

Propane, 2-ethoxy-2-methyl-

Other names:	2-Ethoxy-2-methylpropane 4,4-dimethyl-3-oxapentane Ether, tert-butyl ethyl Ethyl tert-butyl ether Ethyl tert-butyl oxide ethyl 1,1-dimethylethyl ether t-Butyl ethyl ether tert-Butyl Ethyl ether tert-C4H9OC2H5
Inchi:	InChI=1S/C6H14O/c1-5-7-6(2,3)4/h5H2,1-4H3
InchiKey:	NUMQCACRALPSHD-UHFFFAOYSA-N
Formula:	C6H14O
SMILES:	CCOC(C)(C)C
Mol. weight [g/mol]:	102.17
CAS:	637-92-3

Physical Properties

Property code	Value	Unit	Source
affp	856.00	kJ/mol	NIST Webbook
basg	826.90	kJ/mol	NIST Webbook
gf	-102.52	kJ/mol	Joback Method
hf	-314.00 ± 2.00	kJ/mol	NIST Webbook
hf	-317.80	kJ/mol	NIST Webbook
hfl	-350.80 ± 2.60	kJ/mol	NIST Webbook
hfus	5.07	kJ/mol	Joback Method
hvap	33.10 ± 0.40	kJ/mol	NIST Webbook
hvap	32.97	kJ/mol	NIST Webbook
ie	9.39 ± 0.01	eV	NIST Webbook
log10ws	-1.53		Crippen Method
logp	1.821		Crippen Method
mcvol	101.270	ml/mol	McGowan Method
pc	3114.04	kPa	Joback Method
rinpol	587.00		NIST Webbook
rinpol	615.40		NIST Webbook
rinpol	620.00		NIST Webbook
rinpol	621.00		NIST Webbook
rinpol	616.00		NIST Webbook

rinpol	612.70		NIST Webbook
rinpol	612.00		NIST Webbook
rinpol	612.70		NIST Webbook
rinpol	586.00		NIST Webbook
rinpol	620.00		NIST Webbook
rinpol	624.00		NIST Webbook
rinpol	620.00		NIST Webbook
rinpol	637.00		NIST Webbook
rinpol	620.00		NIST Webbook
ripol	710.00		NIST Webbook
ripol	710.00		NIST Webbook
tb	345.60	K	NIST Webbook
tb	345.90 ± 0.30	K	NIST Webbook
tb	346.10 ± 0.50	K	NIST Webbook
tb	346.30	K	NIST Webbook
tc	531.48	K	Joback Method
tf	179.15 ± 0.20	K	NIST Webbook
vc	0.379	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	205.32	J/mol×K	414.41	Joback Method
cpg	245.69	J/mol×K	531.48	Joback Method
cpg	182.43	J/mol×K	355.87	Joback Method
cpg	236.25	J/mol×K	502.21	Joback Method
cpg	226.37	J/mol×K	472.94	Joback Method
cpg	216.07	J/mol×K	443.68	Joback Method
cpg	194.11	J/mol×K	385.14	Joback Method
cpl	218.00	J/mol×K	298.00	NIST Webbook
dvisc	0.0005320	Pa×s	293.15	Viscosities of binary mixtures of some n-ethoxyethanols with ethyl tert-butyl ether at T = (293.15, 298.15, and 303.15) K

dvisc	0.0005040	Pa×s	298.15	Viscosities of binary mixtures of some n-ethoxyethanols with ethyl tert-butyl ether at T = (293.15, 298.15, and 303.15) K
dvisc	0.0004780	Pa×s	303.15	Viscosities of binary mixtures of some n-ethoxyethanols with ethyl tert-butyl ether at T = (293.15, 298.15, and 303.15) K
hvapt	31.20	kJ/mol	373.50	NIST Webbook
hvapt	32.20	kJ/mol	325.50	NIST Webbook
hvapt	32.10	kJ/mol	326.50	NIST Webbook
hvapt	31.90	kJ/mol	329.00	NIST Webbook
hvapt	29.76	kJ/mol	345.60	NIST Webbook
hvapt	35.30	kJ/mol	299.00	NIST Webbook
hvapt	32.10	kJ/mol	329.50	NIST Webbook
hvapt	33.50	kJ/mol	315.00	NIST Webbook
pvap	74.94	kPa	336.69	Vapor Liquid Equilibrium, Excess Molar Enthalpies, and Excess Molar Volumes of Binary Mixtures Containing 2-Ethoxy-2-methylpropane or 2-Ethoxy-2-methylbutane and Acetonitrile or Propanenitrile
pvap	54.10	kPa	326.60	Vapor Liquid Equilibrium for Binary System of 2-Propanol + 2-Ethoxy-2-methylpropane and Ethyl Ethanoate + 2-Ethoxy-2-methylpropane at 333 K and 2-Propanone + 2-Ethoxy-2-methylpropane at 323 K

pvap	59.00	kPa	329.02	Vapor Liquid Equilibrium for Binary System of 2-Propanol + 2-Ethoxy-2-methylpropane and Ethyl Ethanoate + 2-Ethoxy-2-methylpropane at 333 K and 2-Propanone + 2-Ethoxy-2-methylpropane at 323 K
pvap	65.30	kPa	331.96	Vapor Liquid Equilibrium for Binary System of 2-Propanol + 2-Ethoxy-2-methylpropane and Ethyl Ethanoate + 2-Ethoxy-2-methylpropane at 333 K and 2-Propanone + 2-Ethoxy-2-methylpropane at 323 K
pvap	67.40	kPa	333.28	Vapor Liquid Equilibrium for Binary System of 2-Propanol + 2-Ethoxy-2-methylpropane and Ethyl Ethanoate + 2-Ethoxy-2-methylpropane at 333 K and 2-Propanone + 2-Ethoxy-2-methylpropane at 323 K
pvap	51.40	kPa	325.18	Vapor Liquid Equilibrium for Binary System of 2-Propanol + 2-Ethoxy-2-methylpropane and Ethyl Ethanoate + 2-Ethoxy-2-methylpropane at 333 K and 2-Propanone + 2-Ethoxy-2-methylpropane at 323 K
pvap	47.20	kPa	323.25	Vapor Liquid Equilibrium for Binary System of 2-Propanol + 2-Ethoxy-2-methylpropane and Ethyl Ethanoate + 2-Ethoxy-2-methylpropane at 333 K and 2-Propanone + 2-Ethoxy-2-methylpropane at 323 K

pvap	40.20	kPa	318.55	Vapor Liquid Equilibrium for Binary System of 2-Propanol + 2-Ethoxy-2-methylpropane and Ethyl Ethanoate + 2-Ethoxy-2-methylpropane at 333 K and 2-Propanone + 2-Ethoxy-2-methylpropane at 323 K
pvap	80.50	kPa	338.08	Vapor Liquid Equilibrium for Binary System of 2-Propanol + 2-Ethoxy-2-methylpropane and Ethyl Ethanoate + 2-Ethoxy-2-methylpropane at 333 K and 2-Propanone + 2-Ethoxy-2-methylpropane at 323 K
pvap	85.80	kPa	340.01	Vapor Liquid Equilibrium for Binary System of 2-Propanol + 2-Ethoxy-2-methylpropane and Ethyl Ethanoate + 2-Ethoxy-2-methylpropane at 333 K and 2-Propanone + 2-Ethoxy-2-methylpropane at 323 K
pvap	90.10	kPa	341.49	Vapor Liquid Equilibrium for Binary System of 2-Propanol + 2-Ethoxy-2-methylpropane and Ethyl Ethanoate + 2-Ethoxy-2-methylpropane at 333 K and 2-Propanone + 2-Ethoxy-2-methylpropane at 323 K
pvap	101.69	kPa	345.92	The thermodynamics of vaporization of ethyl tert-butyl ether, isobutyl tert-butyl ether, and di-isopropyl ether

pvap	74.80	kPa	335.92	Vapor Liquid Equilibrium for Binary System of 2-Propanol + 2-Ethoxy-2-methylpropane and Ethyl Ethanoate + 2-Ethoxy-2-methylpropane at 333 K and 2-Propanone + 2-Ethoxy-2-methylpropane at 323 K	
pvap	97.00	kPa	343.86	Vapor Liquid Equilibrium for Binary System of 2-Propanol + 2-Ethoxy-2-methylpropane and Ethyl Ethanoate + 2-Ethoxy-2-methylpropane at 333 K and 2-Propanone + 2-Ethoxy-2-methylpropane at 323 K	
pvap	31.70	kPa	312.49	Vapor Liquid Equilibrium for Binary System of 2-Propanol + 2-Ethoxy-2-methylpropane and Ethyl Ethanoate + 2-Ethoxy-2-methylpropane at 333 K and 2-Propanone + 2-Ethoxy-2-methylpropane at 323 K	
pvap	102.80	kPa	345.77	Vapor Liquid Equilibrium for Binary System of 2-Propanol + 2-Ethoxy-2-methylpropane and Ethyl Ethanoate + 2-Ethoxy-2-methylpropane at 333 K and 2-Propanone + 2-Ethoxy-2-methylpropane at 323 K	
pvap	99.60	kPa	345.25	The thermodynamics of vaporization of ethyl tert-butyl ether, isobutyl tert-butyl ether, and di-isopropyl ether	
pvap	97.44	kPa	344.57	The thermodynamics of vaporization of ethyl tert-butyl ether, isobutyl tert-butyl ether, and di-isopropyl ether	

pvap	95.31	kPa	343.89	The thermodynamics of vaporization of ethyl tert-butyl ether, isobutyl tert-butyl ether, and di-isopropyl ether	
pvap	94.30	kPa	342.88	Vapor Liquid Equilibrium for Binary System of 2-Propanol + 2-Ethoxy-2-methylpropane and Ethyl Ethanoate + 2-Ethoxy-2-methylpropane at 333 K and 2-Propanone + 2-Ethoxy-2-methylpropane at 323 K	
pvap	93.18	kPa	343.23	The thermodynamics of vaporization of ethyl tert-butyl ether, isobutyl tert-butyl ether, and di-isopropyl ether	
pvap	81.57	kPa	339.17	The thermodynamics of vaporization of ethyl tert-butyl ether, isobutyl tert-butyl ether, and di-isopropyl ether	
pvap	67.49	kPa	333.56	The thermodynamics of vaporization of ethyl tert-butyl ether, isobutyl tert-butyl ether, and di-isopropyl ether	
pvap	56.12	kPa	328.30	The thermodynamics of vaporization of ethyl tert-butyl ether, isobutyl tert-butyl ether, and di-isopropyl ether	
pvap	31.90	kPa	312.84	Phase equilibrium measurements for systems containing propanenitrile with tert-butyl ethyl ether and C4-hydrocarbons	

pvap	147.90	kPa	358.31	Phase equilibrium measurements for systems containing propanenitrile with tert-butyl ethyl ether and C4-hydrocarbons
pvap	16.83	kPa	298.25	The thermodynamics of vaporization of ethyl tert-butyl ether, isobutyl tert-butyl ether, and di-isopropyl ether
pvap	20.88	kPa	303.13	The thermodynamics of vaporization of ethyl tert-butyl ether, isobutyl tert-butyl ether, and di-isopropyl ether
pvap	79.89	kPa	338.60	Vapor Liquid Equilibrium, Excess Molar Enthalpies, and Excess Molar Volumes of Binary Mixtures Containing 2-Ethoxy-2-methylpropane or 2-Ethoxy-2-methylbutane and Acetonitrile or Propanenitrile
pvap	25.07	kPa	307.44	The thermodynamics of vaporization of ethyl tert-butyl ether, isobutyl tert-butyl ether, and di-isopropyl ether
pvap	68.91	kPa	334.21	Vapor Liquid Equilibrium, Excess Molar Enthalpies, and Excess Molar Volumes of Binary Mixtures Containing 2-Ethoxy-2-methylpropane or 2-Ethoxy-2-methylbutane and Acetonitrile or Propanenitrile

pvap	101.42	kPa	345.99	Vapor Liquid Equilibrium, Excess Molar Enthalpies, and Excess Molar Volumes of Binary Mixtures Containing 2-Ethoxy-2-methylpropane or 2-Ethoxy-2-methylbutane and Acetonitrile or Propanenitrile
pvap	91.51	kPa	342.76	Vapor Liquid Equilibrium, Excess Molar Enthalpies, and Excess Molar Volumes of Binary Mixtures Containing 2-Ethoxy-2-methylpropane or 2-Ethoxy-2-methylbutane and Acetonitrile or Propanenitrile
pvap	84.63	kPa	340.37	Vapor Liquid Equilibrium, Excess Molar Enthalpies, and Excess Molar Volumes of Binary Mixtures Containing 2-Ethoxy-2-methylpropane or 2-Ethoxy-2-methylbutane and Acetonitrile or Propanenitrile
pvap	64.28	kPa	332.26	Vapor Liquid Equilibrium, Excess Molar Enthalpies, and Excess Molar Volumes of Binary Mixtures Containing 2-Ethoxy-2-methylpropane or 2-Ethoxy-2-methylbutane and Acetonitrile or Propanenitrile
pvap	30.91	kPa	312.55	The thermodynamics of vaporization of ethyl tert-butyl ether, isobutyl tert-butyl ether, and di-isopropyl ether

pvap	40.71	kPa	319.61	Vapor Liquid Equilibrium, Excess Molar Enthalpies, and Excess Molar Volumes of Binary Mixtures Containing 2-Ethoxy-2-methylpropane or 2-Ethoxy-2-methylbutane and Acetonitrile or Propanenitrile
pvap	45.18	kPa	322.38	Vapor Liquid Equilibrium, Excess Molar Enthalpies, and Excess Molar Volumes of Binary Mixtures Containing 2-Ethoxy-2-methylpropane or 2-Ethoxy-2-methylbutane and Acetonitrile or Propanenitrile
pvap	49.34	kPa	324.77	Vapor Liquid Equilibrium, Excess Molar Enthalpies, and Excess Molar Volumes of Binary Mixtures Containing 2-Ethoxy-2-methylpropane or 2-Ethoxy-2-methylbutane and Acetonitrile or Propanenitrile
pvap	55.57	kPa	328.05	Vapor Liquid Equilibrium, Excess Molar Enthalpies, and Excess Molar Volumes of Binary Mixtures Containing 2-Ethoxy-2-methylpropane or 2-Ethoxy-2-methylbutane and Acetonitrile or Propanenitrile
pvap	60.07	kPa	330.26	Vapor Liquid Equilibrium, Excess Molar Enthalpies, and Excess Molar Volumes of Binary Mixtures Containing 2-Ethoxy-2-methylpropane or 2-Ethoxy-2-methylbutane and Acetonitrile or Propanenitrile

pvap	64.24	kPa	332.17	Vapor Liquid Equilibrium, Excess Molar Enthalpies, and Excess Molar Volumes of Binary Mixtures Containing 2-Ethoxy-2-methylpropane or 2-Ethoxy-2-methylbutane and Acetonitrile or Propanenitrile
pvap	29.66	kPa	311.54	Vapor Liquid Equilibrium, Excess Molar Enthalpies, and Excess Molar Volumes of Binary Mixtures Containing 2-Ethoxy-2-methylpropane or 2-Ethoxy-2-methylbutane and Acetonitrile or Propanenitrile
pvap	45.83	kPa	322.74	The thermodynamics of vaporization of ethyl tert-butyl ether, isobutyl tert-butyl ether, and di-isopropyl ether
pvap	37.26	kPa	317.29	The thermodynamics of vaporization of ethyl tert-butyl ether, isobutyl tert-butyl ether, and di-isopropyl ether
rfi	1.37300		298.15	Vapor liquid equilibrium for binary system of diethyl sulfide + cyclohexane at 353.15 and 343.15 K and diethyl sulfide + 2-ethoxy-2-methylpropane at 343.15 and 333.15 K
rfi	1.37319		298.15	Vapor liquid equilibrium, densities, and interfacial tensions for the system ethyl 1,1-dimethylethyl ether (ETBE) + propan-1-ol

rfi	1.37300		298.15	Vapor liquid equilibrium for binary system of thiophene + 2,2,4-trimethylpentane at 343.15 and 353.15K and thiophene + 2-ethoxy-2-methylpropane at 333.15 and 343.15K
rfi	1.37300		298.00	Vapor-Liquid Equilibrium for Dimethyl Disulfide + Butane, + trans-But-2-ene, + 2-Methylpropane, + 2-Methylpropene, + Ethanol, and 2-Ethoxy-2-methylpropane
rfi	1.37468		298.15	Atmospheric densities and interfacial tensions for 1-alkanol (1-butanol to 1-octanol) + water and ether (MTBE, ETBE, DIPE, TAME and THP) + water demixed mixtures.
rhoI	720.69	kg/m3	313.15	Volumetric properties of binary mixtures of alkoxyethanols with ethyl tert-butyl ether at various temperatures
rhoI	730.85	kg/m3	303.15	Volumetric properties of binary mixtures of alkoxyethanols with ethyl tert-butyl ether at various temperatures
rhoI	735.59	kg/m3	298.15	Volumetric properties of binary mixtures of alkoxyethanols with ethyl tert-butyl ether at various temperatures

rhoI	741.11	kg/m3	293.15	Volumetric properties of binary mixtures of alkoxyethanols with ethyl tert-butyl ether at various temperatures
rhoI	735.85	kg/m3	298.15	Azeotrope breaking for the system ethyl tert-butyl ether (ETBE) + ethanol at 313.15 K and excess properties at 298.15 K for mixtures of ETBE and ethanol with phosphonium-based ionic liquids
rhoI	725.98	kg/m3	308.15	Volumetric properties of binary mixtures of alkoxyethanols with ethyl tert-butyl ether at various temperatures
speedsl	1076.43	m/s	288.15	Influence of temperature on thermodynamics of ethers + xylenes
speedsl	920.73	m/s	323.15	Temperature influence on mixing properties of {ethyl tert-butyl ether (ETBE) + gasoline additives}
speedsl	922.48	m/s	323.15	Temperature influence on mixing properties of {ethyl tert-butyl ether (ETBE) + gasoline additives}
speedsl	965.87	m/s	313.15	Temperature influence on mixing properties of {ethyl tert-butyl ether (ETBE) + gasoline additives}
speedsl	1010.23	m/s	303.15	Temperature influence on mixing properties of {ethyl tert-butyl ether (ETBE) + gasoline additives}

speedsl	922.08	m/s	323.15	Temperature influence on mixing properties of {ethyl tert-butyl ether (ETBE) + gasoline additives}	
speedsl	1076.43	m/s	288.15	Temperature influence on mixing properties of {ethyl tert-butyl ether (ETBE) + gasoline additives}	
speedsl	1078.87	m/s	288.15	Temperature influence on mixing properties of {ethyl tert-butyl ether (ETBE) + gasoline additives}	
speedsl	942.67	m/s	318.15	Influence of temperature on thermodynamics of ethers + xylenes	
speedsl	920.73	m/s	323.15	Influence of temperature on thermodynamics of ethers + xylenes	
speedsl	931.73	m/s	320.65	Influence of temperature on thermodynamics of ethers + xylenes	
speedsl	953.54	m/s	315.65	Influence of temperature on thermodynamics of ethers + xylenes	
speedsl	964.53	m/s	313.15	Influence of temperature on thermodynamics of ethers + xylenes	
speedsl	975.42	m/s	310.65	Influence of temperature on thermodynamics of ethers + xylenes	
speedsl	986.39	m/s	308.15	Influence of temperature on thermodynamics of ethers + xylenes	
speedsl	997.52	m/s	305.65	Influence of temperature on thermodynamics of ethers + xylenes	

speedsl	1008.62	m/s	303.15	Influence of temperature on thermodynamics of ethers + xylenes
speedsl	1019.76	m/s	300.65	Influence of temperature on thermodynamics of ethers + xylenes
speedsl	1031.01	m/s	298.15	Influence of temperature on thermodynamics of ethers + xylenes
speedsl	1042.23	m/s	295.65	Influence of temperature on thermodynamics of ethers + xylenes
speedsl	1053.72	m/s	293.15	Influence of temperature on thermodynamics of ethers + xylenes
speedsl	1065.09	m/s	290.65	Influence of temperature on thermodynamics of ethers + xylenes
speedsl	1031.01	m/s	298.15	Temperature influence on mixing properties of {ethyl tert-butyl ether (ETBE) + gasoline additives}
speedsl	1033.23	m/s	298.15	Temperature influence on mixing properties of {ethyl tert-butyl ether (ETBE) + gasoline additives}
tdiff	2.27e-08	m2/s	496.24	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa

tdiff	2.63e-08	m2/s	493.14	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	2.77e-08	m2/s	490.09	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	2.95e-08	m2/s	487.17	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	3.05e-08	m2/s	484.23	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	3.16e-08	m2/s	481.24	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	3.25e-08	m2/s	478.15	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa

tdiff	3.33e-08	m2/s	475.06	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	3.39e-08	m2/s	472.09	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	3.45e-08	m2/s	469.18	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	3.50e-08	m2/s	466.12	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	3.53e-08	m2/s	463.19	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	3.61e-08	m2/s	458.10	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa

tdiff	3.68e-08	m2/s	453.18	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	3.74e-08	m2/s	448.18	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	3.77e-08	m2/s	443.06	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	3.82e-08	m2/s	438.17	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	3.85e-08	m2/s	433.18	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	3.90e-08	m2/s	428.08	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa

tdiff	3.95e-08	m2/s	423.09	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	4.00e-08	m2/s	413.10	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	4.02e-08	m2/s	408.16	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	4.08e-08	m2/s	403.22	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	4.10e-08	m2/s	398.17	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	4.15e-08	m2/s	393.06	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa

tdiff	4.17e-08	m2/s	388.07	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	4.20e-08	m2/s	383.14	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	4.26e-08	m2/s	378.18	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	4.30e-08	m2/s	373.11	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	4.33e-08	m2/s	368.12	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	4.38e-08	m2/s	363.10	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa

tdiff	4.43e-08	m2/s	358.19	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	4.49e-08	m2/s	353.08	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	4.55e-08	m2/s	348.15	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	4.64e-08	m2/s	343.17	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	4.70e-08	m2/s	338.25	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	4.79e-08	m2/s	333.18	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa

tdiff	4.96e-08	m2/s	323.18	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	5.16e-08	m2/s	313.21	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	5.45e-08	m2/s	303.09	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	5.67e-08	m2/s	293.13	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa
tdiff	3.97e-08	m2/s	418.18	Thermal Diffusivity of 2-Ethoxy-2-methylpropane (ETBE) and 2-Methoxy-2-methylbutane (TAME) at Temperatures from (293 to 523) K and Pressure up to 10 MPa

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$

Coeff. A	1.53227e+01
Coeff. B	-3.30527e+03
Coeff. C	-3.73240e+01
Temperature range (K), min.	257.16
Temperature range (K), max.	367.48

Datasets

Mass density, kg/m3

Temperature, K - Liquid	Pressure, kPa - Liquid	Mass density, kg/m3 - Liquid
283.15	100.00	751.23
288.15	100.00	746.2
293.15	100.00	741.05
298.15	100.00	735.9
303.15	100.00	730.67
308.15	100.00	725.44
313.15	100.00	720.14
318.15	100.00	714.82
323.15	100.00	709.43
328.15	100.00	703.95
333.15	100.00	698.45
283.15	5000.00	756.42
288.15	5000.00	751.53
293.15	5000.00	746.6
298.15	5000.00	741.67
303.15	5000.00	736.68
308.15	5000.00	731.69
313.15	5000.00	726.68
318.15	5000.00	721.59
323.15	5000.00	716.51
328.15	5000.00	711.38
333.15	5000.00	706.19
283.15	10000.00	761.33
288.15	10000.00	756.63
293.15	10000.00	751.89
298.15	10000.00	747.14
303.15	10000.00	742.38
308.15	10000.00	737.6

313.15	10000.00	732.78
318.15	10000.00	727.94
323.15	10000.00	723.13
328.15	10000.00	718.21
333.15	10000.00	713.35
283.15	15000.00	765.98
288.15	15000.00	761.42
293.15	15000.00	756.83
298.15	15000.00	752.27
303.15	15000.00	747.69
308.15	15000.00	743.07
313.15	15000.00	738.45
318.15	15000.00	733.82
323.15	15000.00	729.2
328.15	15000.00	724.52
333.15	15000.00	719.84
283.15	20000.00	770.36
288.15	20000.00	765.93
293.15	20000.00	761.5
298.15	20000.00	757.08
303.15	20000.00	752.63
308.15	20000.00	748.18
313.15	20000.00	743.71
318.15	20000.00	739.27
323.15	20000.00	734.81
328.15	20000.00	730.3
333.15	20000.00	725.83
283.15	25000.00	774.54
288.15	25000.00	770.23
293.15	25000.00	765.92
298.15	25000.00	761.61
303.15	25000.00	757.33
308.15	25000.00	753.01
313.15	25000.00	748.69
318.15	25000.00	744.39
323.15	25000.00	740.06
328.15	25000.00	735.75
333.15	25000.00	731.42
283.15	30000.00	778.52
288.15	30000.00	774.31
293.15	30000.00	770.13
298.15	30000.00	765.96
303.15	30000.00	761.74
308.15	30000.00	757.57

313.15	30000.00	753.36
318.15	30000.00	749.2
323.15	30000.00	745.02
328.15	30000.00	740.83
333.15	30000.00	736.64
283.15	35000.00	782.33
288.15	35000.00	778.21
293.15	35000.00	774.13
298.15	35000.00	770.04
303.15	35000.00	765.95
308.15	35000.00	761.9
313.15	35000.00	757.81
318.15	35000.00	753.76
323.15	35000.00	749.69
328.15	35000.00	745.64
333.15	35000.00	741.54
283.15	40000.00	785.98
288.15	40000.00	781.97
293.15	40000.00	777.97
298.15	40000.00	773.96
303.15	40000.00	769.98
308.15	40000.00	766.03
313.15	40000.00	762.03
318.15	40000.00	758.08
323.15	40000.00	754.13
328.15	40000.00	750.18
333.15	40000.00	746.21
283.15	45000.00	789.49
288.15	45000.00	785.55
293.15	45000.00	781.65
298.15	45000.00	777.75
303.15	45000.00	773.86
308.15	45000.00	769.97
313.15	45000.00	766.08
318.15	45000.00	762.23
323.15	45000.00	758.36
328.15	45000.00	754.48
333.15	45000.00	750.65
283.15	50000.00	792.89
288.15	50000.00	789.02
293.15	50000.00	785.19
298.15	50000.00	781.37
303.15	50000.00	777.57
308.15	50000.00	773.76

313.15	50000.00	769.94
318.15	50000.00	766.19
323.15	50000.00	762.39
328.15	50000.00	758.63
333.15	50000.00	754.86
283.15	55000.00	796.17
288.15	55000.00	792.37
293.15	55000.00	788.63
298.15	55000.00	784.85
303.15	55000.00	781.12
308.15	55000.00	777.4
313.15	55000.00	773.66
318.15	55000.00	769.98
323.15	55000.00	766.26
328.15	55000.00	762.55
333.15	55000.00	758.88
283.15	60000.00	799.33
288.15	60000.00	795.56
293.15	60000.00	791.91
298.15	60000.00	788.21
303.15	60000.00	784.56
308.15	60000.00	780.9
313.15	60000.00	777.23
318.15	60000.00	773.61
323.15	60000.00	770.0
328.15	60000.00	766.37
333.15	60000.00	762.77
283.15	65000.00	802.42
288.15	65000.00	798.71
293.15	65000.00	795.1
298.15	65000.00	791.48
303.15	65000.00	787.89
308.15	65000.00	784.29
313.15	65000.00	780.69
318.15	65000.00	777.13
323.15	65000.00	773.58
328.15	65000.00	770.52
333.15	65000.00	766.51

Reference

<https://www.doi.org/10.1016/j.fluid.2016.02.009>

Speed of sound, m/s

Temperature, K - Liquid	Pressure, kPa - Liquid	Speed of sound, m/s - Liquid
293.15	10.00	1059.15
303.15	10.00	1012.95
313.15	10.00	967.71
323.15	20.00	923.32
333.15	40.00	879.69
343.15	60.00	836.71
353.15	90.00	794.25
363.15	130.00	752.18
373.15	180.00	710.37
383.15	250.00	668.66
393.15	340.00	626.87
403.15	440.00	584.83
413.15	570.00	542.3
423.15	730.00	499.06
433.15	920.00	454.82
443.15	1150.00	409.25
453.15	1420.00	361.97
463.15	1750.00	312.51
473.15	2130.00	260.24
483.15	2570.00	204.36
488.15	2820.00	174.7
493.15	3090.00	143.64

Reference

<https://www.doi.org/10.1016/j.fluid.2015.10.026>

Sources

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- Speed of sound in ionic liquid (1-ethyl-3-methylimidazolium hexafluorophosphate) + 2-methoxyethyl ammonium phosphate: <https://www.doi.org/10.1021/je700591h>
- Speed of sound in ionic liquid (1-ethyl-3-methylimidazolium hexafluorophosphate) + 2-methoxyethyl ammonium phosphate: <http://webbook.nist.gov/cgi/cbook.cgi?ID=C637923&Units=SI>
- Speed of sound in ionic liquid (1-ethyl-3-methylimidazolium hexafluorophosphate) + 2-methoxyethyl ammonium phosphate: <https://www.doi.org/10.1016/j.jct.2012.01.019>
- Speed of sound in ionic liquid (1-ethyl-3-methylimidazolium hexafluorophosphate) + 2-methoxyethyl ammonium phosphate: <https://www.doi.org/10.1016/j.jct.2015.05.022>
- Speed of sound in ionic liquid (1-ethyl-3-methylimidazolium hexafluorophosphate) + 2-methoxyethyl ammonium phosphate: <https://www.doi.org/10.1016/j.jct.2016.06.028>
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- Speed of sound in ionic liquid (1-ethyl-3-methylimidazolium hexafluorophosphate) + 2-methoxyethyl ammonium phosphate: <https://www.doi.org/10.1016/j.jct.2005.04.010>
- Speed of sound in ionic liquid (1-ethyl-3-methylimidazolium hexafluorophosphate) + 2-methoxyethyl ammonium phosphate: <https://www.doi.org/10.1016/j.jct.2012.09.033>

[illegible]

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Legend

affp: Proton affinity

basq: Gas basicity

cpg: Ideal gas heat capacity

cpl: Liquid phase heat capacity

dvisc: Dynamic viscosity

gf: Standard Gibbs free energy of formation

hf: Enthalpy of formation at standard conditions

hfl: Liquid phase enthalpy of formation at standard conditions

hfus: Enthalpy of fusion at standard conditions

h_{vap}: 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

p_{vap}: Vapor pressure

rfi: Refractive Index

rhoL: Liquid Density

rinpol: Non-polar retention indices

ripol: Polar retention indices

speedsl:	Speed of sound in fluid
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tdiff:	Thermal diffusivity
tf:	Normal melting (fusion) point
vc:	Critical Volume

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