

Mesitylene

Other names:	1,3,5-Trimethylbenzene
	1,3,5-trimethylbenzene (mesitylene)
	2,4,6-Trimethylbenzene
	3,5-Dimethyltoluene
	Benzene, 1,3,5-trimethyl-
	FLEET-X
	NSC 9273
	S-TRIMETHYLBENEZENE
	TMB
	UN 2325
	s-Trimethylbenzene
	sym-Trimethylbenzene
	InChI=1S/C9H12/c1-7-4-8(2)6-9(3)5-7/h4-6H,1-3H3
Inchi:	
InchiKey:	AUHZEENZYGFFBQ-UHFFFAOYSA-N
Formula:	C9H12
SMILES:	Cc1cc(C)cc(C)c1
Mol. weight [g/mol]:	120.19
CAS:	108-67-8

Physical Properties

Property code	Value	Unit	Source
af	0.3990		KDB
affp	835.10	kJ/mol	NIST Webbook
affp	836.20	kJ/mol	NIST Webbook
basg	808.60	kJ/mol	NIST Webbook
basg	808.80	kJ/mol	NIST Webbook
chl	-5202.70	kJ/mol	NIST Webbook
chl	-5193.10 ± 1.30	kJ/mol	NIST Webbook
cpl	207.43	J/molxK	Thermodynamics of mixtures involving some (benzene derivatives + benzonitrile)
dm	0.10	debye	
gf	118.00	kJ/mol	KDB
hcg	5193.14	kJ/mol	KDB
hcn	4929.045	kJ/mol	KDB
hf	-16.08	kJ/mol	KDB
hfus	12.33	kJ/mol	Joback Method

hvap	39.23	kJ/mol	Joback Method
ie	8.20 ± 0.10	eV	NIST Webbook
ie	8.65 ± 0.03	eV	NIST Webbook
ie	8.46	eV	NIST Webbook
ie	8.45 ± 0.05	eV	NIST Webbook
ie	8.45	eV	NIST Webbook
ie	8.42	eV	NIST Webbook
ie	8.42	eV	NIST Webbook
ie	8.41 ± 0.02	eV	NIST Webbook
ie	8.39 ± 0.01	eV	NIST Webbook
ie	8.55	eV	NIST Webbook
ie	8.40 ± 0.01	eV	NIST Webbook
ie	8.41 ± 0.01	eV	NIST Webbook
ie	8.47	eV	NIST Webbook
ie	8.40 ± 0.01	eV	NIST Webbook
ie	8.45 ± 0.05	eV	NIST Webbook
log10ws	-3.40		Estimated Solubility Method
log10ws	-3.40		Aqueous Solubility Prediction Method
logp	2.612		Crippen Method
mcvol	113.910	ml/mol	McGowan Method
pc	3130.00 ± 40.00	kPa	NIST Webbook
pc	3255.00 ± 0.32	kPa	NIST Webbook
pc	3127.00 ± 6.00	kPa	NIST Webbook
pc	3260.00 ± 9.81	kPa	NIST Webbook
pc	3161.90 ± 0.31	kPa	NIST Webbook
pc	3127.00	kPa	KDB
rinpol	963.00		NIST Webbook
rinpol	963.30		NIST Webbook
rinpol	973.50		NIST Webbook
rinpol	957.00		NIST Webbook
rinpol	972.00		NIST Webbook
rinpol	964.70		NIST Webbook
rinpol	965.00		NIST Webbook
rinpol	965.40		NIST Webbook
rinpol	964.60		NIST Webbook
rinpol	965.00		NIST Webbook
rinpol	965.00		NIST Webbook
rinpol	967.10		NIST Webbook
rinpol	969.00		NIST Webbook
rinpol	965.50		NIST Webbook
rinpol	965.50		NIST Webbook
rinpol	962.70		NIST Webbook
rinpol	988.00		NIST Webbook

rinpol	1000.00	NIST Webbook
rinpol	990.00	NIST Webbook
rinpol	1000.00	NIST Webbook
rinpol	1000.00	NIST Webbook
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rinpol	995.00	NIST Webbook
rinpol	1002.00	NIST Webbook
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rinpol	953.27	NIST Webbook
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rinpol	953.37	NIST Webbook
rinpol	953.00	NIST Webbook
rinpol	997.20	NIST Webbook
rinpol	978.22	NIST Webbook
rinpol	956.00	NIST Webbook
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rinpol	974.00	NIST Webbook
rinpol	1003.00	NIST Webbook
rinpol	985.00	NIST Webbook
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rinpol	963.00	NIST Webbook
rinpol	956.18	NIST Webbook
rinpol	958.00	NIST Webbook
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ripol	1220.30	NIST Webbook
ripol	1236.90	NIST Webbook
ripol	1300.70	NIST Webbook
ripol	1217.00	NIST Webbook
ripol	1241.00	NIST Webbook
ripol	1220.00	NIST Webbook

ripol	1242.00		NIST Webbook
sg	385.30 ± 0.63	J/mol×K	NIST Webbook
sl	273.55	J/mol×K	NIST Webbook
tb	437.89	K	KDB
tb	437.83	K	Phase equilibria of three binary systems containing 2,5-dimethylthiophene and 2-ethylthiophene in hydrocarbons
tc	637.30	K	KDB
tf	228.40	K	KDB
tf	228.23	K	Aqueous Solubility Prediction Method
tt	228.42 ± 0.01	K	NIST Webbook
vc	0.431	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	229.86	J/mol×K	476.96	Joback Method
cpg	216.81	J/mol×K	441.96	Joback Method
cpg	285.90	J/mol×K	651.95	Joback Method
cpg	275.86	J/mol×K	616.95	Joback Method
cpg	265.25	J/mol×K	581.96	Joback Method
cpg	254.06	J/mol×K	546.96	Joback Method
cpg	242.27	J/mol×K	511.96	Joback Method
cpl	207.85	J/mol×K	298.15	NIST Webbook
cpl	205.50	J/mol×K	294.99	NIST Webbook
cpl	211.30	J/mol×K	298.00	NIST Webbook
cpl	213.00	J/mol×K	298.00	NIST Webbook
cpl	209.33	J/mol×K	298.15	NIST Webbook
cpl	201.46	J/mol×K	299.80	NIST Webbook
cpl	206.50	J/mol×K	298.00	NIST Webbook
cpl	207.69	J/mol×K	298.15	NIST Webbook
cpl	207.66	J/mol×K	298.15	NIST Webbook

dvisc	0.0007540	Paxs	288.15	Viscosities, Densities, and Speeds of Sound of Binary Mixtures of Benzene, Toluene, o-Xylene, m-Xylene, p-Xylene, and Mesitylene with Anisole at (288.15, 293.15, 298.15, and 303.15) K
dvisc	0.0005792	Paxs	308.15	Ultrasonic and viscometric study of molecular interactions in binary mixtures of aniline with 1-propanol, 2-propanol, 2-methyl-1-propanol, and 2-methyl-2-propanol at different temperatures
dvisc	0.0005066	Paxs	318.15	Ultrasonic and viscometric study of molecular interactions in binary mixtures of aniline with 1-propanol, 2-propanol, 2-methyl-1-propanol, and 2-methyl-2-propanol at different temperatures
dvisc	0.0006572	Paxs	298.15	Ultrasonic and viscometric study of molecular interactions in binary mixtures of aniline with 1-propanol, 2-propanol, 2-methyl-1-propanol, and 2-methyl-2-propanol at different temperatures

dvisc	0.0007050	Paxs	293.15	Viscosities, Densities, and Speeds of Sound of Binary Mixtures of Benzene, Toluene, o-Xylene, m-Xylene, p-Xylene, and Mesitylene with Anisole at (288.15, 293.15, 298.15, and 303.15) K
dvisc	0.0006610	Paxs	298.15	Viscosities, Densities, and Speeds of Sound of Binary Mixtures of Benzene, Toluene, o-Xylene, m-Xylene, p-Xylene, and Mesitylene with Anisole at (288.15, 293.15, 298.15, and 303.15) K
dvisc	0.0006210	Paxs	303.15	Viscosities, Densities, and Speeds of Sound of Binary Mixtures of Benzene, Toluene, o-Xylene, m-Xylene, p-Xylene, and Mesitylene with Anisole at (288.15, 293.15, 298.15, and 303.15) K
dvisc	0.0008500	Paxs	278.15	Shear Viscosity of Mixtures of r-Tocopherol with Nonpolar Solvents
dvisc	0.0008000	Paxs	284.15	Shear Viscosity of Mixtures of r-Tocopherol with Nonpolar Solvents
dvisc	0.0007500	Paxs	290.15	Shear Viscosity of Mixtures of r-Tocopherol with Nonpolar Solvents

dvisc	0.0006300	Paxs	296.15	Shear Viscosity of Mixtures of r-Tocopherol with Nonpolar Solvents
dvisc	0.0005700	Paxs	302.15	Shear Viscosity of Mixtures of r-Tocopherol with Nonpolar Solvents
dvisc	0.0005300	Paxs	308.15	Shear Viscosity of Mixtures of r-Tocopherol with Nonpolar Solvents
dvisc	0.0004900	Paxs	314.15	Shear Viscosity of Mixtures of r-Tocopherol with Nonpolar Solvents
dvisc	0.0004600	Paxs	320.15	Shear Viscosity of Mixtures of r-Tocopherol with Nonpolar Solvents
dvisc	0.0004400	Paxs	325.15	Shear Viscosity of Mixtures of r-Tocopherol with Nonpolar Solvents
dvisc	0.0004100	Paxs	330.15	Shear Viscosity of Mixtures of r-Tocopherol with Nonpolar Solvents
dvisc	0.0004000	Paxs	335.15	Shear Viscosity of Mixtures of r-Tocopherol with Nonpolar Solvents
dvisc	0.0003400	Paxs	350.15	Shear Viscosity of Mixtures of r-Tocopherol with Nonpolar Solvents
dvisc	0.0003500	Paxs	345.15	Shear Viscosity of Mixtures of r-Tocopherol with Nonpolar Solvents
dvisc	0.0003900	Paxs	340.15	Shear Viscosity of Mixtures of r-Tocopherol with Nonpolar Solvents
hfust	9.51	kJ/mol	228.40	NIST Webbook
hfust	9.51	kJ/mol	228.40	NIST Webbook
hvapt	46.20 ± 1.30	kJ/mol	319.00	NIST Webbook
hvapt	51.10	kJ/mol	261.50	NIST Webbook

hvapt	47.70	kJ/mol	286.00	NIST Webbook
hvapt	43.90	kJ/mol	399.50	NIST Webbook
hvapt	49.70	kJ/mol	302.50	NIST Webbook
hvapt	43.50	kJ/mol	386.00	NIST Webbook
pvap	101.33	kPa	437.83	Phase equilibria of three binary systems containing 2,5-dimethylthiophene and 2-ethylthiophene in hydrocarbons
rfi	1.49180		308.15	Refractive Indices of Binary Mixtures of Tetrahydrofuran with Aromatic Hydrocarbon at Temperatures from (288.15 to 318.15) K
rfi	1.49440		303.15	Densities, Refractive Indices, and Excess Properties of Binary Mixtures of 1,4-Dioxane with Benzene, Toluene, o-Xylene, m-Xylene, p-Xylene, and Mesitylene at Temperatures from (288.15 to 318.15) K
rfi	1.49690		298.15	Densities, Refractive Indices, and Excess Properties of Binary Mixtures of 1,4-Dioxane with Benzene, Toluene, o-Xylene, m-Xylene, p-Xylene, and Mesitylene at Temperatures from (288.15 to 318.15) K

rfi	1.49950	293.15	Densities, Refractive Indices, and Excess Properties of Binary Mixtures of 1,4-Dioxane with Benzene, Toluene, o-Xylene, m-Xylene, p-Xylene, and Mesitylene at Temperatures from (288.15 to 318.15) K
rfi	1.50200	288.15	Densities, Refractive Indices, and Excess Properties of Binary Mixtures of 1,4-Dioxane with Benzene, Toluene, o-Xylene, m-Xylene, p-Xylene, and Mesitylene at Temperatures from (288.15 to 318.15) K
rfi	1.49180	308.15	Densities, Refractive Indices, and Excess Properties of Binary Mixtures of 1,4-Dioxane with Benzene, Toluene, o-Xylene, m-Xylene, p-Xylene, and Mesitylene at Temperatures from (288.15 to 318.15) K
rfi	1.48930	313.15	Densities, Refractive Indices, and Excess Properties of Binary Mixtures of 1,4-Dioxane with Benzene, Toluene, o-Xylene, m-Xylene, p-Xylene, and Mesitylene at Temperatures from (288.15 to 318.15) K

rfi	1.48680	318.15	Densities, Refractive Indices, and Excess Properties of Binary Mixtures of 1,4-Dioxane with Benzene, Toluene, o-Xylene, m-Xylene, p-Xylene, and Mesitylene at Temperatures from (288.15 to 318.15) K
rfi	1.49693	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	1.48923	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
rfi	1.49760	298.15	Excess molar volumes and refractive indices of (methoxybenzene + benzene, or toluene, or o-xylene, or m-xylene, or p-xylene, or mesitylene) binary mixtures between T = (288.15 to 303.15) K
rfi	1.49684	298.15	KDB

rfi	1.49682	298.15	Effect of Temperature on the Change of Refractive Index on Mixing for Butyl Acetate + Aromatic Hydrocarbons
rfi	1.49580	298.15	Thermodynamic properties of (tetradecane + benzene, + toluene, + chlorobenzene, + bromobenzene, + anisole) binary mixtures at T = (298.15, 303.15, and 308.15) K
rfi	1.48980	298.15	Thermodynamic properties of (tetradecane + benzene, + toluene, + chlorobenzene, + bromobenzene, + anisole) binary mixtures at T = (298.15, 303.15, and 308.15) K
rfi	1.49280	303.15	Thermodynamic properties of (tetradecane + benzene, + toluene, + chlorobenzene, + bromobenzene, + anisole) binary mixtures at T = (298.15, 303.15, and 308.15) K
rfi	1.48980	308.15	Thermodynamic properties of (tetradecane + benzene, + toluene, + chlorobenzene, + bromobenzene, + anisole) binary mixtures at T = (298.15, 303.15, and 308.15) K
rfi	1.48680	318.15	Refractive Indices of Binary Mixtures of Tetrahydrofuran with Aromatic Hydrocarbon at Temperatures from (288.15 to 318.15) K

rfi	1.49360	303.15	Excess and deviation properties for the binary mixtures of methylcyclohexane with benzene, toluene, p-xylene, mesitylene, and anisole at T = (298.15, 303.15, and 308.15) K
rfi	1.49130	308.15	Excess and deviation properties for the binary mixtures of methylcyclohexane with benzene, toluene, p-xylene, mesitylene, and anisole at T = (298.15, 303.15, and 308.15) K
rfi	1.50450	288.15	Excess molar volumes and refractive indices of (methoxybenzene + benzene, or toluene, or o-xylene, or m-xylene, or p-xylene, or mesitylene) binary mixtures between T = (288.15 to 303.15) K
rfi	1.49930	293.15	Excess molar volumes and refractive indices of (methoxybenzene + benzene, or toluene, or o-xylene, or m-xylene, or p-xylene, or mesitylene) binary mixtures between T = (288.15 to 303.15) K
rfi	1.48930	313.15	Refractive Indices of Binary Mixtures of Tetrahydrofuran with Aromatic Hydrocarbon at Temperatures from (288.15 to 318.15) K

rfi	1.49480	303.15	Excess molar volumes and refractive indices of (methoxybenzene + benzene, or toluene, or o-xylene, or m-xylene, or p-xylene, or mesitylene) binary mixtures between T = (288.15 to 303.15) K
rfi	1.49670	298.15	Excess molar volumes of (octane + benzene, or toluene, or 1,3-xylene, or 1,3,5-trimethylbenzene) at temperatures between (298.15 and 328.15) K
rfi	1.49920	293.10	Liquid-Liquid Equilibria Measurements for Ternary System of Hexadecane + 1,3,5-Trimethylbenzene + N-Methyl-2-pyrrolidone
rfi	1.50200	288.15	Refractive Indices of Binary Mixtures of Tetrahydrofuran with Aromatic Hydrocarbon at Temperatures from (288.15 to 318.15) K
rfi	1.49950	293.15	Refractive Indices of Binary Mixtures of Tetrahydrofuran with Aromatic Hydrocarbon at Temperatures from (288.15 to 318.15) K
rfi	1.49690	298.15	Refractive Indices of Binary Mixtures of Tetrahydrofuran with Aromatic Hydrocarbon at Temperatures from (288.15 to 318.15) K

rfi	1.49440		303.15	Refractive Indices of Binary Mixtures of Tetrahydrofuran with Aromatic Hydrocarbon at Temperatures from (288.15 to 318.15) K
rfi	1.49600		298.15	Excess and deviation properties for the binary mixtures of methylcyclohexane with benzene, toluene, p-xylene, mesitylene, and anisole at T = (298.15, 303.15, and 308.15) K
rhoI	853.30	kg/m3	308.15	Densities and Dynamic Viscosities of Alicyclic Cyclohexane with Toluene, o-Xylene, and Mesitylene at T = (303.15 to 323.15) K and Atmospheric Pressure
rhoI	859.70	kg/m3	298.20	Liquid-liquid equilibrium for methyl butyl ketone + o-, m-, p-cresol + water ternary systems and COSMO-SAC predictions
rhoI	852.66	kg/m3	308.15	Acoustic and thermodynamic properties of binary mixtures of 1-nonanol with o-xylene, m-xylene, p-xylene, ethylbenzene and mesitylene at T = (298.15 and 308.15) K

rhoI	860.86	kg/m3	298.15	Acoustic and thermodynamic properties of binary mixtures of 1-nonanol with o-xylene, m-xylene, p-xylene, ethylbenzene and mesitylene at T = (298.15 and 308.15) K
rhoI	840.90	kg/m3	323.15	Densities and Dynamic Viscosities of Alicyclic Cyclohexane with Toluene, o-Xylene, and Mesitylene at T = (303.15 to 323.15) K and Atmospheric Pressure
rhoI	818.50	kg/m3	343.15	Densities and volumetric properties of (N-acetylmorpholine + aromatic hydrocarbon) binary mixtures from T = (293.15 to 343.15) K
rhoI	826.60	kg/m3	333.15	Densities and volumetric properties of (N-acetylmorpholine + aromatic hydrocarbon) binary mixtures from T = (293.15 to 343.15) K
rhoI	861.45	kg/m3	298.15	Densities and Volumetric Properties of Binary Mixtures of Butyl Acrylate with Benzene, Toluene, o-Xylene, m-Xylene, p-Xylene, and Mesitylene at Temperatures from 288.15 K to 318.15 K

rhoI	861.03	kg/m3	298.15	Excess Molar Volumes and Surface Tensions of 1,2,4-Trimethylbenzene and 1,3,5-Trimethylbenzene with 1-Butanol, 2-Methyl-1-propanol, 2-Butanol, and 2-Methyl-2-propanol at 298.15 K
rhoI	861.03	kg/m3	298.15	Excess Molar volumes and Surface Tensions of Trimethylbenzene with Tetrahydrofuran Tetrachloromethane and Dimethylsulfoxide at 298.15 K
rhoI	845.10	kg/m3	318.15	Densities and Dynamic Viscosities of Alicyclic Cyclohexane with Toluene, o-Xylene, and Mesitylene at T = (303.15 to 323.15) K and Atmospheric Pressure
rhoI	865.00	kg/m3	293.00	KDB
rhoI	869.28	kg/m3	288.15	Densities and Volumetric Properties of Binary Mixtures of Butyl Acrylate with Benzene, Toluene, o-Xylene, m-Xylene, p-Xylene, and Mesitylene at Temperatures from 288.15 K to 318.15 K
rhoI	865.37	kg/m3	293.15	Densities and Volumetric Properties of Binary Mixtures of Butyl Acrylate with Benzene, Toluene, o-Xylene, m-Xylene, p-Xylene, and Mesitylene at Temperatures from 288.15 K to 318.15 K

rhoI	842.80	kg/m3	313.15	Densities and volumetric properties of (N-acetylmorpholine + aromatic hydrocarbon) binary mixtures from T = (293.15 to 343.15) K
rhoI	857.54	kg/m3	303.15	Densities and Volumetric Properties of Binary Mixtures of Butyl Acrylate with Benzene, Toluene, o-Xylene, m-Xylene, p-Xylene, and Mesitylene at Temperatures from 288.15 K to 318.15 K
rhoI	853.63	kg/m3	308.15	Densities and Volumetric Properties of Binary Mixtures of Butyl Acrylate with Benzene, Toluene, o-Xylene, m-Xylene, p-Xylene, and Mesitylene at Temperatures from 288.15 K to 318.15 K
rhoI	849.71	kg/m3	313.15	Densities and Volumetric Properties of Binary Mixtures of Butyl Acrylate with Benzene, Toluene, o-Xylene, m-Xylene, p-Xylene, and Mesitylene at Temperatures from 288.15 K to 318.15 K
rhoI	845.80	kg/m3	318.15	Densities and Volumetric Properties of Binary Mixtures of Butyl Acrylate with Benzene, Toluene, o-Xylene, m-Xylene, p-Xylene, and Mesitylene at Temperatures from 288.15 K to 318.15 K

rhoI	865.10	kg/m3	293.15	Densities and volumetric properties of (N-acetylmorpholine + aromatic hydrocarbon) binary mixtures from T = (293.15 to 343.15) K
rhoI	856.90	kg/m3	303.15	Densities and volumetric properties of (N-acetylmorpholine + aromatic hydrocarbon) binary mixtures from T = (293.15 to 343.15) K
rhoI	849.30	kg/m3	313.15	Densities and Dynamic Viscosities of Alicyclic Cyclohexane with Toluene, o-Xylene, and Mesitylene at T = (303.15 to 323.15) K and Atmospheric Pressure
rhoI	834.70	kg/m3	323.15	Densities and volumetric properties of (N-acetylmorpholine + aromatic hydrocarbon) binary mixtures from T = (293.15 to 343.15) K
rhoI	857.40	kg/m3	303.15	Densities and Dynamic Viscosities of Alicyclic Cyclohexane with Toluene, o-Xylene, and Mesitylene at T = (303.15 to 323.15) K and Atmospheric Pressure
speedsl	1339.80	m/s	298.15	Physicochemical study of intermolecular interactions in 1,4-dioxane + aromatic hydrocarbons binary mixtures at different temperatures by using ultrasonic and viscometric methods

speedsl	1300.20	m/s	308.15	Physicochemical study of intermolecular interactions in 1,4-dioxane + aromatic hydrocarbons binary mixtures at different temperatures by using ultrasonic and viscometric methods
speedsl	1280.40	m/s	313.15	Physicochemical study of intermolecular interactions in 1,4-dioxane + aromatic hydrocarbons binary mixtures at different temperatures by using ultrasonic and viscometric methods
speedsl	1263.00	m/s	318.15	Physicochemical study of intermolecular interactions in 1,4-dioxane + aromatic hydrocarbons binary mixtures at different temperatures by using ultrasonic and viscometric methods
speedsl	1360.40	m/s	293.15	Physicochemical study of intermolecular interactions in 1,4-dioxane + aromatic hydrocarbons binary mixtures at different temperatures by using ultrasonic and viscometric methods
speedsl	1319.60	m/s	303.15	Physicochemical study of intermolecular interactions in 1,4-dioxane + aromatic hydrocarbons binary mixtures at different temperatures by using ultrasonic and viscometric methods

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

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

srf	0.03	N/m	298.15	Densities, surface tensions, and derived surface thermodynamics properties of (trimethylbenzene + propyl acetate, or butyl acetate) from T = 298.15 K to 313.15 K
srf	0.03	N/m	313.15	Densities, surface tensions, and derived surface thermodynamics properties of (trimethylbenzene + propyl acetate, or butyl acetate) from T = 298.15 K to 313.15 K
srf	0.03	N/m	298.15	Excess Molar Volumes and Surface Tensions of 1,2,4-Trimethylbenzene and 1,3,5-Trimethylbenzene with 1,1-Diethoxyethane and 2,2-Dimethoxypropane at (298.15, 308.15, and 313.15) K
tcondl	0.13	W/m×K	332.16	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons
tcondl	0.13	W/m×K	331.99	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons

tcondl	0.13	W/m×K	332.28	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons
tcondl	0.13	W/m×K	313.60	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons
tcondl	0.13	W/m×K	313.44	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons
tcondl	0.14	W/m×K	296.66	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons
tcondl	0.14	W/m×K	296.53	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons

tcondl	0.13	W/m×K	313.73	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons
tcondl	0.14	W/m×K	277.16	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons
tcondl	0.14	W/m×K	277.04	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons
tcondl	0.14	W/m×K	276.88	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons
tcondl	0.14	W/m×K	258.95	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons

tcondl	0.14	W/m×K	258.83	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons
tcondl	0.14	W/m×K	258.66	Thermal Conductivity and Thermal Diffusivity of Twenty-Nine Liquids: Alkenes, Cyclic (Alkanes, Alkenes, Alkadienes, Aromatics), and Deuterated Hydrocarbons
tcondl	0.14	W/m×K	296.36	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	$\ln(P_{vp}) = A + B/T + C \cdot \ln(T) + D \cdot T^2$
Coeff. A	8.58665e+01
Coeff. B	-8.51220e+03
Coeff. C	-1.03429e+01
Coeff. D	5.70952e-06
Temperature range (K), min.	228.46
Temperature range (K), max.	637.38

Sources

[illegible]

Liquid-liquid equilibria for ternary systems water + acetic acid + pentan-3-one and benzene and water. Binary Mixtures of Ethyl Acrylate with Benzene, Propylene Glycol Dimethyl Ether, Diethyl Ether, Methyl Ethyl Ketone, and Toluene at Temperatures from 288.15 K to 318.15 K: aromatic solvents and alcohols: Experimental data and modeling with CPA EoS: Viscosities, Densities, and Speeds of Sound of Binary Mixtures of Benzene, Toluene, o-xylene, m-xylene, p-xylene, and mesitylene at 288.15, 293.15, 298.15, and 303.15 K: xylene, or p-xylene, or mesitylene) binary mixtures between $T = (288.15 \text{ to } 303.15)$ K:

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<https://www.doi.org/10.1021/je3010535>

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Excess and deviation properties for the binary mixtures of methylcyclohexane with benzene, chloroform, diethyl ether and Excess Properties of Binary Mixtures of Methylcyclohexane with Benzene, chloroform, diethyl ether, and ethyl acetate in vapor-liquid equilibrium, and in liquid-liquid equilibrium, and in mesophase-liquid equilibrium, and in mesophase-liquid equilibrium from 298.15 to 343.15 K, 2,2-bicyclocloctanium bis(trimethylammonium) sulfonates, involving some benzene derivatives, + benzene, binary diffusivities of Aniline, Styrene, and Mesitylene in Supercritical Carbon Dioxide;

<https://www.doi.org/10.1021/je7000254>

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
hfus:	Enthalpy of fusion at standard conditions
hfust:	Enthalpy of fusion at a given temperature
hvap:	Enthalpy of vaporization at standard conditions
hvapt:	Enthalpy of vaporization at a given temperature
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
pvap:	Vapor pressure
rfi:	Refractive Index
rho:	Liquid Density
rinpol:	Non-polar retention indices
ripol:	Polar retention indices
sg:	Molar entropy at standard conditions
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
tcondl:	Liquid thermal conductivity
tf:	Normal melting (fusion) point
tt:	Triple Point Temperature
vc:	Critical Volume

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