

Benzene, n-butyl-

Other names:	1-PHENYLBUTANE 1-butylbenzene Benzene, butyl- Butylbenzene UN 2709 n-Butylbenzene
Inchi:	InChI=1S/C10H14/c1-2-3-7-10-8-5-4-6-9-10/h4-6,8-9H,2-3,7H2,1H3
InchiKey:	OCKPCBLVKNKHBMX-UHFFFAOYSA-N
Formula:	C10H14
SMILES:	CCCCc1ccccc1
Mol. weight [g/mol]:	134.22
CAS:	104-51-8

Physical Properties

Property code	Value	Unit	Source
af	0.3930		KDB
affp	791.90	kJ/mol	NIST Webbook
basg	764.20	kJ/mol	NIST Webbook
chl	-5873.00 ± 1.10	kJ/mol	NIST Webbook
chl	-5872.10 ± 1.10	kJ/mol	NIST Webbook
dm	0.40	debye	KDB
gf	144.80	kJ/mol	KDB
hcg	5872.08	kJ/mol	KDB
hcn	5563.967	kJ/mol	KDB
hf	-13.80 ± 1.30	kJ/mol	NIST Webbook
hf	-13.82	kJ/mol	KDB
hf	-12.80	kJ/mol	NIST Webbook
hfl	-62.90 ± 1.20	kJ/mol	NIST Webbook
hfl	-63.90 ± 1.30	kJ/mol	NIST Webbook
hfus	15.70	kJ/mol	Joback Method
hvap	50.80	kJ/mol	NIST Webbook
hvap	50.10	kJ/mol	NIST Webbook
hvap	51.00 ± 2.90	kJ/mol	NIST Webbook
hvap	50.10	kJ/mol	NIST Webbook
hvap	51.37	kJ/mol	NIST Webbook
ie	8.69 ± 0.01	eV	NIST Webbook
ie	8.69	eV	NIST Webbook

ie	8.71 ± 0.01	eV	NIST Webbook
ie	8.68	eV	NIST Webbook
ie	8.69 ± 0.01	eV	NIST Webbook
ie	8.69 ± 0.05	eV	NIST Webbook
log10ws	-4.06		Estimated Solubility Method
log10ws	-4.06		Aqueous Solubility Prediction Method
logp	3.029		Crippen Method
mcvol	128.000	ml/mol	McGowan Method
nfpaf	%!d(float64=2)		KDB
nfpah	%!d(float64=2)		KDB
pc	2887.00 ± 7.00	kPa	NIST Webbook
pc	2890.00	kPa	KDB
pc	2890.00 ± 40.00	kPa	NIST Webbook
rhoc	269.78 ± 5.37	kg/m3	NIST Webbook
rhoc	269.64 ± 10.07	kg/m3	NIST Webbook
rinpol	1047.00		NIST Webbook
rinpol	1046.00		NIST Webbook
rinpol	1048.00		NIST Webbook
rinpol	1048.00		NIST Webbook
rinpol	1022.00		NIST Webbook
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rinpol	1045.00		NIST Webbook
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rinpol	1066.87	NIST Webbook
rinpol	1024.00	NIST Webbook
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rinpol	1060.55	NIST Webbook
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ripol	1367.70		NIST Webbook
ripol	1362.10		NIST Webbook
ripol	1356.40		NIST Webbook
ripol	1284.00		NIST Webbook
sg	437.86	J/mol×K	NIST Webbook
sl	321.30	J/mol×K	NIST Webbook
sl	321.21	J/mol×K	NIST Webbook
tb	456.45 ± 0.30	K	NIST Webbook
tb	456.40	K	Isobaric (vapour + liquid) equilibria for N-formylmorpholine with ethylbenzene, n-butylbenzene, iso-propylbenzene and 1,2,4-trimethylbenzene at 101.33 kPa
tb	457.00 ± 4.00	K	NIST Webbook
tb	456.50	K	NIST Webbook
tb	456.00	K	NIST Webbook
tb	456.40	K	NIST Webbook
tb	456.43 ± 0.20	K	NIST Webbook
tb	454.00 ± 4.00	K	NIST Webbook
tb	456.60 ± 1.00	K	NIST Webbook

tb	456.38	K	Isobaric vapour + liquid equilibria for three binary systems (toluene + anisole, nbutylbenzene + anisole, and guaiacol + anisole) at 101.33 kPa
tb	456.46	K	KDB
tb	456.41 ± 0.30	K	NIST Webbook
tb	455.00 ± 3.00	K	NIST Webbook
tb	455.70 ± 1.50	K	NIST Webbook
tb	456.05 ± 0.30	K	NIST Webbook
tb	456.50 ± 0.30	K	NIST Webbook
tb	456.25 ± 0.40	K	NIST Webbook
tb	456.41 ± 0.30	K	NIST Webbook
tb	456.00 ± 0.70	K	NIST Webbook
tb	456.42 ± 0.03	K	NIST Webbook
tb	453.15 ± 2.00	K	NIST Webbook
tb	453.65 ± 2.00	K	NIST Webbook
tb	456.25 ± 0.30	K	NIST Webbook
tb	453.00 ± 5.00	K	NIST Webbook
tb	453.00 ± 4.00	K	NIST Webbook
tb	456.30 ± 0.30	K	NIST Webbook
tb	451.00 ± 5.00	K	NIST Webbook
tb	453.00 ± 3.00	K	NIST Webbook
tb	442.15 ± 2.50	K	NIST Webbook
tb	466.00 ± 2.00	K	NIST Webbook
tb	456.41 ± 0.30	K	NIST Webbook
tb	456.41 ± 0.20	K	NIST Webbook
tb	456.25 ± 0.30	K	NIST Webbook
tb	454.50 ± 0.80	K	NIST Webbook
tb	455.00 ± 3.00	K	NIST Webbook
tb	453.00 ± 2.00	K	NIST Webbook
tb	455.00 ± 2.00	K	NIST Webbook
tb	456.34 ± 0.30	K	NIST Webbook
tb	456.50 ± 0.20	K	NIST Webbook
tb	456.50 ± 0.20	K	NIST Webbook
tb	456.25 ± 0.30	K	NIST Webbook
tb	456.25 ± 0.30	K	NIST Webbook
tb	456.50 ± 0.30	K	NIST Webbook
tb	456.41 ± 0.30	K	NIST Webbook
tb	456.30 ± 0.50	K	NIST Webbook
tb	456.41 ± 0.10	K	NIST Webbook
tb	456.00 ± 3.00	K	NIST Webbook
tc	660.45 ± 0.10	K	NIST Webbook
tc	660.50	K	NIST Webbook
tc	660.50 ± 0.50	K	NIST Webbook

tc	660.50	K	KDB
tc	661.00 ± 0.50	K	NIST Webbook
tc	660.05 ± 0.50	K	NIST Webbook
tf	185.00 ± 0.50	K	NIST Webbook
tf	185.18 ± 0.04	K	NIST Webbook
tf	185.00 ± 0.20	K	NIST Webbook
tf	185.61 ± 0.30	K	NIST Webbook
tf	184.70 ± 1.50	K	NIST Webbook
tf	184.70 ± 1.00	K	NIST Webbook
tf	192.00 ± 0.30	K	NIST Webbook
tf	185.20	K	KDB
tf	185.61 ± 0.20	K	NIST Webbook
tf	185.15 ± 0.20	K	NIST Webbook
tf	185.15 ± 0.20	K	NIST Webbook
tf	185.19	K	Aqueous Solubility Prediction Method
tf	185.18 ± 0.30	K	NIST Webbook
tf	184.97 ± 0.20	K	NIST Webbook
tt	185.14 ± 0.01	K	NIST Webbook
tt	184.60 ± 0.25	K	NIST Webbook
tt	185.30 ± 0.01	K	NIST Webbook
vc	0.497	m3/kmol	KDB
vc	0.497	m3/kmol	NIST Webbook
zc	0.2615440		KDB

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	311.99	J/mol×K	591.26	Joback Method
cpg	256.33	J/mol×K	454.88	Joback Method
cpg	271.45	J/mol×K	488.98	Joback Method
cpg	285.75	J/mol×K	523.07	Joback Method
cpg	323.99	J/mol×K	625.36	Joback Method
cpg	335.30	J/mol×K	659.45	Joback Method
cpg	299.25	J/mol×K	557.17	Joback Method
cpl	243.34	J/mol×K	298.15	NIST Webbook
cpl	203.00	J/mol×K	293.00	NIST Webbook
cpl	240.20	J/mol×K	298.20	NIST Webbook
cpl	241.00	J/mol×K	298.15	NIST Webbook

dvisc	0.0009010	Pa×s	303.15	Physical Properties of Binary Mixtures of Ethyl Formate with Benzene, Isopropyl Benzene, Isobutyl Benzene, and Butylbenzene at (303.15, 308.15, and 313.15) K
dvisc	0.0008440	Pa×s	308.15	Physical Properties of Binary Mixtures of Ethyl Formate with Benzene, Isopropyl Benzene, Isobutyl Benzene, and Butylbenzene at (303.15, 308.15, and 313.15) K
dvisc	0.0007870	Pa×s	313.15	Physical Properties of Binary Mixtures of Ethyl Formate with Benzene, Isopropyl Benzene, Isobutyl Benzene, and Butylbenzene at (303.15, 308.15, and 313.15) K
dvisc	0.0008440	Pa×s	308.15	Density and Viscosity of Propyl Formate + Aromatic Hydrocarbons at T = (303.15, 308.15, and 313.15) K
dvisc	0.0007870	Pa×s	313.15	Density and Viscosity of Propyl Formate + Aromatic Hydrocarbons at T = (303.15, 308.15, and 313.15) K
dvisc	0.0009010	Pa×s	303.15	Density and Viscosity of Propyl Formate + Aromatic Hydrocarbons at T = (303.15, 308.15, and 313.15) K
hfust	11.22	kJ/mol	185.30	NIST Webbook
hfust	11.22	kJ/mol	185.30	NIST Webbook
hfust	10.98	kJ/mol	184.60	NIST Webbook

hvapt	38.87	kJ/mol	456.40	NIST Webbook
hvapt	53.50	kJ/mol	323.00	NIST Webbook
hvapt	37.50 ± 0.70	kJ/mol	422.00	NIST Webbook
hvapt	43.50 ± 0.20	kJ/mol	422.00	NIST Webbook
hvapt	47.40 ± 0.20	kJ/mol	422.00	NIST Webbook
hvapt	45.70	kJ/mol	416.00	NIST Webbook
hvapt	46.80 ± 0.10	kJ/mol	358.00	NIST Webbook
hvapt	46.00 ± 0.10	kJ/mol	368.00	NIST Webbook
hvapt	45.20	kJ/mol	414.00	NIST Webbook
hvapt	40.60 ± 0.40	kJ/mol	422.00	NIST Webbook
hvapt	48.00 ± 0.10	kJ/mol	343.00	NIST Webbook
hvapt	39.25	kJ/mol	456.40	KDB
rfi	1.48740		298.15	Excess Molar Volumes of (propiophenone + benzene, or toluene, or ethylbenzene, or butylbenzene) at temperatures 298.15 K and 328.15 K
rfi	1.48950		293.10	Extraction of propylbenzene or butylbenzene from dodecane using 4-methyl-N-butylpyridinium tetrafluoroborate, [mebupy][BF ₄], as an ionic liquid at different temperatures
rfi	1.48950		293.15	Densities, Viscosities, and Refractive Indices of Binary Mixtures of Anisole with Benzene, Methylbenzene, Ethylbenzene, Propylbenzene, and Butylbenzene at (293.15 and 303.15) K

rfi	1.48450		303.15	Densities, Viscosities, and Refractive Indices of Binary Mixtures of Anisole with Benzene, Methylbenzene, Ethylbenzene, Propylbenzene, and Butylbenzene at (293.15 and 303.15) K
rfi	1.48940		293.10	Extraction of Butylbenzene from Dodecane Using Hexafluorophosphate-Based Ionic Liquids: Effect of Cation Change
rfi	1.48735		298.15	Effect of Temperature on the Change of Refractive Index on Mixing for Butyl Acetate + Aromatic Hydrocarbons
rfi	1.48742		298.15	KDB
rhoI	860.00	kg/m3	293.00	KDB
rhoI	856.29	kg/m3	298.15	Excess Enthalpies of Chloroalkylbenzene + Alkylbenzene Mixtures
rhoI	856.29	kg/m3	298.15	Thermodynamic study of 1,1,2,2-tetrachloroethane + hydrocarbon mixtures I. Excess and solvation enthalpies

rhoI	828.38	kg/m3	333.15	Densities, Viscosities, Speeds of Sound, Bulk Moduli, Surface Tensions, and Flash Points of Quaternary Mixtures of n-Dodecane (1), n-Butylcyclohexane (2), n-Butylbenzene (3), and 2,2,4,4,6,8,8-Heptamethylnonane (4) at 0.1 MPa as Potential Surrogate Mixtures for Military Jet Fuel, JP-5
rhoI	836.51	kg/m3	323.15	Densities, Viscosities, Speeds of Sound, Bulk Moduli, Surface Tensions, and Flash Points of Quaternary Mixtures of n-Dodecane (1), n-Butylcyclohexane (2), n-Butylbenzene (3), and 2,2,4,4,6,8,8-Heptamethylnonane (4) at 0.1 MPa as Potential Surrogate Mixtures for Military Jet Fuel, JP-5
rhoI	844.60	kg/m3	313.15	Densities, Viscosities, Speeds of Sound, Bulk Moduli, Surface Tensions, and Flash Points of Quaternary Mixtures of n-Dodecane (1), n-Butylcyclohexane (2), n-Butylbenzene (3), and 2,2,4,4,6,8,8-Heptamethylnonane (4) at 0.1 MPa as Potential Surrogate Mixtures for Military Jet Fuel, JP-5

rhoI	852.65	kg/m3	303.15	Densities, Viscosities, Speeds of Sound, Bulk Moduli, Surface Tensions, and Flash Points of Quaternary Mixtures of n-Dodecane (1), n-Butylcyclohexane (2), n-Butylbenzene (3), and 2,2,4,4,6,8,8-Heptamethylnonane (4) at 0.1 MPa as Potential Surrogate Mixtures for Military Jet Fuel, JP-5
rhoI	856.68	kg/m3	298.15	Densities, Viscosities, Speeds of Sound, Bulk Moduli, Surface Tensions, and Flash Points of Quaternary Mixtures of n-Dodecane (1), n-Butylcyclohexane (2), n-Butylbenzene (3), and 2,2,4,4,6,8,8-Heptamethylnonane (4) at 0.1 MPa as Potential Surrogate Mixtures for Military Jet Fuel, JP-5
rhoI	860.69	kg/m3	293.15	Densities, Viscosities, Speeds of Sound, Bulk Moduli, Surface Tensions, and Flash Points of Quaternary Mixtures of n-Dodecane (1), n-Butylcyclohexane (2), n-Butylbenzene (3), and 2,2,4,4,6,8,8-Heptamethylnonane (4) at 0.1 MPa as Potential Surrogate Mixtures for Military Jet Fuel, JP-5

rhoI	864.70	kg/m3	288.15	Densities, Viscosities, Speeds of Sound, Bulk Moduli, Surface Tensions, and Flash Points of Quaternary Mixtures of n-Dodecane (1), n-Butylcyclohexane (2), n-Butylbenzene (3), and 2,2,4,4,6,8,8-Heptamethylnonane (4) at 0.1 MPa as Potential Surrogate Mixtures for Military Jet Fuel, JP-5
rhoI	860.60	kg/m3	293.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Selected Ternary Mixtures of n-Butylcyclohexane + a Linear Alkane (n-Hexadecane or n-Dodecane) + an Aromatic Compound (Toluene, n-Butylbenzene, or n-Hexylbenzene)
rhoI	892.80	kg/m3	253.15	Densities, Viscosities, Speeds of Sound, Bulk Moduli, Surface Tensions, and Flash Points of Quaternary Mixtures of n-Dodecane (1), n-Butylcyclohexane (2), n-Butylbenzene (3), and 2,2,4,4,6,8,8-Heptamethylnonane (4) at 0.1 MPa as Potential Surrogate Mixtures for Military Jet Fuel, JP-5

rhoI	827.86	kg/m3	333.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Binary Mixtures of n-Hexylbenzene (1) or n-Butylbenzene (1) in 2,2,4,6,6-Pentamethylheptane (2) or 2,2,4,4,6,8,8-Heptamethylnonane (2) at 0.1 MPa
rhoI	835.98	kg/m3	323.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Binary Mixtures of n-Hexylbenzene (1) or n-Butylbenzene (1) in 2,2,4,6,6-Pentamethylheptane (2) or 2,2,4,4,6,8,8-Heptamethylnonane (2) at 0.1 MPa
rhoI	844.07	kg/m3	313.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Binary Mixtures of n-Hexylbenzene (1) or n-Butylbenzene (1) in 2,2,4,6,6-Pentamethylheptane (2) or 2,2,4,4,6,8,8-Heptamethylnonane (2) at 0.1 MPa
rhoI	852.13	kg/m3	303.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Binary Mixtures of n-Hexylbenzene (1) or n-Butylbenzene (1) in 2,2,4,6,6-Pentamethylheptane (2) or 2,2,4,4,6,8,8-Heptamethylnonane (2) at 0.1 MPa

rhoI	860.17	kg/m3	293.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Binary Mixtures of n-Hexylbenzene (1) or n-Butylbenzene (1) in 2,2,4,6,6-Pentamethylheptane (2) or 2,2,4,4,6,8,8-Heptamethylnonane (2) at 0.1 MPa
rhoI	864.47	kg/m3	288.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Binary Mixtures of n-Hexylbenzene (1) or n-Butylbenzene (1) in 2,2,4,6,6-Pentamethylheptane (2) or 2,2,4,4,6,8,8-Heptamethylnonane (2) at 0.1 MPa
rhoI	892.60	kg/m3	253.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Binary Mixtures of n-Hexylbenzene (1) or n-Butylbenzene (1) in 2,2,4,6,6-Pentamethylheptane (2) or 2,2,4,4,6,8,8-Heptamethylnonane (2) at 0.1 MPa

rhoI	820.30	kg/m3	343.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Selected Ternary Mixtures of n-Butylcyclohexane + a Linear Alkane (n-Hexadecane or n-Dodecane) + an Aromatic Compound (Toluene, n-Butylbenzene, or n-Hexylbenzene)
rhoI	828.29	kg/m3	333.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Selected Ternary Mixtures of n-Butylcyclohexane + a Linear Alkane (n-Hexadecane or n-Dodecane) + an Aromatic Compound (Toluene, n-Butylbenzene, or n-Hexylbenzene)
rhoI	836.41	kg/m3	323.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Selected Ternary Mixtures of n-Butylcyclohexane + a Linear Alkane (n-Hexadecane or n-Dodecane) + an Aromatic Compound (Toluene, n-Butylbenzene, or n-Hexylbenzene)

rhoI	844.50	kg/m3	313.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Selected Ternary Mixtures of n-Butylcyclohexane + a Linear Alkane (n-Hexadecane or n-Dodecane) + an Aromatic Compound (Toluene, n-Butylbenzene, or n-Hexylbenzene)
rhoI	852.56	kg/m3	303.15	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Selected Ternary Mixtures of n-Butylcyclohexane + a Linear Alkane (n-Hexadecane or n-Dodecane) + an Aromatic Compound (Toluene, n-Butylbenzene, or n-Hexylbenzene)
sfust	59.50	J/mol×K	184.60	NIST Webbook
srf	0.03	N/m	294.20	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Binary Mixtures of Butylbenzene + Linear Alkanes (n-Decane, n-Dodecane, n-Tetradecane, n-Hexadecane, or n-Heptadecane) at 0.1 MPa
srf	0.03	N/m	293.20	KDB

Correlations

Information

Value

Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.45284e+01
Coeff. B	-3.96130e+03
Coeff. C	-5.67370e+01
Temperature range (K), min.	334.90
Temperature range (K), max.	486.52

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/T + C \cdot \ln(T) + D \cdot T^2$
Coeff. A	1.12433e+02
Coeff. B	-1.01044e+04
Coeff. C	-1.42573e+01
Coeff. D	7.81134e-06
Temperature range (K), min.	185.30
Temperature range (K), max.	660.55

Sources

KDB Vapor Pressure Data:

Saturated Heat Capacities of Some Linear and Branched Alkylbenzenes
 Excess Vapor Pressure
 (propiophenone + benzene, or toluene, or ethylbenzene, or butylbenzene) at 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-31-32-33-34-35-36-37-38-39-40-41-42-43-44-45-46-47-48-49-50-51-52-53-54-55-56-57-58-59-60-61-62-63-64-65-66-67-68-69-70-71-72-73-74-75-76-77-78-79-80-81-82-83-84-85-86-87-88-89-90-91-92-93-94-95-96-97-98-99-100-101-102-103-104-105-106-107-108-109-110-111-112-113-114-115-116-117-118-119-120-121-122-123-124-125-126-127-128-129-130-131-132-133-134-135-136-137-138-139-140-141-142-143-144-145-146-147-148-149-150-151-152-153-154-155-156-157-158-159-160-161-162-163-164-165-166-167-168-169-170-171-172-173-174-175-176-177-178-179-180-181-182-183-184-185-186-187-188-189-190-191-192-193-194-195-196-197-198-199-200-201-202-203-204-205-206-207-208-209-210-211-212-213-214-215-216-217-218-219-220-221-222-223-224-225-226-227-228-229-230-231-232-233-234-235-236-237-238-239-240-241-242-243-244-245-246-247-248-249-250-251-252-253-254-255-256-257-258-259-260-261-262-263-264-265-266-267-268-269-270-271-272-273-274-275-276-277-278-279-280-281-282-283-284-285-286-287-288-289-290-291-292-293-294-295-296-297-298-299-300-301-302-303-304-305-306-307-308-309-310-311-312-313-314-315-316-317-318-319-320-321-322-323-324-325-326-327-328-329-330-331-332-333-334-335-336-337-338-339-340-341-342-343-344-345-346-347-348-349-350-351-352-353-354-355-356-357-358-359-360-361-362-363-364-365-366-367-368-369-370-371-372-373-374-375-376-377-378-379-380-381-382-383-384-385-386-387-388-389-390-391-392-393-394-395-396-397-398-399-400-401-402-403-404-405-406-407-408-409-410-411-412-413-414-415-416-417-418-419-420-421-422-423-424-425-426-427-428-429-430-431-432-433-434-435-436-437-438-439-440-441-442-443-444-445-446-447-448-449-450-451-452-453-454-455-456-457-458-459-460-461-462-463-464-465-466-467-468-469-470-471-472-473-474-475-476-477-478-479-480-481-482-483-484-485-486-487-488-489-490-491-492-493-494-495-496-497-498-499-500-501-502-503-504-505-506-507-508-509-510-511-512-513-514-515-516-517-518-519-520-521-522-523-524-525-526-527-528-529-530-531-532-533-534-535-536-537-538-539-540-541-542-543-544-545-546-547-548-549-550-551-552-553-554-555-556-557-558-559-560-561-562-563-564-565-566-567-568-569-570-571-572-573-574-575-576-577-578-579-580-581-582-583-584-585-586-587-588-589-590-591-592-593-594-595-596-597-598-599-600-601-602-603-604-605-606-607-608-609-610-611-612-613-614-615-616-617-618-619-620-621-622-623-624-625-626-627-628-629-630-631-632-633-634-635-636-637-638-639-640-641-642-643-644-645-646-647-648-649-650-651-652-653-654-655-656-657-658-659-660-661-662-663-664-665-666-667-668-669-670-671-672-673-674-675-676-677-678-679-680-681-682-683-684-685-686-687-688-689-690-691-692-693-694-695-696-697-698-699-700-701-702-703-704-705-706-707-708-709-710-711-712-713-714-715-716-717-718-719-720-721-722-723-724-725-726-727-728-729-730-731-732-733-734-735-736-737-738-739-740-741-742-743-744-745-746-747-748-749-750-751-752-753-754-755-756-757-758-759-760-761-762-763-764-765-766-767-768-769-770-771-772-773-774-775-776-777-778-779-780-781-782-783-784-785-786-787-788-789-790-791-792-793-794-795-796-797-798-799-800-801-802-803-804-805-806-807-808-809-810-811-812-813-814-815-816-817-818-819-820-821-822-823-824-825-826-827-828-829-830-831-832-833-834-835-836-837-838-839-840-841-842-843-844-845-846-847-848-849-850-851-852-853-854-855-856-857-858-859-860-861-862-863-864-865-866-867-868-869-870-871-872-873-874-875-876-877-878-879-880-881-882-883-884-885-886-887-888-889-890-891-892-893-894-895-896-897-898-899-900-901-902-903-904-905-906-907-908-909-910-911-912-913-914-915-916-917-918-919-920-921-922-923-924-925-926-927-928-929-930-931-932-933-934-935-936-937-938-939-940-941-942-943-944-945-946-947-948-949-950-951-952-953-954-955-956-957-958-959-960-961-962-963-964-965-966-967-968-969-970-971-972-973-974-975-976-977-978-979-980-981-982-983-984-985-986-987-988-989-990-991-992-993-994-995-996-997-998-999-1000-1001-1002-1003-1004-1005-1006-1007-1008-1009-1010-1011-1012-1013-1014-1015-1016-1017-1018-1019-1020-1021-1022-1023-1024-1025-1026-1027-1028-1029-1030-1031-1032-1033-1034-1035-1036-1037-1038-1039-1040-1041-1042-1043-1044-1045-1046-1047-1048-1049-1050-1051-1052-1053-1054-1055-1056-1057-1058-1059-1060-1061-1062-1063-1064-1065-1066-1067-1068-1069-1070-1071-1072-1073-1074-1075-1076-1077-1078-1079-1080-1081-1082-1083-1084-1085-1086-1087-1088-1089-1090-1091-1092-1093-1094-1095-1096-1097-1098-1099-1100-1101-1102-1103-1104-1105-1106-1107-1108-1109-1110-1111-1112-1113-1114-1115-1116-1117-1118-1119-1120-1121-1122-1123-1124-1125-1126-1127-1128-1129-1130-1131-1132-1133-1134-1135-1136-1137-1138-1139-1140-1141-1142-1143-1144-1145-1146-1147-1148-1149-1150-1151-1152-1153-1154-1155-1156-1157-1158-1159-1160-1161-1162-1163-1164-1165-1166-1167-1168-1169-1170-1171-1172-1173-1174-1175-1176-1177-1178-1179-1180-1181-1182-1183-1184-1185-1186-1187-1188-1189-1190-1191-1192-1193-1194-1195-1196-1197-1198-1199-1200-1201-1202-1203-1204-1205-1206-1207-1208-1209-1210-1211-1212-1213-1214-1215-1216-1217-1218-1219-1220-1221-12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The Yaws Handbook of Vapor Pressure:
 Infinite dilution activity coefficients, specific retention volumes and densities, viscosities, speeds of sound, bulk moduli, surface tensions and boiling and critical temperatures and pressures of pure compounds at T critical: Alkane (n-Hexadecane to n-Dodecane) + an Aromatic Compound
 Physical Properties of Binary Mixtures of Ethyl-1-Formate With Benzene, Isopropyl Benzene, Isobutyl Benzene, and Butylbenzene at (303.15, 308.15, and 313.15) K
 Excess Enthalpies of Chloroalkylbenzene + Alkylbenzene Mixtures
 Evaluation of 1-ethyl-3-methylimidazolium Determination of Activity Coefficients at Infinite Dilution of Sulfate and Sulfonate Salts in Aqueous Media
 Solvents for Extraction of Polymeric Compounds
 Density of the Binary Mixture of Ethylbenzene and n-Tetradecane Using Hexafluorophosphate-Based Ionic Liquids at 313.15 and 318.15 K
 Viscosities and Relative Indices of Binary Mixtures of Anisole with Benzene, Methyl Benzene, Ethylbenzene, Propylbenzene, and Butylbenzene at (293.15 and 303.15) K
 Surface Tensions, Bulk Moduli, and Speeds of Sound of Binary Mixtures of Ethylbenzene and n-Tetradecane
 Extractions of n-Tetradecane and n-Hexadecane using 4-Methyl-N-hexylpyridinium Tetrafluoroborate, [4][Py][BF₄], as an Extractant
 Density of Binary Mixtures of 2,2,4,4,6,6-Hexafluorobutane-1-thiol and 2,2,4,4,6,6-Hexafluorobutane-1-thiol as a Potential Surrogate Mixtures for Military Jet Fuel, JP-5:

<https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure>
<https://www.doi.org/10.1016/j.fluid.2006.07.015>
<https://www.doi.org/10.1021/acs.jced.7b00466>
<https://www.doi.org/10.1021/je901071x>
<http://onschallenge.wikispaces.com/file/view/AqueousDataset002.xlsx/351826032/AqueousDataset002.xlsx>
<https://www.doi.org/10.1021/je900689m>
<https://www.cheric.org/files/research/kdb/mol/mol665.mol>
<https://www.doi.org/10.1021/je7002447>
<https://www.doi.org/10.1016/j.fluid.2017.09.011>
<https://www.doi.org/10.1021/acs.jced.8b00635>
<https://www.doi.org/10.1021/acs.jced.8b00356>
<http://link.springer.com/article/10.1007/BF02311772>
<https://www.doi.org/10.1021/je0502546>
http://pubs.acs.org/doi/suppl/10.1021/ci034243x/suppl_file/ci034243xsi20040112_053635.txt
<https://www.doi.org/10.1021/acs.jced.8b01233>
<https://www.doi.org/10.1016/j.jct.2011.06.009>

af:	Acentric Factor
affp:	Proton affinity
basg:	Gas basicity
chl:	Standard liquid enthalpy of combustion
cpg:	Ideal gas heat capacity
cpl:	Liquid phase heat capacity
dm:	Dipole Moment
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
nfpaf:	NFPA Fire Rating

nfpah:	NFPA Health Rating
pc:	Critical Pressure
pvap:	Vapor pressure
rfi:	Refractive Index
rhoc:	Critical density
rhof:	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
tf:	Normal melting (fusion) point
tt:	Triple Point Temperature
vc:	Critical Volume
zc:	Critical Compressibility

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