary Mixtures of Diethanolamine with Water, Methanol, Ethanol and Ternary Solutions of Diethanolamine + Water with Methanol, Ethanol at Atmospheric Pressure from 278.15 to 353.15 K

rhol	1103.88	kg/m3	283.14	Densities and Excess Molar Volumes for Binary Mixtures of Diethanolamine with Water, Methanol, Ethanol and Ternary Solutions of Diethanolamine + Water with Methanol, Ethanol at Atmospheric Pressure from 278.15 to 353.15 K
rhol	1050.24	kg/m3	363.15	Volumetric properties of binary mixtures of dimethyl sulfoxide with amines from (293.15 to 363.15) K
rhol	1091.06	kg/m3	303.14	Densities and Excess Molar Volumes for Binary Mixtures of Diethanolamine with Water, Methanol, Ethanol and Ternary Solutions of Diethanolamine + Water with Methanol, Ethanol at Atmospheric Pressure from 278.15 to 353.15 K
rhol	1084.49	kg/m3	313.14	Densities and Excess Molar Volumes for Binary Mixtures of Diethanolamine with Water, Methanol, Ethanol and Ternary Solutions of Diethanolamine + Water with Methanol, Ethanol at Atmospheric Pressure from 278.15 to 353.15 K

rhol	1077.78	kg/m3	323.14	Densities and Excess Molar Volumes for Binary Mixtures of Diethanolamine with Water, Methanol, Ethanol and Ternary Solutions of Diethanolamine + Water with Methanol, Ethanol at Atmospheric Pressure from 278.15 to 353.15 K
rhol	1071.00	kg/m3	333.14	Densities and Excess Molar Volumes for Binary Mixtures of Diethanolamine with Water, Methanol, Ethanol and Ternary Solutions of Diethanolamine + Water with Methanol, Ethanol at Atmospheric Pressure from 278.15 to 353.15 K
rhol	1064.14	kg/m3	343.14	Densities and Excess Molar Volumes for Binary Mixtures of Diethanolamine with Water, Methanol, Ethanol and Ternary Solutions of Diethanolamine + Water with Methanol, Ethanol at Atmospheric Pressure from 278.15 to 353.15 K

rhol	1060.68	kg/m3	348.14	Densities and Excess Molar Volumes for Binary Mixtures of Diethanolamine with Water, Methanol, Ethanol and Ternary Solutions of Diethanolamine + Water with Methanol, Ethanol at Atmospheric Pressure from 278.15 to 353.15 K
rhol	1056.83	kg/m3	353.15	Densities and Excess Molar Volumes for Binary Mixtures of Diethanolamine with Water, Methanol, Ethanol and Ternary Solutions of Diethanolamine + Water with Methanol, Ethanol at Atmospheric Pressure from 278.15 to 353.15 K
rhol	1084.70	kg/m3	313.15	Density and Viscosity of Aqueous Blends of Three Alkanolamines: N-Methyldiethanolamine, Diethanolamine, and 2-Amino-2-methyl-1-propanol in the Range of (303 to 343) K
rhol	1077.40	kg/m3	323.15	Density and Viscosity of Aqueous Blends of Three Alkanolamines: N-Methyldiethanolamine, Diethanolamine, and 2-Amino-2-methyl-1-propanol in the Range of (303 to 343) K

rhol	1077.88	kg/m3	323.15	Volumetric properties of binary mixtures of dimethyl sulfoxide with amines from (293.15 to 363.15) K
rhol	1094.02	kg/m3	298.15	Densities and Viscosities of Aqueous Ternary Mixtures of 2-(Methylamino)ethanol and 2-(Ethylamino)ethanol with Diethanolamine, Triethanolamine, N-Methyldiethanolamine, or 2-Amino-1-methyl-1-propanol from 298.15 to 323.15 K
rhol	1090.79	kg/m3	303.15	Densities and Viscosities of Aqueous Ternary Mixtures of 2-(Methylamino)ethanol and 2-(Ethylamino)ethanol with Diethanolamine, Triethanolamine, N-Methyldiethanolamine, or 2-Amino-1-methyl-1-propanol from 298.15 to 323.15 K
rhol	1087.51	kg/m3	308.15	Densities and Viscosities of Aqueous Ternary Mixtures of 2-(Methylamino)ethanol and 2-(Ethylamino)ethanol with Diethanolamine, Triethanolamine, N-Methyldiethanolamine, or 2-Amino-1-methyl-1-propanol from 298.15 to 323.15 K

rhol	1084.20	kg/m3	313.15	Densities and Viscosities of Aqueous Ternary Mixtures of 2-(Methylamino)ethanol and 2-(Ethylamino)ethanol with Diethanolamine, Triethanolamine, N-Methyldiethanolamine, or 2-Amino-1-methyl-1-propanol from 298.15 to 323.15 K
rhol	1080.86	kg/m3	318.15	Densities and Viscosities of Aqueous Ternary Mixtures of 2-(Methylamino)ethanol and 2-(Ethylamino)ethanol with Diethanolamine, Triethanolamine, N-Methyldiethanolamine, or 2-Amino-1-methyl-1-propanol from 298.15 to 323.15 K
rhol	1077.49	kg/m3	323.15	Densities and Viscosities of Aqueous Ternary Mixtures of 2-(Methylamino)ethanol and 2-(Ethylamino)ethanol with Diethanolamine, Triethanolamine, N-Methyldiethanolamine, or 2-Amino-1-methyl-1-propanol from 298.15 to 323.15 K
rhol	1096.10	kg/m3	293.15	Density and Viscosity for Binary Mixtures of Diethylene Glycol Monobutyl Ether with Monoethanolamine, Diethanolamine, and Triethanolamine from (293.15 to 333.15) K

rhol	1089.80	kg/m3	303.15	Density and Viscosity for Binary Mixtures of Diethylene Glycol Monobutyl Ether with Monoethanolamine, Diethanolamine, and Triethanolamine from (293.15 to 333.15) K
rhol	1083.70	kg/m3	313.15	Density and Viscosity for Binary Mixtures of Diethylene Glycol Monobutyl Ether with Monoethanolamine, Diethanolamine, and Triethanolamine from (293.15 to 333.15) K
rhol	1077.40	kg/m3	323.15	Density and Viscosity for Binary Mixtures of Diethylene Glycol Monobutyl Ether with Monoethanolamine, Diethanolamine, and Triethanolamine from (293.15 to 333.15) K
rhol	1070.70	kg/m3	333.15	Density and Viscosity for Binary Mixtures of Diethylene Glycol Monobutyl Ether with Monoethanolamine, Diethanolamine, and Triethanolamine from (293.15 to 333.15) K
rhol	1057.31	kg/m3	353.14	Volumetric properties of binary mixtures of dimethyl sulfoxide with amines from (293.15 to 363.15) K
rhol	1064.25	kg/m3	343.14	Volumetric properties of binary mixtures of dimethyl sulfoxide with amines from (293.15 to 363.15) K

rhol	1084.60	kg/m3	313.15	Volumetric properties of binary mixtures of dimethyl sulfoxide with amines from (293.15 to 363.15) K
rhol	1091.17	kg/m3	303.15	Volumetric properties of binary mixtures of dimethyl sulfoxide with amines from (293.15 to 363.15) K
rhol	1097.61	kg/m3	293.15	Volumetric properties of binary mixtures of dimethyl sulfoxide with amines from (293.15 to 363.15) K
rhol	1063.50	kg/m3	343.15	Volumetric and viscometric behaviour of the binary systems of N-methyldiethanolamine and diethanolamine with 1-butyl-3-methylimidazolium acetate at various temperatures
rhol	1070.30	kg/m3	333.15	Volumetric and viscometric behaviour of the binary systems of N-methyldiethanolamine and diethanolamine with 1-butyl-3-methylimidazolium acetate at various temperatures
rhol	1077.10	kg/m3	323.15	Volumetric and viscometric behaviour of the binary systems of N-methyldiethanolamine and diethanolamine with 1-butyl-3-methylimidazolium acetate at various temperatures

rhol	1083.90	kg/m3	313.15	Volumetric and viscometric behaviour of the binary systems of N-methyldiethanolamine and diethanolamine with 1-butyl-3-methylimidazolium acetate at various temperatures
rhol	1090.50	kg/m3	303.15	Volumetric and viscometric behaviour of the binary systems of N-methyldiethanolamine and diethanolamine with 1-butyl-3-methylimidazolium acetate at various temperatures
rhol	1097.51	kg/m3	293.15	Densities and Excess Molar Volumes for Binary Mixtures of Diethanolamine with Water, Methanol, Ethanol and Ternary Solutions of Diethanolamine + Water with Methanol, Ethanol at Atmospheric Pressure from 278.15 to 353.15 K
rhol	1070.30	kg/m3	333.15	Density and Viscosity of Aqueous Blends of Three Alkanolamines: N-Methyldiethanolamine, Diethanolamine, and 2-Amino-2-methyl-1-propanol in the Range of (303 to 343) K
rhol	1071.11	kg/m3	333.14	Volumetric properties of binary mixtures of dimethyl sulfoxide with amines from (293.15 to 363.15) K

speedsl	1739.20	m/s	293.15	Density, Speed of Sound, Viscosity, Surface Tension, and Excess Volume of N-Ethyl-2-pyrrolidone + Ethanolamine (or Diethanolamine or Triethanolamine) from T = (293.15 to 323.15) K
speedsl	1711.55	m/s	303.15	Density, Speed of Sound, Isentropic Compressibility, and Excess Volume of Binary Mixtures of 1-Amino-2-propanol or 3-Amino-1-propanol with 2-Amino-2-methyl-1-propanol, Diethanolamine, or Triethanolamine from (293.15 to 323.15) K
speedsl	1698.70	m/s	308.15	Density, Speed of Sound, Isentropic Compressibility, and Excess Volume of Binary Mixtures of 1-Amino-2-propanol or 3-Amino-1-propanol with 2-Amino-2-methyl-1-propanol, Diethanolamine, or Triethanolamine from (293.15 to 323.15) K
speedsl	1686.13	m/s	313.15	Density, Speed of Sound, Isentropic Compressibility, and Excess Volume of Binary Mixtures of 1-Amino-2-propanol or 3-Amino-1-propanol with 2-Amino-2-methyl-1-propanol, Diethanolamine, or Triethanolamine from (293.15 to 323.15) K

speedsl	1673.76	m/s	318.15	Density, Speed of Sound, Isentropic Compressibility, and Excess Volume of Binary Mixtures of 1-Amino-2-propanol or 3-Amino-1-propanol with 2-Amino-2-methyl-1-propanol, Diethanolamine, or Triethanolamine from (293.15 to 323.15) K
speedsl	1660.36	m/s	323.15	Density, Speed of Sound, Isentropic Compressibility, and Excess Volume of Binary Mixtures of 1-Amino-2-propanol or 3-Amino-1-propanol with 2-Amino-2-methyl-1-propanol, Diethanolamine, or Triethanolamine from (293.15 to 323.15) K
speedsl	1661.10	m/s	323.15	Density, Speed of Sound, Viscosity, Surface Tension, and Excess Volume of N-Ethyl-2-pyrrolidone + Ethanolamine (or Diethanolamine or Triethanolamine) from T = (293.15 to 323.15) K
speedsl	1685.90	m/s	313.15	Density, Speed of Sound, Viscosity, Surface Tension, and Excess Volume of N-Ethyl-2-pyrrolidone + Ethanolamine (or Diethanolamine or Triethanolamine) from T = (293.15 to 323.15) K

speedsl	1711.30	m/s	303.15	Density, Speed of Sound, Viscosity, Surface Tension, and Excess Volume of N-Ethyl-2-pyrrolidone + Ethanolamine (or Diethanolamine or Triethanolamine) from T = (293.15 to 323.15) K
speedsl	1723.96	m/s	298.15	Density, Speed of Sound, Isentropic Compressibility, and Excess Volume of Binary Mixtures of 1-Amino-2-propanol or 3-Amino-1-propanol with 2-Amino-2-methyl-1-propanol, Diethanolamine, or Triethanolamine from (293.15 to 323.15) K
speedsl	1736.54	m/s	293.15	Density, Speed of Sound, Isentropic Compressibility, and Excess Volume of Binary Mixtures of 1-Amino-2-propanol or 3-Amino-1-propanol with 2-Amino-2-methyl-1-propanol, Diethanolamine, or Triethanolamine from (293.15 to 323.15) K
srf	0.05	N/m	298.15	Density, speed of sound, viscosity, refractive index and surface tension of N-methyl-2-pyrrolidone + diethanolamine (or triethanolamine) from T = (293.15 to 323.15) K

srf	0.04	N/m	323.20	Investigation of surface tension and viscosity for aqueous solutions of MEA-MeOH and DEA-MeOH
srf	0.05	N/m	303.20	Investigation of surface tension and viscosity for aqueous solutions of MEA-MeOH and DEA-MeOH
srf	0.05	N/m	323.15	Density, speed of sound, viscosity, refractive index and surface tension of N-methyl-2-pyrrolidone + diethanolamine (or triethanolamine) from T = (293.15 to 323.15) K
srf	0.05	N/m	313.15	Density, speed of sound, viscosity, refractive index and surface tension of N-methyl-2-pyrrolidone + diethanolamine (or triethanolamine) from T = (293.15 to 323.15) K
srf	0.05	N/m	303.15	Density, speed of sound, viscosity, refractive index and surface tension of N-methyl-2-pyrrolidone + diethanolamine (or triethanolamine) from T = (293.15 to 323.15) K
srf	0.05	N/m	293.15	Density, speed of sound, viscosity, refractive index and surface tension of N-methyl-2-pyrrolidone + diethanolamine (or triethanolamine) from T = (293.15 to 323.15) K

srf	0.04	N/m	313.20	Investigation of surface tension and viscosity for aqueous solutions of MEA-MeOH and DEA-MeOH

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	490.20	K	20.00	NIST Webbook
tbrp	427.70	K	1.30	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.72949e+01
Coeff. B	-5.79247e+03
Coeff. C	-8.45980e+01
Temperature range (K), min.	425.18
Temperature range (K), max.	567.97

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/T + C*ln(T) + D*T^2
Coeff. A	2.16769e+02
Coeff. B	-1.89915e+04
Coeff. C	-2.88239e+01
Coeff. D	1.48221e-05
Temperature range (K), min.	301.15
Temperature range (K), max.	542.15

Datasets

Mass density, kg/m3

Pressure, kPa - Liquid	Temperature, K - Liquid	Mass density, kg/m3 - Liquid
100.00	298.15	1093.6
100.00	303.15	1090.4
100.00	308.15	1087.1
100.00	313.15	1083.8
100.00	318.15	1080.6
100.00	323.15	1077.4
100.00	328.15	1074.1
100.00	333.15	1070.8
100.00	338.15	1067.4
100.00	343.15	1064.0
100.00	348.15	1060.6
100.00	353.15	1057.2
100.00	358.15	1053.7
100.00	363.15	1050.1
700.00	373.15	1043.3
700.00	383.15	1035.5
700.00	393.15	1028.1
700.00	403.15	1020.5
700.00	413.15	1012.9
700.00	423.15	1004.8

Reference *https://www.doi.org/10.1021/je300345m*

Sources

Solubility of Ethane in Aqueous Solutions of Monoethanolamine and Diethanolamine:	https://www.doi.org/10.1021/je060031v
Molar excess enthalpy (Hm E) for systems of aqueous piperazine derivatives:	https://www.doi.org/10.1016/j.jct.2015.06.006
Solubility data for toluene in various aqueous alkanolamine solutions:	https://www.doi.org/10.1016/j.jct.2006.07.027
Physical Solubility and Diffusivity of N2O and CO2 into Aqueous Solutions of (2-Amino-2-methyl-1-propanol + Diethanolamine) and (N-Methyldiethanolamine + Diethanolamine):	https://www.doi.org/10.1021/je0301951
Estimation of CO2 Absorption Capacity via Correlating Measured Electrical Conductivity in Diethanolamine Solvent Systems Compared to Monoethanolamine Solvent Systems	https://www.doi.org/10.1021/acs.jced.6b00862
Density of Water (1) + Diethanolamine (2) + CO2 (3) and Water (1) + N-Methyldiethanolamine (2) + CO2 (3) from (298.15 to 423.15) K:	https://www.doi.org/10.1021/je300345m
Absorption Data for Carbon Dioxide in Aqueous Blends of Methyl-Diethanolamine (MDEA) and Diethanol Amine (DEA): 25% MDEA + 25% DEA and 30 % MDEA + 20% DEA:	https://www.doi.org/10.1021/je201132d

Volumetric properties of binary mixtures of dimethyl sulfoxide with amines from (293.15 to 363.15) K: https://www.doi.org/10.1016/j.jct.2012.08.021

KDB: https://www.cheric.org/files/research/kdb/mol/mol1320.mol

Heat capacities of aqueous solutions containing diethanolamine and N-methyldiethanolamine: https://www.doi.org/10.1016/j.jct.2009.05.015

Density and Viscosity of Aqueous Solutions of 2-Piperidineethanol, (2-Piperidineethanol + Monoethanolamine), and (2-Piperidineethanol + Diethanolamine) from (288 to 333) K: https://www.doi.org/10.1021/je060108f

Densities, Viscosities, and Refractive Indices of Aqueous Alkanolamine Solutions as Potential Carbon Dioxide Removal Reagents: https://www.doi.org/10.1021/je300938w

Joback Method: https://en.wikipedia.org/wiki/Joback_method

Experimental Mutual Solubility Data for Cyclohexane and Water in Aqueous Solutions of Diethanolamine: https://www.doi.org/10.1021/acs.jced.8b01179

Density, Speed of Sound, Viscosity, Surface Tension, and Excess Volume of N-Ethyl-2-pyrrolidone + Ethanolamine (or Diethanolamine or Triethanolamine) from T = (293.15 to 323.15) K: https://www.doi.org/10.1021/je301123j

Bubble Point Determination for CO2 + Ethanol + Alkanolamines (Monoethanolamine, Diethanolamine, and Triethanolamine) at High Pressures: https://www.doi.org/10.1021/je5002957

Experimental and predicted vapor–liquid equilibrium for binary systems with diethanolamine, m-cresol and p-cresol at 20.0 kPa: https://www.doi.org/10.1016/j.jct.2018.09.002

Densities of Water + Diethanolamine + Methanol and Water + N-Methyldiethanolamine + Methanol at Temperatures Ranging from (283.15 to 353.15) K: https://www.doi.org/10.1021/je034094e

Density, Speed of Sound, Isentropic Compressibility, and Excess Volume of Binary Mixtures of 1-Amino-2-propanol or 3-Amino-1-propanol with 2-Amino-2-methyl-1-propanol, Diethanolamine, or Triethanolamine from (293.15 to 323.15) K: https://www.doi.org/10.1021/je900739x

Surface Tension of aqueous binary mixtures of 1-amino-2-propanol and 3-amino-1-propanol, and aqueous ternary mixtures of these amines with diethanolamine, triethanolamine, and 2-amino-2-methyl-1-propanol from (298.15 to 323.15) K: https://www.doi.org/10.1021/je020048n

Density and Viscosity of Aqueous Solutions of (N-Methyldiethanolamine + Monoethanolamine), (N-Methyldiethanolamine + Diethanolamine), (2-Amino-2-methyl-1-propanol + Monoethanolamine), and (2-Amino-2-methyl-1-propanol + Diethanolamine): https://www.doi.org/10.1021/je020206a

Liquid–Liquid Equilibria for Benzene/Thiophene + Cyclohexane/Hexadecane + Deep Eutectic Solvents: Data and Correlation: https://www.doi.org/10.1021/acs.jced.9b00313

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Legend

affp:	Proton affinity
basg:	Gas basicity
chs:	Standard solid enthalpy of combustion
cpg:	Ideal gas heat capacity
cps:	Solid phase heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfs:	Solid phase enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hsub:	Enthalpy of sublimation at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
hvapt:	Enthalpy of vaporization at a given temperature
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
rhol:	Liquid Density
ripol:	Polar retention indices
speedsl:	Speed of sound in fluid
srf:	Surface Tension
tb:	Normal Boiling Point Temperature
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume