

Dimethyl ether

Other names:	(CH3)2O DIMETHYL OXIDE DME Demeon D Dymel Dymel A Ether, dimethyl Ether, methyl METHYL ETHER Methane, 1,1'-oxybis- Methane, oxybis- Methoxymethane OXYBIS-METHANE Oxybismethane UN 1033 Wood ether
Inchi:	InChI=1S/C2H6O/c1-3-2/h1-2H3
InchiKey:	LCGLNKUTAGEVQW-UHFFFAOYSA-N
Formula:	C2H6O
SMILES:	COC
Mol. weight [g/mol]:	46.07
CAS:	115-10-6

Physical Properties

Property code	Value	Unit	Source
af	0.2000		KDB
affp	792.00	kJ/mol	NIST Webbook
aigt	623.15	K	KDB
basg	764.50	kJ/mol	NIST Webbook
chg	-1460.40 ± 0.46	kJ/mol	NIST Webbook
dm	1.30	debye	KDB
fil	2.00	% in Air	KDB
flu	50.00	% in Air	KDB
gf	-113.00	kJ/mol	KDB
hf	-184.20	kJ/mol	KDB
hf	-184.10 ± 0.50	kJ/mol	NIST Webbook
hfus	2.12	kJ/mol	Joback Method

hvap	18.50	kJ/mol	NIST Webbook
hvap	19.30	kJ/mol	NIST Webbook
ie	10.04	eV	NIST Webbook
ie	10.01 ± 0.01	eV	NIST Webbook
ie	9.80	eV	NIST Webbook
ie	9.80 ± 0.10	eV	NIST Webbook
ie	10.04	eV	NIST Webbook
ie	10.10 ± 0.20	eV	NIST Webbook
ie	10.04	eV	NIST Webbook
ie	9.94	eV	NIST Webbook
ie	9.96 ± 0.05	eV	NIST Webbook
ie	10.00 ± 0.02	eV	NIST Webbook
ie	9.95 ± 0.07	eV	NIST Webbook
ie	10.10	eV	NIST Webbook
ie	9.98	eV	NIST Webbook
ie	10.03 ± 0.03	eV	NIST Webbook
ie	10.00	eV	NIST Webbook
ie	10.00 ± 0.20	eV	NIST Webbook
ie	10.03	eV	NIST Webbook
ie	10.10	eV	NIST Webbook
ie	11.94	eV	NIST Webbook
ie	9.94 ± 0.01	eV	NIST Webbook
ie	10.05	eV	NIST Webbook
ie	10.03 ± 0.03	eV	NIST Webbook
log10ws	0.25		Crippen Method
logp	0.263		Crippen Method
mcvol	44.910	ml/mol	McGowan Method
nfpaf	%!d(float64=4)		KDB
nfpah	%!d(float64=2)		KDB
pc	5370.00	kPa	KDB
pc	5340.50	kPa	Experimental densities, vapor pressures, and critical point, and a fundamental equation of state for dimethyl ether
pc	5356.00	kPa	Measurement of the Critical Parameters and the Saturation Densities of Dimethyl Ether
pc	5267.00	kPa	Critical Properties of Three Dimethyl Ether Binary Systems: Dimethyl Ether (RE-170) + Propane (HC-290), Butane (HC-600), and 2-Methyl Propane (HC-600A)
pc	5359.00 ± 50.66	kPa	NIST Webbook
pc	5330.00 ± 60.79	kPa	NIST Webbook

pc	5400.00 ± 101.32	kPa	NIST Webbook
pc	5269.00 ± 40.53	kPa	NIST Webbook
pc	5400.00 ± 101.32	kPa	NIST Webbook
pc	5400.00 ± 151.99	kPa	NIST Webbook
pc	5800.00 ± 405.30	kPa	NIST Webbook
pc	5264.00 ± 15.00	kPa	NIST Webbook
rhoc	271.39 ± 3.22	kg/m3	NIST Webbook
rhoc	246.51 ± 19.81	kg/m3	NIST Webbook
rhoc	225.50 ± 29.94	kg/m3	NIST Webbook
rinpol	323.00		NIST Webbook
rinpol	350.00		NIST Webbook
rinpol	327.00		NIST Webbook
rinpol	331.00		NIST Webbook
rinpol	324.00		NIST Webbook
rinpol	325.00		NIST Webbook
rinpol	328.00		NIST Webbook
rinpol	327.00		NIST Webbook
rinpol	328.00		NIST Webbook
rinpol	323.00		NIST Webbook
rinpol	323.00		NIST Webbook
ripol	478.00		NIST Webbook
ripol	524.00		NIST Webbook
ripol	524.00		NIST Webbook
ripol	481.00		NIST Webbook
sl	146.57	J/mol×K	NIST Webbook
tb	248.45	K	NIST Webbook
tb	248.30	K	NIST Webbook
tb	248.20	K	NIST Webbook
tb	249.50 ± 0.60	K	NIST Webbook
tb	249.20 ± 0.40	K	NIST Webbook
tb	248.25 ± 1.00	K	NIST Webbook
tb	248.30	K	KDB
tc	400.10 ± 0.40	K	NIST Webbook
tc	402.80 ± 3.00	K	NIST Webbook
tc	400.00 ± 2.00	K	NIST Webbook
tc	400.30 ± 0.40	K	NIST Webbook
tc	402.80 ± 3.00	K	NIST Webbook
tc	400.05 ± 0.30	K	NIST Webbook
tc	399.40 ± 0.40	K	NIST Webbook
tc	402.80 ± 3.00	K	NIST Webbook
tc	399.70 ± 0.40	K	NIST Webbook
tc	400.10 ± 0.40	K	NIST Webbook
tc	399.40 ± 0.15	K	NIST Webbook
tc	400.33 ± 1.00	K	NIST Webbook

tc	400.00	K	KDB
tf	135.20 ± 2.00	K	NIST Webbook
tf	131.60	K	KDB
tf	131.65	K	NIST Webbook
tt	131.64 ± 0.05	K	NIST Webbook
tt	131.66 ± 0.06	K	NIST Webbook
vc	0.164 ± 0.003	m3/kmol	NIST Webbook
vc	0.190	m3/kmol	KDB
zc	0.3067830		KDB
zra	0.27		KDB

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	65.90	J/mol×K	300.76	NIST Webbook
cpg	62.01	J/mol×K	272.20	NIST Webbook
cpg	75.14	J/mol×K	370.42	NIST Webbook
cpg	70.33	J/mol×K	333.25	NIST Webbook
cpl	102.30	J/mol×K	240.00	NIST Webbook
dvisc	0.0001351	Pa×s	293.14	Experimental Measurement and Modeling of the Viscosity of Dimethyl Ether
dvisc	0.0001989	Pa×s	253.15	Experimental Measurement and Modeling of the Viscosity of Dimethyl Ether
dvisc	0.0000626	Pa×s	373.13	Experimental Measurement and Modeling of the Viscosity of Dimethyl Ether
dvisc	0.0000664	Pa×s	368.13	Experimental Measurement and Modeling of the Viscosity of Dimethyl Ether
dvisc	0.0000701	Pa×s	363.13	Experimental Measurement and Modeling of the Viscosity of Dimethyl Ether
dvisc	0.0000739	Pa×s	358.13	Experimental Measurement and Modeling of the Viscosity of Dimethyl Ether

dvisc	0.0000778	Pa×s	353.12	Experimental Measurement and Modeling of the Viscosity of Dimethyl Ether
dvisc	0.0000817	Pa×s	348.13	Experimental Measurement and Modeling of the Viscosity of Dimethyl Ether
dvisc	0.0000857	Pa×s	343.13	Experimental Measurement and Modeling of the Viscosity of Dimethyl Ether
dvisc	0.0000942	Pa×s	333.13	Experimental Measurement and Modeling of the Viscosity of Dimethyl Ether
dvisc	0.0000986	Pa×s	328.12	Experimental Measurement and Modeling of the Viscosity of Dimethyl Ether
dvisc	0.0001031	Pa×s	323.12	Experimental Measurement and Modeling of the Viscosity of Dimethyl Ether
dvisc	0.0001080	Pa×s	318.12	Experimental Measurement and Modeling of the Viscosity of Dimethyl Ether
dvisc	0.0001129	Pa×s	313.14	Experimental Measurement and Modeling of the Viscosity of Dimethyl Ether
dvisc	0.0001181	Pa×s	308.14	Experimental Measurement and Modeling of the Viscosity of Dimethyl Ether
dvisc	0.0001240	Pa×s	303.14	Experimental Measurement and Modeling of the Viscosity of Dimethyl Ether
dvisc	0.0001290	Pa×s	298.14	Experimental Measurement and Modeling of the Viscosity of Dimethyl Ether
dvisc	0.0001414	Pa×s	288.14	Experimental Measurement and Modeling of the Viscosity of Dimethyl Ether

dvisc	0.0001479	Pa×s	283.14	Experimental Measurement and Modeling of the Viscosity of Dimethyl Ether	
dvisc	0.0001552	Pa×s	278.13	Experimental Measurement and Modeling of the Viscosity of Dimethyl Ether	
dvisc	0.0001627	Pa×s	273.14	Experimental Measurement and Modeling of the Viscosity of Dimethyl Ether	
dvisc	0.0001709	Pa×s	268.14	Experimental Measurement and Modeling of the Viscosity of Dimethyl Ether	
dvisc	0.0001889	Pa×s	258.14	Experimental Measurement and Modeling of the Viscosity of Dimethyl Ether	
dvisc	0.0002097	Pa×s	248.16	Experimental Measurement and Modeling of the Viscosity of Dimethyl Ether	
dvisc	0.0001796	Pa×s	263.15	Experimental Measurement and Modeling of the Viscosity of Dimethyl Ether	
dvisc	0.0002217	Pa×s	243.15	Experimental Measurement and Modeling of the Viscosity of Dimethyl Ether	
dvisc	0.0000898	Pa×s	338.13	Experimental Measurement and Modeling of the Viscosity of Dimethyl Ether	
hfust	4.94	kJ/mol	131.70	NIST Webbook	
hfust	4.94	kJ/mol	131.70	NIST Webbook	
hfust	4.94	kJ/mol	131.66	NIST Webbook	
hvapt	21.10	kJ/mol	374.50	NIST Webbook	
hvapt	21.51	kJ/mol	249.20	KDB	
hvapt	21.51	kJ/mol	248.34	NIST Webbook	
hvapt	21.51	kJ/mol	248.30	NIST Webbook	
hvapt	22.60	kJ/mol	224.00	NIST Webbook	
hvapt	22.80	kJ/mol	214.50	NIST Webbook	
hvapt	21.20	kJ/mol	326.50	NIST Webbook	
hvapt	22.20	kJ/mol	272.00	NIST Webbook	

hvapt	21.40	kJ/mol	209.50	NIST Webbook	
hvapt	22.70	kJ/mol	221.50	NIST Webbook	
hvapt	21.50 ± 0.10	kJ/mol	248.00	NIST Webbook	
kvisc	0.0000002	m2/s	322.50	Viscosity of saturated liquid dimethyl ether from (227 to 343) K	
kvisc	0.0000002	m2/s	263.14	Viscosity of saturated liquid dimethyl ether from (227 to 343) K	
kvisc	0.0000002	m2/s	258.15	Viscosity of saturated liquid dimethyl ether from (227 to 343) K	
kvisc	0.0000003	m2/s	253.14	Viscosity of saturated liquid dimethyl ether from (227 to 343) K	
kvisc	0.0000002	m2/s	342.45	Viscosity of saturated liquid dimethyl ether from (227 to 343) K	
kvisc	0.0000003	m2/s	248.30	Viscosity of saturated liquid dimethyl ether from (227 to 343) K	
kvisc	0.0000003	m2/s	243.15	Viscosity of saturated liquid dimethyl ether from (227 to 343) K	
kvisc	0.0000002	m2/s	268.15	Viscosity of saturated liquid dimethyl ether from (227 to 343) K	
kvisc	0.0000003	m2/s	237.47	Viscosity of saturated liquid dimethyl ether from (227 to 343) K	
kvisc	0.0000003	m2/s	232.28	Viscosity of saturated liquid dimethyl ether from (227 to 343) K	
kvisc	0.0000003	m2/s	227.22	Viscosity of saturated liquid dimethyl ether from (227 to 343) K	

kvisc	0.0000002	m2/s	273.16	Viscosity of saturated liquid dimethyl ether from (227 to 343) K
kvisc	0.0000002	m2/s	278.16	Viscosity of saturated liquid dimethyl ether from (227 to 343) K
kvisc	0.0000002	m2/s	308.15	Viscosity of saturated liquid dimethyl ether from (227 to 343) K
kvisc	0.0000002	m2/s	283.15	Viscosity of saturated liquid dimethyl ether from (227 to 343) K
kvisc	0.0000002	m2/s	337.47	Viscosity of saturated liquid dimethyl ether from (227 to 343) K
kvisc	0.0000002	m2/s	288.15	Viscosity of saturated liquid dimethyl ether from (227 to 343) K
kvisc	0.0000002	m2/s	293.14	Viscosity of saturated liquid dimethyl ether from (227 to 343) K
kvisc	0.0000002	m2/s	298.16	Viscosity of saturated liquid dimethyl ether from (227 to 343) K
kvisc	0.0000002	m2/s	303.16	Viscosity of saturated liquid dimethyl ether from (227 to 343) K
kvisc	0.0000002	m2/s	312.53	Viscosity of saturated liquid dimethyl ether from (227 to 343) K
kvisc	0.0000002	m2/s	317.52	Viscosity of saturated liquid dimethyl ether from (227 to 343) K
kvisc	0.0000002	m2/s	332.49	Viscosity of saturated liquid dimethyl ether from (227 to 343) K

kvisc	0.0000002	m2/s	327.50	Viscosity of saturated liquid dimethyl ether from (227 to 343) K
pvap	437.40	kPa	288.19	Vapour liquid equilibrium data for the 1,1,1,2 tetrafluoroethane (R134a) + dimethyl ether (DME) system at temperatures from 293.18 to 358.15K and pressures up to about 3 MPa up to about 3MPa
pvap	875.30	kPa	312.26	Vapor-liquid equilibrium data for the dimethyl ether (RE170) + decafluorobutane (R3-1-10) system at temperatures from 313.28 to 392.83 K and pressures up to 4.9 MPa
pvap	993.30	kPa	317.17	Vapor-liquid equilibrium data for the dimethyl ether (RE170) + decafluorobutane (R3-1-10) system at temperatures from 313.28 to 392.83 K and pressures up to 4.9 MPa
pvap	1122.00	kPa	322.08	Vapor-liquid equilibrium data for the dimethyl ether (RE170) + decafluorobutane (R3-1-10) system at temperatures from 313.28 to 392.83 K and pressures up to 4.9 MPa
pvap	1265.60	kPa	327.08	Vapor-liquid equilibrium data for the dimethyl ether (RE170) + decafluorobutane (R3-1-10) system at temperatures from 313.28 to 392.83 K and pressures up to 4.9 MPa

pvap	1423.50	kPa	332.09	Vapor-liquid equilibrium data for the dimethyl ether (RE170) + decafluorobutane (R3-1-10) system at temperatures from 313.28 to 392.83 K and pressures up to 4.9 MPa
pvap	1591.10	kPa	337.00	Vapor-liquid equilibrium data for the dimethyl ether (RE170) + decafluorobutane (R3-1-10) system at temperatures from 313.28 to 392.83 K and pressures up to 4.9 MPa
pvap	1773.80	kPa	341.97	Vapor-liquid equilibrium data for the dimethyl ether (RE170) + decafluorobutane (R3-1-10) system at temperatures from 313.28 to 392.83 K and pressures up to 4.9 MPa
pvap	1976.20	kPa	347.00	Vapor-liquid equilibrium data for the dimethyl ether (RE170) + decafluorobutane (R3-1-10) system at temperatures from 313.28 to 392.83 K and pressures up to 4.9 MPa
pvap	2187.40	kPa	351.89	Vapor-liquid equilibrium data for the dimethyl ether (RE170) + decafluorobutane (R3-1-10) system at temperatures from 313.28 to 392.83 K and pressures up to 4.9 MPa

pvap	2422.20	kPa	356.91	Vapor-liquid equilibrium data for the dimethyl ether (RE170) + decafluorobutane (R3-1-10) system at temperatures from 313.28 to 392.83 K and pressures up to 4.9 MPa
pvap	2675.20	kPa	361.94	Vapor-liquid equilibrium data for the dimethyl ether (RE170) + decafluorobutane (R3-1-10) system at temperatures from 313.28 to 392.83 K and pressures up to 4.9 MPa
pvap	2946.30	kPa	366.96	Vapor-liquid equilibrium data for the dimethyl ether (RE170) + decafluorobutane (R3-1-10) system at temperatures from 313.28 to 392.83 K and pressures up to 4.9 MPa
pvap	3230.30	kPa	371.84	Vapor-liquid equilibrium data for the dimethyl ether (RE170) + decafluorobutane (R3-1-10) system at temperatures from 313.28 to 392.83 K and pressures up to 4.9 MPa
pvap	3546.40	kPa	376.91	Vapor-liquid equilibrium data for the dimethyl ether (RE170) + decafluorobutane (R3-1-10) system at temperatures from 313.28 to 392.83 K and pressures up to 4.9 MPa

pvap	3739.00	kPa	379.82	Vapor-liquid equilibrium data for the dimethyl ether (RE170) + decafluorobutane (R3-1-10) system at temperatures from 313.28 to 392.83 K and pressures up to 4.9 MPa
pvap	3950.30	kPa	382.88	Vapor-liquid equilibrium data for the dimethyl ether (RE170) + decafluorobutane (R3-1-10) system at temperatures from 313.28 to 392.83 K and pressures up to 4.9 MPa
pvap	4161.90	kPa	385.83	Vapor-liquid equilibrium data for the dimethyl ether (RE170) + decafluorobutane (R3-1-10) system at temperatures from 313.28 to 392.83 K and pressures up to 4.9 MPa
pvap	4309.60	kPa	387.81	Vapor-liquid equilibrium data for the dimethyl ether (RE170) + decafluorobutane (R3-1-10) system at temperatures from 313.28 to 392.83 K and pressures up to 4.9 MPa
pvap	4463.70	kPa	389.81	Vapor-liquid equilibrium data for the dimethyl ether (RE170) + decafluorobutane (R3-1-10) system at temperatures from 313.28 to 392.83 K and pressures up to 4.9 MPa

pvap	4625.60	kPa	391.86	Vapor-liquid equilibrium data for the dimethyl ether (RE170) + decafluorobutane (R3-1-10) system at temperatures from 313.28 to 392.83 K and pressures up to 4.9 MPa
pvap	4783.00	kPa	393.81	Vapor-liquid equilibrium data for the dimethyl ether (RE170) + decafluorobutane (R3-1-10) system at temperatures from 313.28 to 392.83 K and pressures up to 4.9 MPa
pvap	4943.60	kPa	395.74	Vapor-liquid equilibrium data for the dimethyl ether (RE170) + decafluorobutane (R3-1-10) system at temperatures from 313.28 to 392.83 K and pressures up to 4.9 MPa
pvap	1576.50	kPa	336.67	Vapor-liquid equilibrium measurements of dimethylsulfide, +ethanol, +dimethylether, +methylacetate with a static total pressure method
pvap	372.00	kPa	283.15	Isothermal vapor-liquid equilibria for the binary system of dimethylether (DME) + methyl iodide (CH ₃ I)
pvap	501.00	kPa	293.15	Isothermal vapor-liquid equilibria for the binary system of dimethylether (DME) + methyl iodide (CH ₃ I)
pvap	687.00	kPa	303.15	Isothermal vapor-liquid equilibria for the binary system of dimethylether (DME) + methyl iodide (CH ₃ I)

pvap	898.00	kPa	313.15	Isothermal vapor-liquid equilibria for the binary system of dimethylether (DME) + methyl iodide (CH ₃ I)
pvap	1116.20	kPa	323.15	Isothermal vapor-liquid equilibria for the binary system of dimethylether (DME) + methyl iodide (CH ₃ I)
pvap	887.00	kPa	313.15	(Vapour + liquid) equilibria of the {pentafluoroethane (HFC-125) + dimethyl ether (DME)} system
pvap	1147.00	kPa	323.15	(Vapour + liquid) equilibria of the {pentafluoroethane (HFC-125) + dimethyl ether (DME)} system
pvap	1451.00	kPa	333.15	(Vapour + liquid) equilibria of the {pentafluoroethane (HFC-125) + dimethyl ether (DME)} system
pvap	1817.00	kPa	343.15	(Vapour + liquid) equilibria of the {pentafluoroethane (HFC-125) + dimethyl ether (DME)} system
pvap	2251.00	kPa	353.15	(Vapour + liquid) equilibria of the {pentafluoroethane (HFC-125) + dimethyl ether (DME)} system
pvap	2738.00	kPa	363.15	(Vapour + liquid) equilibria of the {pentafluoroethane (HFC-125) + dimethyl ether (DME)} system
pvap	54.61	kPa	233.13	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	68.49	kPa	238.13	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K

pvap	85.57	kPa	243.16	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	105.59	kPa	248.15	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	129.42	kPa	253.15	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	157.53	kPa	258.16	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	190.44	kPa	263.16	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	228.48	kPa	268.16	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	272.17	kPa	273.15	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	321.87	kPa	278.14	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	378.66	kPa	283.16	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	443.57	kPa	288.17	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	515.53	kPa	293.16	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	596.21	kPa	298.17	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K

pvap	687.37	kPa	303.16	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	726.26	kPa	305.16	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	787.07	kPa	308.16	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	897.59	kPa	313.16	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	968.55	kPa	316.15	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	1018.91	kPa	318.16	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	1152.35	kPa	323.15	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	1298.23	kPa	328.15	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	1457.50	kPa	333.16	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	1457.76	kPa	333.16	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	1631.01	kPa	338.15	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	1818.80	kPa	343.15	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K

pvap	2022.45	kPa	348.15	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	2242.74	kPa	353.15	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	2243.07	kPa	353.16	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	2479.92	kPa	358.14	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	2735.67	kPa	363.15	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	3010.81	kPa	368.16	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	3305.67	kPa	373.15	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	3622.60	kPa	378.15	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	3962.25	kPa	383.14	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	4331.48	kPa	388.15	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	4725.02	kPa	393.16	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	5146.82	kPa	398.16	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K

pvap	5355.80	kPa	400.38	Vapor Pressure Measurements of Dimethyl Ether from (233 to 399) K
pvap	152.90	kPa	258.15	Isothermal VLE Measurements for Difluoromethane + Dimethylether and an Evaluation of Hydrogen Bonding
pvap	266.80	kPa	273.15	Isothermal VLE Measurements for Difluoromethane + Dimethylether and an Evaluation of Hydrogen Bonding
pvap	509.30	kPa	293.15	Isothermal VLE Measurements for Difluoromethane + Dimethylether and an Evaluation of Hydrogen Bonding
pvap	125.00	kPa	253.05	Vapor-Liquid Equilibria on Four Binary Systems: 2-Phenylpropionaldehyde + Phenol, Propylene Glycol Monomethyl Ether + Nitroethane, Dimethyl Ether + Propylene, and N-Butyric Acid + Propionic Acid
pvap	508.10	kPa	293.15	Vapor-Liquid Equilibria on Four Binary Systems: 2-Phenylpropionaldehyde + Phenol, Propylene Glycol Monomethyl Ether + Nitroethane, Dimethyl Ether + Propylene, and N-Butyric Acid + Propionic Acid

pvap	22.30	kPa	219.15	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K	
pvap	25.20	kPa	221.13	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K	
pvap	28.30	kPa	223.11	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K	
pvap	31.50	kPa	224.88	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K	
pvap	35.40	kPa	226.88	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K	
pvap	39.50	kPa	228.85	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K	
pvap	43.90	kPa	230.86	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K	
pvap	48.70	kPa	232.86	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K	
pvap	54.10	kPa	234.85	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K	

pvap	59.80	kPa	236.85	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K	
pvap	66.30	kPa	239.14	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K	
pvap	73.20	kPa	241.14	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K	
pvap	84.00	kPa	244.14	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K	
pvap	96.10	kPa	247.13	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K	
pvap	104.90	kPa	249.13	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K	
pvap	114.30	kPa	251.14	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K	
pvap	135.10	kPa	255.13	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K	

pvap	146.60	kPa	257.12	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	159.00	kPa	259.14	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	171.80	kPa	261.13	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	185.60	kPa	263.13	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	199.80	kPa	265.13	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	215.50	kPa	267.13	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	231.80	kPa	269.13	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	248.90	kPa	271.13	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	266.80	kPa	273.13	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K

pvap	285.10	kPa	275.04	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	305.00	kPa	277.02	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	326.40	kPa	279.02	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	348.80	kPa	281.02	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	372.30	kPa	283.02	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	397.00	kPa	285.01	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	422.80	kPa	287.00	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	449.80	kPa	288.99	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K

pvap	478.40	kPa	290.99	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	508.90	kPa	293.08	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	540.00	kPa	295.07	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	573.00	kPa	297.07	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	606.90	kPa	299.08	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	643.10	kPa	301.11	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	680.20	kPa	303.08	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	718.40	kPa	305.07	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	758.80	kPa	307.07	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K

pvap	800.70	kPa	309.06	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	844.20	kPa	311.07	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	889.50	kPa	313.06	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	936.60	kPa	315.06	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	985.30	kPa	317.04	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	1036.00	kPa	319.03	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	1088.70	kPa	321.03	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	1143.30	kPa	323.02	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K

pvap	1200.60	kPa	325.02	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	793.10	kPa	308.54	Vapor-liquid equilibrium data for the dimethyl ether (RE170) + decafluorobutane (R3-1-10) system at temperatures from 313.28 to 392.83 K and pressures up to 4.9 MPa
pvap	1319.90	kPa	329.02	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	1385.30	kPa	331.11	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	1450.60	kPa	333.11	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	1518.80	kPa	335.11	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	1588.40	kPa	337.10	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	1660.30	kPa	339.10	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K

pvap	1733.30	kPa	341.08	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K	
pvap	1811.30	kPa	343.09	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K	
pvap	1891.20	kPa	345.09	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K	
pvap	1972.80	kPa	347.08	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K	
pvap	2057.40	kPa	349.08	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K	
pvap	2144.30	kPa	351.07	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K	
pvap	2232.70	kPa	353.05	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K	
pvap	2326.00	kPa	355.05	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K	
pvap	2421.90	kPa	357.05	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K	

pvap	2520.30	kPa	359.05	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	2621.50	kPa	361.04	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
pvap	788.00	kPa	308.10	Vapor-Liquid Equilibrium for Methoxymethane + Methyl Formate, Methoxymethane + Hexane, and Methyl Formate + Methanol
pvap	785.20	kPa	308.13	Vapor-Liquid Equilibrium for Methoxymethane + Methyl Formate, Methoxymethane + Hexane, and Methyl Formate + Methanol
pvap	1539.60	kPa	335.65	Vapor-Liquid Equilibrium for Methoxymethane + Methyl Formate, Methoxymethane + Hexane, and Methyl Formate + Methanol
pvap	1540.00	kPa	335.63	Vapor Liquid Equilibrium for Methoxymethane + Thiophene, + Diethylsulfide, + 2-Methyl-2-propanethiol and 1-Hexene, + 1-Propanethiol
pvap	786.60	kPa	308.14	Vapor Liquid Equilibrium for Methoxymethane + Thiophene, + Diethylsulfide, + 2-Methyl-2-propanethiol and 1-Hexene, + 1-Propanethiol

pvap	1572.20	kPa	336.70	Vapor Liquid Equilibrium for Methoxymethane + Thiophene, + Diethylsulfide, + 2-Methyl-2-propanethiol and 1-Hexene, + 1-Propanethiol
pvap	1572.20	kPa	336.63	Vapor Liquid Equilibrium for Methoxymethane + Thiophene, + Diethylsulfide, + 2-Methyl-2-propanethiol and 1-Hexene, + 1-Propanethiol
pvap	520.00	kPa	293.00	Vapor-Liquid Equilibrium Data of the Binary Systems in Oxidative Carbonylation of Dimethyl Ether Synthesizing Dimethyl Carbonate
pvap	900.00	kPa	313.00	Vapor-Liquid Equilibrium Data of the Binary Systems in Oxidative Carbonylation of Dimethyl Ether Synthesizing Dimethyl Carbonate
pvap	2240.00	kPa	353.00	Vapor-Liquid Equilibrium Data of the Binary Systems in Oxidative Carbonylation of Dimethyl Ether Synthesizing Dimethyl Carbonate
pvap	3260.00	kPa	373.00	Vapor-Liquid Equilibrium Data of the Binary Systems in Oxidative Carbonylation of Dimethyl Ether Synthesizing Dimethyl Carbonate
pvap	16.46	kPa	213.08	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K

pvap	22.24	kPa	218.11	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	29.61	kPa	223.15	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	38.64	kPa	228.06	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	49.96	kPa	233.09	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	63.84	kPa	238.11	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	80.36	kPa	243.07	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	100.43	kPa	248.12	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	124.09	kPa	253.12	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	152.40	kPa	258.13	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	184.96	kPa	263.13	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	222.70	kPa	268.13	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	266.50	kPa	273.17	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K

pvap	316.12	kPa	278.17	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	372.90	kPa	283.16	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	436.69	kPa	288.13	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	509.01	kPa	293.17	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	588.17	kPa	298.08	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	600.51	kPa	298.78	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	679.68	kPa	303.15	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	691.56	kPa	303.78	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	778.92	kPa	308.13	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	889.98	kPa	313.17	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	1011.55	kPa	318.16	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	1144.73	kPa	323.17	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K

pvap	1290.23	kPa	328.16	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	1449.22	kPa	333.17	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	1621.53	kPa	338.17	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	1809.11	kPa	343.16	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	2012.44	kPa	348.16	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	2232.34	kPa	353.16	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	2468.87	kPa	358.16	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	2723.27	kPa	363.16	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	2996.38	kPa	368.14	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	690.20	kPa	303.46	Vapor-liquid equilibrium data for the dimethyl ether (RE170) + decafluorobutane (R3-1-10) system at temperatures from 313.28 to 392.83 K and pressures up to 4.9 MPa
pvap	3608.63	kPa	378.15	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K

pvap	3948.62	kPa	383.15	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	4313.91	kPa	388.16	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	4706.18	kPa	393.16	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	571.90	kPa	296.78	Vapor-liquid equilibrium data for the dimethyl ether (RE170) + decafluorobutane (R3-1-10) system at temperatures from 313.28 to 392.83 K and pressures up to 4.9 MPa
pvap	2735.00	kPa	363.15	Vapor liquid equilibria of the 1,1,1-trifluoroethane (HFC-143a) + dimethyl ether (DME) system
pvap	2245.00	kPa	353.15	Vapor liquid equilibria of the 1,1,1-trifluoroethane (HFC-143a) + dimethyl ether (DME) system
pvap	1817.00	kPa	343.15	Vapor liquid equilibria of the 1,1,1-trifluoroethane (HFC-143a) + dimethyl ether (DME) system
pvap	1451.00	kPa	333.15	Vapor liquid equilibria of the 1,1,1-trifluoroethane (HFC-143a) + dimethyl ether (DME) system
pvap	1141.00	kPa	323.15	Vapor liquid equilibria of the 1,1,1-trifluoroethane (HFC-143a) + dimethyl ether (DME) system
pvap	884.00	kPa	313.15	Vapor liquid equilibria of the 1,1,1-trifluoroethane (HFC-143a) + dimethyl ether (DME) system

pvap	2579.10	kPa	360.52	Vapour liquid equilibrium data for the 1,1,1,2 tetrafluoroethane (R134a) + dimethyl ether (DME) system at temperatures from 293.18 to 358.15K and pressures up to about 3 MPa up to about 3MPa
pvap	2528.50	kPa	359.49	Vapour liquid equilibrium data for the 1,1,1,2 tetrafluoroethane (R134a) + dimethyl ether (DME) system at temperatures from 293.18 to 358.15K and pressures up to about 3 MPa up to about 3MPa
pvap	2429.50	kPa	357.49	Vapour liquid equilibrium data for the 1,1,1,2 tetrafluoroethane (R134a) + dimethyl ether (DME) system at temperatures from 293.18 to 358.15K and pressures up to about 3 MPa up to about 3MPa
pvap	2333.30	kPa	355.46	Vapour liquid equilibrium data for the 1,1,1,2 tetrafluoroethane (R134a) + dimethyl ether (DME) system at temperatures from 293.18 to 358.15K and pressures up to about 3 MPa up to about 3MPa
pvap	2315.60	kPa	355.08	Vapour liquid equilibrium data for the 1,1,1,2 tetrafluoroethane (R134a) + dimethyl ether (DME) system at temperatures from 293.18 to 358.15K and pressures up to about 3 MPa up to about 3MPa

pvap	2240.00	kPa	353.45	Vapour liquid equilibrium data for the 1,1,1,2 tetrafluoroethane (R134a) + dimethyl ether (DME) system at temperatures from 293.18 to 358.15K and pressures up to about 3 MPa up to about 3MPa
pvap	2224.50	kPa	353.10	Vapour liquid equilibrium data for the 1,1,1,2 tetrafluoroethane (R134a) + dimethyl ether (DME) system at temperatures from 293.18 to 358.15K and pressures up to about 3 MPa up to about 3MPa
pvap	2149.60	kPa	351.44	Vapour liquid equilibrium data for the 1,1,1,2 tetrafluoroethane (R134a) + dimethyl ether (DME) system at temperatures from 293.18 to 358.15K and pressures up to about 3 MPa up to about 3MPa
pvap	2007.30	kPa	348.17	Vapour liquid equilibrium data for the 1,1,1,2 tetrafluoroethane (R134a) + dimethyl ether (DME) system at temperatures from 293.18 to 358.15K and pressures up to about 3 MPa up to about 3MPa

pvap	1976.80	kPa	347.42	Vapour liquid equilibrium data for the 1,1,1,2 tetrafluoroethane (R134a) + dimethyl ether (DME) system at temperatures from 293.18 to 358.15K and pressures up to about 3 MPa up to about 3MPa
pvap	1814.40	kPa	343.41	Vapour liquid equilibrium data for the 1,1,1,2 tetrafluoroethane (R134a) + dimethyl ether (DME) system at temperatures from 293.18 to 358.15K and pressures up to about 3 MPa up to about 3MPa
pvap	1619.90	kPa	338.23	Vapour liquid equilibrium data for the 1,1,1,2 tetrafluoroethane (R134a) + dimethyl ether (DME) system at temperatures from 293.18 to 358.15K and pressures up to about 3 MPa up to about 3MPa
pvap	1447.20	kPa	333.23	Vapour liquid equilibrium data for the 1,1,1,2 tetrafluoroethane (R134a) + dimethyl ether (DME) system at temperatures from 293.18 to 358.15K and pressures up to about 3 MPa up to about 3MPa
pvap	1289.20	kPa	328.25	Vapour liquid equilibrium data for the 1,1,1,2 tetrafluoroethane (R134a) + dimethyl ether (DME) system at temperatures from 293.18 to 358.15K and pressures up to about 3 MPa up to about 3MPa

pvap	1146.20	kPa	323.37	Vapour liquid equilibrium data for the 1,1,1,2 tetrafluoroethane (R134a) + dimethyl ether (DME) system at temperatures from 293.18 to 358.15K and pressures up to about 3 MPa up to about 3MPa
pvap	1144.50	kPa	323.28	Vapour liquid equilibrium data for the 1,1,1,2 tetrafluoroethane (R134a) + dimethyl ether (DME) system at temperatures from 293.18 to 358.15K and pressures up to about 3 MPa up to about 3MPa
pvap	1009.50	kPa	318.19	Vapour liquid equilibrium data for the 1,1,1,2 tetrafluoroethane (R134a) + dimethyl ether (DME) system at temperatures from 293.18 to 358.15K and pressures up to about 3 MPa up to about 3MPa
pvap	888.80	kPa	313.20	Vapour liquid equilibrium data for the 1,1,1,2 tetrafluoroethane (R134a) + dimethyl ether (DME) system at temperatures from 293.18 to 358.15K and pressures up to about 3 MPa up to about 3MPa

pvap	778.70	kPa	308.19	Vapour liquid equilibrium data for the 1,1,1,2 tetrafluoroethane (R134a) + dimethyl ether (DME) system at temperatures from 293.18 to 358.15K and pressures up to about 3 MPa up to about 3MPa
pvap	678.10	kPa	303.19	Vapour liquid equilibrium data for the 1,1,1,2 tetrafluoroethane (R134a) + dimethyl ether (DME) system at temperatures from 293.18 to 358.15K and pressures up to about 3 MPa up to about 3MPa
pvap	679.20	kPa	303.18	Vapour liquid equilibrium data for the 1,1,1,2 tetrafluoroethane (R134a) + dimethyl ether (DME) system at temperatures from 293.18 to 358.15K and pressures up to about 3 MPa up to about 3MPa
pvap	589.60	kPa	298.19	Vapour liquid equilibrium data for the 1,1,1,2 tetrafluoroethane (R134a) + dimethyl ether (DME) system at temperatures from 293.18 to 358.15K and pressures up to about 3 MPa up to about 3MPa
pvap	509.40	kPa	293.20	Vapour liquid equilibrium data for the 1,1,1,2 tetrafluoroethane (R134a) + dimethyl ether (DME) system at temperatures from 293.18 to 358.15K and pressures up to about 3 MPa up to about 3MPa

pvap	373.60	kPa	283.20	Vapour liquid equilibrium data for the 1,1,1,2 tetrafluoroethane (R134a) + dimethyl ether (DME) system at temperatures from 293.18 to 358.15K and pressures up to about 3 MPa up to about 3MPa
pvap	317.60	kPa	278.25	Vapour liquid equilibrium data for the 1,1,1,2 tetrafluoroethane (R134a) + dimethyl ether (DME) system at temperatures from 293.18 to 358.15K and pressures up to about 3 MPa up to about 3MPa
pvap	3291.17	kPa	373.14	Vapor Pressure Measurements of Dimethyl Ether from (213 to 393) K
pvap	1805.30	kPa	343.18	Vapour liquid equilibrium data for the 1,1,1,2 tetrafluoroethane (R134a) + dimethyl ether (DME) system at temperatures from 293.18 to 358.15K and pressures up to about 3 MPa up to about 3MPa
pvap	1262.30	kPa	327.13	Saturated Pressure Measurements of Dimethyl Ether at Temperatures from (219 to 361) K
rhoI	667.00	kg/m3	293.00	KDB
sfust	37.49	J/mol×K	131.66	NIST Webbook
srf	0.01	N/m	345.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point

srf	0.01	N/m	315.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point
srf	0.01	N/m	320.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point
srf	0.01	N/m	325.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point
srf	0.01	N/m	330.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point
srf	0.01	N/m	335.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point
srf	0.01	N/m	340.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point
srf	0.01	N/m	305.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point

srf	0.00	N/m	350.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point
srf	0.00	N/m	355.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point
srf	0.00	N/m	360.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point
srf	0.00	N/m	365.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point
srf	0.00	N/m	370.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point
srf	0.00	N/m	375.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point
srf	0.00	N/m	380.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point

srf	0.00	N/m	385.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point
srf	6.14e-04	N/m	390.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point
srf	0.02	N/m	213.12	Surface Tension of Dimethyl Ether from (213 to 368) K
srf	0.02	N/m	223.11	Surface Tension of Dimethyl Ether from (213 to 368) K
srf	0.02	N/m	228.19	Surface Tension of Dimethyl Ether from (213 to 368) K
srf	0.02	N/m	233.31	Surface Tension of Dimethyl Ether from (213 to 368) K
srf	0.02	N/m	238.15	Surface Tension of Dimethyl Ether from (213 to 368) K
srf	0.02	N/m	243.12	Surface Tension of Dimethyl Ether from (213 to 368) K
srf	0.02	N/m	248.12	Surface Tension of Dimethyl Ether from (213 to 368) K
srf	0.02	N/m	253.09	Surface Tension of Dimethyl Ether from (213 to 368) K
srf	0.02	N/m	258.11	Surface Tension of Dimethyl Ether from (213 to 368) K
srf	0.02	N/m	263.12	Surface Tension of Dimethyl Ether from (213 to 368) K

srf	0.02	N/m	268.08	Surface Tension of Dimethyl Ether from (213 to 368) K
srf	0.02	N/m	273.08	Surface Tension of Dimethyl Ether from (213 to 368) K
srf	0.01	N/m	278.06	Surface Tension of Dimethyl Ether from (213 to 368) K
srf	0.01	N/m	283.07	Surface Tension of Dimethyl Ether from (213 to 368) K
srf	0.01	N/m	288.04	Surface Tension of Dimethyl Ether from (213 to 368) K
srf	0.01	N/m	293.09	Surface Tension of Dimethyl Ether from (213 to 368) K
srf	0.01	N/m	298.08	Surface Tension of Dimethyl Ether from (213 to 368) K
srf	0.01	N/m	303.20	Surface Tension of Dimethyl Ether from (213 to 368) K
srf	0.01	N/m	308.12	Surface Tension of Dimethyl Ether from (213 to 368) K
srf	0.01	N/m	313.12	Surface Tension of Dimethyl Ether from (213 to 368) K
srf	0.01	N/m	318.18	Surface Tension of Dimethyl Ether from (213 to 368) K
srf	0.01	N/m	323.18	Surface Tension of Dimethyl Ether from (213 to 368) K
srf	0.01	N/m	328.14	Surface Tension of Dimethyl Ether from (213 to 368) K
srf	0.01	N/m	333.14	Surface Tension of Dimethyl Ether from (213 to 368) K
srf	0.01	N/m	338.09	Surface Tension of Dimethyl Ether from (213 to 368) K

srf	0.01	N/m	343.13	Surface Tension of Dimethyl Ether from (213 to 368) K
srf	0.01	N/m	348.07	Surface Tension of Dimethyl Ether from (213 to 368) K
srf	0.00	N/m	353.11	Surface Tension of Dimethyl Ether from (213 to 368) K
srf	0.01	N/m	300.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point
srf	0.00	N/m	363.10	Surface Tension of Dimethyl Ether from (213 to 368) K
srf	0.00	N/m	368.04	Surface Tension of Dimethyl Ether from (213 to 368) K
srf	0.01	N/m	290.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point
srf	0.01	N/m	285.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point
srf	0.01	N/m	280.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point

srf	0.02	N/m	275.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point
srf	0.02	N/m	270.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point
srf	0.02	N/m	265.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point
srf	0.02	N/m	260.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point
srf	0.02	N/m	255.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point
srf	0.02	N/m	250.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point
srf	0.02	N/m	245.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point

srf	0.02	N/m	240.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point
srf	0.02	N/m	235.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point
srf	0.02	N/m	230.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point
srf	0.02	N/m	225.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point
srf	0.02	N/m	220.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point
srf	0.02	N/m	214.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point
srf	0.01	N/m	303.13	Surface tension of dimethyl ether + propane from 243 to 333 K
srf	0.01	N/m	298.10	Surface tension of dimethyl ether + propane from 243 to 333 K

srf	0.01	N/m	293.15	Surface tension of dimethyl ether + propane from 243 to 333 K	
srf	0.01	N/m	288.17	Surface tension of dimethyl ether + propane from 243 to 333 K	
srf	0.01	N/m	283.21	Surface tension of dimethyl ether + propane from 243 to 333 K	
srf	0.01	N/m	278.16	Surface tension of dimethyl ether + propane from 243 to 333 K	
srf	0.02	N/m	233.20	KDB	
srf	0.01	N/m	295.00	Capillary constant and surface tension of dimethyl ether and n-butane at temperatures from 214 K to those close to the critical point	
srf	0.00	N/m	358.11	Surface Tension of Dimethyl Ether from (213 to 368) K	
svapt	86.61	J/mol×K	248.34	NIST Webbook	
tcondl	0.15	W/m×K	291.33	Thermal Conductivity of Some Oxygenated Fuels and Additives in the Saturated Liquid Phase	
tcondl	0.18	W/m×K	229.67	Thermal Conductivity of Some Oxygenated Fuels and Additives in the Saturated Liquid Phase	
tcondl	0.18	W/m×K	244.98	Thermal Conductivity of Some Oxygenated Fuels and Additives in the Saturated Liquid Phase	

tcondl	0.17	W/m×K	254.60	Thermal Conductivity of Some Oxygenated Fuels and Additives in the Saturated Liquid Phase
tcondl	0.16	W/m×K	271.55	Thermal Conductivity of Some Oxygenated Fuels and Additives in the Saturated Liquid Phase
tcondl	0.15	W/m×K	281.76	Thermal Conductivity of Some Oxygenated Fuels and Additives in the Saturated Liquid Phase
virco2	-2.51e-04	m3/mol	378.01	Gas phase PVT properties and second virial coefficients of dimethyl ether
virco2	-2.84e-04	m3/mol	358.02	Gas phase PVT properties and second virial coefficients of dimethyl ether
virco2	-2.75e-04	m3/mol	363.02	Gas phase PVT properties and second virial coefficients of dimethyl ether
virco2	-2.67e-04	m3/mol	368.02	Gas phase PVT properties and second virial coefficients of dimethyl ether
virco2	-2.94e-04	m3/mol	353.03	Gas phase PVT properties and second virial coefficients of dimethyl ether
virco2	-3.02e-04	m3/mol	348.03	Gas phase PVT properties and second virial coefficients of dimethyl ether
virco2	-2.44e-04	m3/mol	383.00	Gas phase PVT properties and second virial coefficients of dimethyl ether

virco2	-2.36e-04	m3/mol	388.16	Gas phase PVT properties and second virial coefficients of dimethyl ether
virco2	-2.29e-04	m3/mol	393.16	Gas phase PVT properties and second virial coefficients of dimethyl ether
virco2	-2.22e-04	m3/mol	398.16	Gas phase PVT properties and second virial coefficients of dimethyl ether
virco2	-2.15e-04	m3/mol	403.16	Gas phase PVT properties and second virial coefficients of dimethyl ether
virco2	-3.11e-04	m3/mol	343.05	Gas phase PVT properties and second virial coefficients of dimethyl ether
virco2	-3.21e-04	m3/mol	338.04	Gas phase PVT properties and second virial coefficients of dimethyl ether
virco2	-3.28e-04	m3/mol	333.04	Gas phase PVT properties and second virial coefficients of dimethyl ether
virco2	-3.42e-04	m3/mol	328.05	Gas phase PVT properties and second virial coefficients of dimethyl ether
virco2	-2.59e-04	m3/mol	373.02	Gas phase PVT properties and second virial coefficients of dimethyl ether

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.44577e+01
Coeff. B	-2.25150e+03

Coeff. C	-2.01740e+01
Temperature range (K), min.	179.07
Temperature range (K), max.	400.38

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/T + C \cdot \ln(T) + D \cdot T^2$
Coeff. A	4.55657e+01
Coeff. B	-3.69518e+03
Coeff. C	-4.79328e+00
Coeff. D	5.94662e-06
Temperature range (K), min.	131.65
Temperature range (K), max.	400.10

Datasets

Thermal conductivity, W/m/K

Temperature, K - Gas	Pressure, kPa - Gas	Thermal conductivity, W/m/K - Gas
266.62	148.10	0.0135
267.77	148.10	0.0136
268.94	148.10	0.0136
276.20	155.80	0.0147
276.20	207.50	0.0147
277.09	207.50	0.0148
277.12	155.80	0.0148
278.14	155.80	0.0148
278.17	207.50	0.0149
285.91	253.20	0.0159
286.05	144.60	0.0159
286.67	253.20	0.0160
286.89	144.60	0.0160
287.68	253.20	0.0161
287.99	144.60	0.0161
295.96	253.20	0.0173
296.02	352.90	0.0173
296.03	154.50	0.0171

296.69	352.90	0.0174
296.76	253.20	0.0173
296.80	154.50	0.0173
297.39	352.90	0.0174
297.64	253.20	0.0174
297.76	154.50	0.0173
305.64	155.20	0.0183
305.64	502.40	0.0185
305.80	352.80	0.0184
306.69	155.20	0.0184
306.69	502.40	0.0186
306.80	352.80	0.0185
307.53	155.20	0.0185
307.53	502.40	0.0187
307.82	352.80	0.0186
315.68	496.30	0.0196
315.77	348.90	0.0195
316.05	153.90	0.0196
316.35	700.40	0.0201
316.55	496.30	0.0197
316.56	700.40	0.0199
316.75	348.90	0.0197
317.06	153.90	0.0196
317.20	700.40	0.0200
317.63	496.30	0.0198
317.81	348.90	0.0198
318.26	153.90	0.0197
325.16	1120.20	0.0214
325.31	883.70	0.0212
325.41	701.60	0.0210
325.53	500.80	0.0209
325.64	348.00	0.0208
325.83	151.50	0.0208
325.88	1120.20	0.0214
326.11	883.70	0.0213
326.20	701.60	0.0211
326.36	500.80	0.0210
326.53	348.00	0.0209
326.73	1120.20	0.0216
326.79	151.50	0.0209
326.99	883.70	0.0215
327.16	701.60	0.0213
327.38	500.80	0.0212
327.53	348.00	0.0210

327.88	151.50	0.0209
335.18	1196.90	0.0226
335.35	898.70	0.0224
335.43	705.20	0.0221
335.48	353.40	0.0220
335.54	505.20	0.0220
335.66	152.20	0.0220
335.88	1196.90	0.0227
336.11	898.70	0.0224
336.23	705.20	0.0223
336.32	353.40	0.0221
336.37	505.20	0.0222
336.45	1196.90	0.0228
336.55	152.20	0.0221
336.74	898.70	0.0225
336.91	705.20	0.0223
337.06	505.20	0.0223
337.25	353.40	0.0222
337.54	152.20	0.0221
345.11	1503.90	0.0242
345.23	1200.40	0.0239
345.35	897.30	0.0235
345.47	700.00	0.0234
345.57	502.50	0.0234
345.59	1503.90	0.0243
345.67	352.70	0.0234
345.74	1200.40	0.0240
345.88	154.30	0.0232
345.90	897.30	0.0236
346.03	700.00	0.0235
346.12	1503.90	0.0244
346.15	502.50	0.0235
346.26	352.70	0.0234
346.29	1200.40	0.0241
346.49	897.30	0.0237
346.52	154.30	0.0232
346.64	700.00	0.0236
346.82	502.50	0.0236
346.93	352.70	0.0235
347.27	154.30	0.0233
354.82	2226.00	0.0264
355.11	1777.80	0.0257
355.20	1497.30	0.0254
355.22	2226.00	0.0265

355.33	1194.90	0.0251
355.47	872.50	0.0248
355.55	701.60	0.0247
355.58	1777.80	0.0259
355.64	504.30	0.0247
355.66	2226.00	0.0263
355.69	1497.30	0.0255
355.74	356.10	0.0246
355.82	1194.90	0.0251
355.89	156.10	0.0244
355.97	872.50	0.0249
356.09	1777.80	0.0260
356.10	701.60	0.0249
356.20	504.30	0.0249
356.21	1497.30	0.0255
356.31	356.10	0.0248
356.38	1194.90	0.0252
356.52	156.10	0.0245
356.57	872.50	0.0250
356.72	701.60	0.0249
356.86	504.30	0.0249
356.98	356.10	0.0248
357.23	156.10	0.0246
364.94	2198.10	0.0278
365.09	1801.90	0.0269
365.20	1500.10	0.0265
365.30	1202.00	0.0262
365.42	906.20	0.0261
365.51	697.20	0.0260
365.51	2198.10	0.0279
365.59	481.60	0.0260
365.68	346.30	0.0259
365.70	1801.90	0.0271
365.81	1500.10	0.0267
365.86	156.40	0.0260
365.94	1202.00	0.0263
365.99	2198.10	0.0280
366.10	906.20	0.0261
366.20	697.20	0.0261
366.23	1801.90	0.0272
366.31	481.60	0.0260
366.35	1500.10	0.0267
366.42	346.30	0.0260
366.52	1202.00	0.0264

366.66	156.40	0.0259
366.70	906.20	0.0262
366.82	697.20	0.0261
366.96	481.60	0.0261
367.09	346.30	0.0260
367.38	156.40	0.0260
374.95	2704.40	0.0303
375.17	2197.80	0.0289
375.29	1766.80	0.0283
375.36	1499.60	0.0278
375.46	892.80	0.0273
375.49	1198.60	0.0276
375.49	2704.40	0.0304
375.54	707.60	0.0274
375.63	507.40	0.0273
375.72	354.00	0.0273
375.76	2197.80	0.0291
375.90	152.40	0.0271
375.92	1766.80	0.0283
375.95	2704.40	0.0305
375.97	1499.60	0.0279
376.14	892.80	0.0276
376.17	1198.60	0.0277
376.22	707.60	0.0275
376.28	2197.80	0.0292
376.35	507.40	0.0274
376.45	354.00	0.0274
376.46	1766.80	0.0284
376.56	1499.60	0.0279
376.68	152.40	0.0273
376.72	892.80	0.0276
376.75	1198.60	0.0277
376.81	707.60	0.0275
376.96	507.40	0.0274
377.08	354.00	0.0274
377.40	152.40	0.0273
384.94	3297.70	0.0333
385.16	2700.70	0.0312
385.35	2197.00	0.0300
385.44	3297.70	0.0335
385.48	1805.70	0.0295
385.56	1500.60	0.0292
385.66	1201.30	0.0290
385.74	2700.70	0.0313

385.77	899.90	0.0289
385.93	503.90	0.0286
385.95	703.00	0.0288
385.98	2197.00	0.0301
386.00	3297.70	0.0336
386.01	355.60	0.0286
386.13	1805.70	0.0296
386.20	156.60	0.0285
386.22	1500.60	0.0293
386.33	1201.30	0.0292
386.38	2700.70	0.0314
386.48	899.90	0.0290
386.50	2197.00	0.0302
386.60	703.00	0.0289
386.65	503.90	0.0287
386.65	1805.70	0.0296
386.74	1500.60	0.0294
386.79	355.60	0.0287
386.93	1201.30	0.0292
387.03	156.60	0.0286
387.08	899.90	0.0290
387.21	703.00	0.0290
387.32	503.90	0.0288
387.44	355.60	0.0288
387.74	156.60	0.0286

Reference

<https://www.doi.org/10.1021/je050305z>

Thermal conductivity, W/m/K

Temperature, K - Liquid	Pressure, kPa - Liquid	Thermal conductivity, W/m/K - Liquid
234.04	5100.00	0.1561
234.20	600.00	0.1534
234.29	600.00	0.1530
234.33	10000.00	0.1600
234.43	29800.00	0.1704
234.44	30000.00	0.1709
234.58	600.00	0.1538
234.66	5300.00	0.1568
234.70	20200.00	0.1655
234.71	10400.00	0.1605

234.72	5300.00	0.1562
234.79	30100.00	0.1703
235.00	20100.00	0.1654
235.27	20200.00	0.1655
235.32	10700.00	0.1598
253.99	10200.00	0.1528
254.02	600.00	0.1422
254.11	20400.00	0.1582
254.12	30200.00	0.1633
254.16	600.00	0.1427
254.20	20100.00	0.1579
254.22	10400.00	0.1529
254.34	30300.00	0.1643
254.37	20100.00	0.1583
254.42	600.00	0.1427
254.42	5100.00	0.1467
254.81	10100.00	0.1522
254.88	5100.00	0.1466
255.08	5000.00	0.1471
257.35	29900.00	0.1640
273.93	5000.00	0.1396
274.08	5100.00	0.1396
274.48	5000.00	0.1404
274.56	29800.00	0.1585
274.57	30400.00	0.1579
274.60	20000.00	0.1523
274.90	10500.00	0.1456
274.90	20300.00	0.1522
275.12	20300.00	0.1523
275.22	10200.00	0.1452
275.30	30600.00	0.1582
275.31	700.00	0.1342
275.74	700.00	0.1343
276.02	10500.00	0.1459
276.44	700.00	0.1347
293.79	5100.00	0.1305
293.80	800.00	0.1249
294.15	800.00	0.1252
294.16	10000.00	0.1362
294.22	10200.00	0.1364
294.30	29800.00	0.1495
294.45	800.00	0.1248
294.45	4900.00	0.1305
294.59	29900.00	0.1486

294.68	20600.00	0.1417
294.84	5200.00	0.1307
295.13	20300.00	0.1417
295.22	10000.00	0.1356
296.32	20200.00	0.1415
314.01	5100.00	0.1191
314.06	1000.00	0.1143
314.11	5200.00	0.1189
314.39	1000.00	0.1145
314.39	5100.00	0.1195
314.43	10200.00	0.1242
314.60	30100.00	0.1385
314.66	1000.00	0.1137
314.81	10200.00	0.1241
314.88	30000.00	0.1382
315.01	20400.00	0.1313
315.06	10100.00	0.1242
315.07	20100.00	0.1318
315.37	30400.00	0.1384
315.55	20000.00	0.1318
333.73	1500.00	0.1079
333.92	5200.00	0.1113
334.03	1500.00	0.1075
334.09	30000.00	0.1283
334.31	20200.00	0.1229
334.38	30100.00	0.1287
334.47	1500.00	0.1078
334.55	5100.00	0.1108
334.70	10200.00	0.1156
334.79	20200.00	0.1224
334.85	5200.00	0.1116
334.90	30200.00	0.1288
334.91	10200.00	0.1154
335.09	30400.00	0.1294
335.29	20100.00	0.1228
335.37	10100.00	0.1151
335.72	20000.00	0.1223
335.76	10300.00	0.1146
353.73	10300.00	0.1059
353.93	30500.00	0.1206
353.97	30100.00	0.1208
354.06	10200.00	0.1053
354.10	20400.00	0.1145
354.15	5800.00	0.0998

354.21	2300.00	0.0973
354.29	5300.00	0.1005
354.45	2300.00	0.0970
354.59	30100.00	0.1208
354.86	2300.00	0.0971
354.97	5200.00	0.1000
355.08	20000.00	0.1141
355.18	2300.00	0.0971
355.36	20100.00	0.1142
355.46	5200.00	0.1012
374.25	10700.00	0.0988
374.25	20500.00	0.1071
374.30	30400.00	0.1129
374.62	30300.00	0.1133
374.81	29900.00	0.1135
374.85	3300.00	0.0871
374.85	5100.00	0.0908
374.91	5000.00	0.0908
375.13	3300.00	0.0869
375.27	5000.00	0.0911
375.38	3300.00	0.0867
375.68	20200.00	0.1065
376.02	20000.00	0.1065
376.38	10600.00	0.0976

Reference

<https://www.doi.org/10.1021/je800964k>

Molar heat capacity at constant pressure, J/K/mol

Temperature, K - Liquid	Pressure, kPa - Liquid	Molar heat capacity at constant pressure, J/K/mol - Liquid
305.15	1460.00	113.19
305.15	2030.00	112.82
305.15	2520.00	112.13
305.15	2930.00	112.36
305.15	3540.00	111.99
305.15	4060.00	111.53
305.15	4580.00	111.26
305.15	5020.00	111.02
310.15	1460.00	113.47
310.15	2030.00	112.91
310.15	2520.00	112.31

310.15	2930.00	112.45
310.15	3540.00	111.72
310.15	4060.00	111.21
310.15	4580.00	111.44
310.15	5020.00	111.30
315.15	1460.00	114.80
315.15	2030.00	114.11
315.15	2520.00	113.60
315.15	2930.00	113.47
315.15	3540.00	112.78
315.15	4060.00	112.13
315.15	4580.00	112.45
315.15	5020.00	112.22
320.15	1460.00	116.23
320.15	2030.00	115.45
320.15	2520.00	115.03
320.15	2930.00	114.89
320.15	3540.00	114.02
320.15	4060.00	113.37
320.15	4580.00	113.56
320.15	5020.00	113.28
325.15	1460.00	117.84
325.15	2030.00	116.92
325.15	2520.00	116.65
325.15	2930.00	116.05
325.15	3540.00	115.31
325.15	4060.00	114.57
325.15	4580.00	114.66
325.15	5020.00	114.30
330.15	2030.00	118.86
330.15	2520.00	118.49
330.15	2930.00	117.75
330.15	3540.00	117.01
330.15	4060.00	116.05
330.15	4580.00	116.05
330.15	5020.00	115.59
335.15	2030.00	121.34
335.15	2520.00	120.84
335.15	2930.00	120.15
335.15	3540.00	119.27
335.15	4060.00	118.03
335.15	4580.00	117.98
335.15	5020.00	117.38
340.15	2520.00	123.92

340.15	2930.00	123.09
340.15	3540.00	122.08
340.15	4060.00	120.65
340.15	4580.00	120.52
340.15	5020.00	119.82
345.15	2520.00	127.75
345.15	2930.00	126.55
345.15	3540.00	125.35
345.15	4060.00	123.92
345.15	4580.00	123.65
345.15	5020.00	122.86
350.15	2930.00	130.65
350.15	3540.00	129.13
350.15	4060.00	127.75
350.15	4580.00	127.19
350.15	5020.00	126.27
355.15	3540.00	133.46
355.15	4060.00	131.94
355.15	4580.00	131.06
355.15	5020.00	129.91
360.15	4060.00	136.82
360.15	4580.00	135.67
360.15	5020.00	134.15
365.15	4060.00	144.01
365.15	4580.00	142.31
365.15	5020.00	140.42

Reference

<https://www.doi.org/10.1021/je500512f>

Temperature, K	Pressure, kPa	Molar heat capacity at constant pressure, J/K/mol
310.00	2000.00	123.92
310.00	3000.00	122.08
310.00	4000.00	121.62
310.00	5000.00	121.16
320.00	2000.00	127.61
320.00	3000.00	125.77
320.00	4000.00	124.85
320.00	5000.00	124.85
330.00	2000.00	131.30
330.00	3000.00	128.53
330.00	4000.00	128.07
330.00	5000.00	127.15
340.00	2000.00	137.74

340.00	3000.00	134.98
340.00	4000.00	132.22
340.00	5000.00	129.45
350.00	3000.00	140.51
350.00	4000.00	137.28
350.00	5000.00	132.68
360.00	3000.00	153.87
360.00	4000.00	145.12
360.00	5000.00	136.36

Reference

<https://www.doi.org/10.1021/je900922x>

Viscosity, Pa*s

Temperature, K - Gas	Pressure, kPa - Gas	Viscosity, Pa*s - Gas
298.15	101.00	0.0000092
298.15	296.00	0.0000092
298.15	475.00	0.0000091
323.15	101.00	0.0000100
323.15	295.00	0.0000100
323.15	490.00	0.0000099
323.15	736.00	0.0000099
323.15	976.00	0.0000099
348.15	101.00	0.0000108
348.15	305.00	0.0000108
348.15	551.00	0.0000108
348.15	1006.00	0.0000108
348.15	1561.00	0.0000109
348.15	1850.00	0.0000111
373.15	101.00	0.0000116
373.15	305.00	0.0000116
373.15	500.00	0.0000116
373.15	1028.00	0.0000117
373.15	1940.00	0.0000119
373.15	2505.00	0.0000122
373.15	2875.00	0.0000125
373.15	3049.00	0.0000126
398.15	101.00	0.0000123
398.15	300.00	0.0000124
398.15	531.00	0.0000124
398.15	992.00	0.0000124

398.15	2085.00	0.0000127
398.15	2985.00	0.0000132
398.15	3965.00	0.0000141
398.15	4480.00	0.0000150
398.15	4620.00	0.0000154
423.15	101.00	0.0000133
423.15	310.00	0.0000133
423.15	505.00	0.0000133
423.15	985.00	0.0000134
423.15	2022.00	0.0000137
423.15	3004.00	0.0000141
423.15	4015.00	0.0000148
423.15	4495.00	0.0000152
423.15	4912.00	0.0000157

Reference

<https://www.doi.org/10.1021/je8009545>

Mass density, kg/m3

Temperature, K - Gas	Pressure, kPa - Gas	Mass density, kg/m3 - Gas
402.80	8580.00	451.0
411.60	10360.00	451.0
419.50	12150.00	451.0
425.40	13670.00	451.0
429.80	14600.00	451.0
432.60	15210.00	451.0
437.20	16200.00	451.0

Reference

<https://www.doi.org/10.1021/acs.jced.9b00249>

Mass density, kg/m3

Pressure, kPa - Fluid (supercritical or subcritical phases)	Temperature, K - Fluid (supercritical or subcritical phases)	Mass density, kg/m3 - Fluid (supercritical or subcritical phases)
4100.00	288.50	684.0
5100.00	288.60	686.0
6100.00	288.80	688.0
7200.00	289.00	690.0

8200.00	289.10	691.0
9200.00	289.10	693.0
10000.00	289.30	694.0
15000.00	289.30	703.0
20000.00	289.30	711.0
25000.00	289.40	718.0
30000.00	289.50	725.0

Reference

<https://www.doi.org/10.1016/j.fluid.2010.07.009>

Temperature, K	Pressure, kPa	Mass density, kg/m3
293.84	1000.00	669.27
293.84	3000.00	673.21
293.84	5000.00	676.85
293.84	10000.00	685.08
293.84	15000.00	692.61
293.84	20000.00	699.44
293.84	25000.00	705.75
293.84	30000.00	711.53
293.84	35000.00	717.0
293.84	40000.00	722.21
293.84	50000.00	731.68
293.84	60000.00	740.35
293.84	70000.00	748.4
303.45	1000.00	653.54
303.45	3000.00	657.94
303.45	5000.00	662.06
303.45	10000.00	671.42
303.45	15000.00	679.73
303.45	20000.00	687.19
303.45	25000.00	694.14
303.45	30000.00	700.39
303.45	35000.00	706.33
303.45	40000.00	711.79
303.45	50000.00	721.98
303.45	60000.00	731.17
303.45	70000.00	739.59
313.18	3000.00	641.72
313.18	5000.00	646.5
313.18	10000.00	657.11
313.18	15000.00	666.38
313.18	20000.00	674.68
313.18	25000.00	682.06

313.18	30000.00	688.96
313.18	35000.00	695.3
313.18	40000.00	701.19
313.18	50000.00	711.96
313.18	60000.00	721.63
313.18	70000.00	730.55
323.00	3000.00	624.46
323.00	5000.00	630.01
323.00	10000.00	642.19
323.00	15000.00	652.54
323.00	20000.00	661.65
323.00	25000.00	669.81
323.00	30000.00	677.2
323.00	35000.00	684.06
323.00	40000.00	690.37
323.00	50000.00	701.9
323.00	60000.00	712.04
323.00	70000.00	721.44
332.83	3000.00	605.7
332.83	5000.00	612.33
332.83	10000.00	626.46
332.83	15000.00	638.17
332.83	20000.00	648.33
332.83	25000.00	657.3
332.83	30000.00	665.34
332.83	35000.00	672.7
332.83	40000.00	679.54
332.83	50000.00	691.67
332.83	60000.00	702.5
332.83	70000.00	712.29
343.01	3000.00	584.39
343.01	5000.00	592.63
343.01	10000.00	609.39
343.01	15000.00	622.87
343.01	20000.00	634.17
343.01	25000.00	644.06
343.01	30000.00	652.87
343.01	35000.00	660.84
343.01	40000.00	668.11
343.01	50000.00	681.15
343.01	60000.00	692.63
343.01	70000.00	702.89
353.00	3000.00	560.89
353.00	5000.00	571.39

353.00	10000.00	591.7
353.00	15000.00	607.19
353.00	20000.00	619.91
353.00	25000.00	630.86
353.00	30000.00	640.46
353.00	35000.00	649.09
353.00	40000.00	656.92
353.00	50000.00	670.8
353.00	60000.00	682.9
353.00	70000.00	693.76
362.91	5000.00	547.69
362.91	10000.00	572.99
362.91	15000.00	591.04
362.91	20000.00	605.41
362.91	25000.00	617.51
362.91	30000.00	627.99
362.91	35000.00	637.26
362.91	40000.00	645.67
362.91	50000.00	660.45
362.91	60000.00	673.27
362.91	70000.00	684.63
372.94	5000.00	519.39
372.94	10000.00	552.4
372.94	15000.00	573.78
372.94	20000.00	590.14
372.94	25000.00	603.55
372.94	30000.00	615.07
372.94	35000.00	625.15
372.94	40000.00	634.21
372.94	50000.00	649.98
372.94	60000.00	663.51
372.94	70000.00	675.48

Reference

<https://www.doi.org/10.1016/j.jct.2011.04.011>

Temperature, K	Pressure, kPa	Mass density, kg/m3
283.14	2513.00	688.1
283.14	5003.00	692.0
283.14	9016.00	698.0
283.14	11009.00	700.8
283.14	18086.00	710.2
283.14	21845.00	714.6
283.14	32151.00	726.1

283.15	550.00	684.8
283.15	14790.00	705.9
283.15	25006.00	718.2
283.15	29056.00	722.8
283.16	35521.00	729.5
293.15	602.00	669.3
293.15	2506.00	672.9
293.15	5017.00	677.4
293.15	9039.00	684.2
293.15	11056.00	687.3
293.15	15028.00	693.2
293.15	18059.00	697.4
293.15	21007.00	701.4
293.15	25071.00	706.5
293.15	29096.00	711.3
293.15	32201.00	714.8
293.16	34680.00	717.5
303.15	804.00	653.8
303.15	9000.00	670.1
303.15	15007.00	680.1
303.15	19009.00	686.3
303.15	32101.00	703.7
303.16	2502.00	657.3
303.16	5002.00	662.5
303.16	11000.00	673.6
303.16	21216.00	689.5
303.16	25625.00	695.5
303.16	29118.00	700.0
303.16	35012.00	707.1
313.14	2207.00	639.8
313.14	29291.00	688.3
313.15	1003.00	636.8
313.15	5011.00	646.6
313.15	9070.00	655.3
313.15	11057.00	659.2
313.15	15041.00	666.5
313.15	19082.00	673.3
313.15	21159.00	676.6
313.15	25629.00	683.2
313.15	32000.00	692.0
313.15	35404.00	696.2
323.14	1750.00	620.4
323.14	4998.00	629.7
323.14	7033.00	634.9

323.14	10877.00	643.9
323.14	17659.00	657.5
323.14	23929.00	667.9
323.14	26052.00	671.4
323.14	32540.00	680.9
323.15	15253.00	652.9
323.15	20934.00	663.1
323.15	29643.00	676.8
323.15	35338.00	684.8
333.15	1545.00	600.4
333.15	3523.00	606.9
333.15	6504.00	616.3
333.15	9001.00	623.3
333.15	11059.00	628.5
333.15	14097.00	635.6
333.15	16998.00	642.0
333.15	20991.00	649.8
333.15	25004.00	657.1
333.15	29204.00	663.9
333.15	31963.00	668.2
333.15	35361.00	673.2
343.14	29042.00	651.5
343.15	3041.00	585.3
343.15	5002.00	593.1
343.15	8077.00	603.7
343.15	11043.00	612.6
343.15	12026.00	615.4
343.15	15026.00	623.1
343.15	18017.00	630.0
343.15	21209.00	636.9
343.15	25025.00	644.3
343.15	32018.00	656.5
343.16	35240.00	661.7
353.14	18102.00	615.2
353.14	22764.00	625.8
353.14	25005.00	630.8
353.15	7284.00	581.4
353.15	8162.00	584.8
353.15	9548.00	589.9
353.15	11065.00	594.9
353.15	15245.00	607.6
353.15	21002.00	622.2
353.15	29020.00	638.6
353.15	32599.00	645.3

353.15

35513.00

650.1

Reference

<https://www.doi.org/10.1021/je050135q>

Amount density, mol/m³

Temperature, K - Gas	Pressure, kPa - Gas	Amount density, mol/m ³ - Gas
343.86	55.00	19.2
343.86	57.00	19.9
343.86	75.10	26.6
343.86	83.10	29.3
343.86	86.10	30.4
343.86	113.70	40.4
343.86	125.70	44.5
343.86	130.20	46.2
343.86	171.80	61.6
343.86	189.80	67.8
343.86	196.60	70.3
343.86	259.20	93.7
343.86	285.70	103.2
343.86	295.80	107.0
343.86	389.00	142.6
343.86	428.00	157.0
343.86	442.70	162.9
343.86	578.40	217.0
343.86	634.00	239.0
343.86	656.40	248.0
343.86	851.00	330.3
343.86	928.60	363.7
343.86	958.90	377.4
343.86	1225.60	502.7
343.86	1326.50	553.5
343.86	1365.40	574.4
343.86	1697.30	765.1
348.96	68.90	23.6
348.96	103.90	35.9
348.96	156.70	54.7
348.96	235.80	83.2
348.96	353.40	126.6
348.96	526.10	192.7
348.96	774.90	293.3

348.96	1121.10	446.4
348.96	1574.70	679.4
354.08	74.30	25.2
354.08	112.20	38.4
354.08	169.40	58.4
354.08	255.20	88.9
354.08	382.70	135.3
354.08	569.90	205.9
354.08	839.20	313.4
354.08	1212.90	477.0
354.08	1701.30	726.0
359.21	94.10	31.5
359.21	142.00	47.9
359.21	214.20	72.9
359.21	321.80	111.0
359.21	480.90	168.9
359.21	712.40	257.1
359.21	1040.80	391.3
359.21	1486.80	595.6
359.21	2045.90	906.5
364.35	103.80	34.6
364.35	157.10	52.6
364.35	237.30	80.1
364.35	357.20	121.9
364.35	534.50	185.5
364.35	790.30	282.3
364.35	1155.70	429.7
364.35	1647.70	654.0
364.35	2259.60	995.3
364.36	119.10	39.9
364.36	180.20	60.7
364.36	272.10	92.4
364.36	409.00	140.7
364.36	610.70	214.1
364.36	901.90	325.9
364.36	1309.20	496.0
364.36	1848.50	755.0
364.36	2485.70	1149.1
369.49	86.20	28.1
369.49	130.50	42.7
369.49	197.00	65.0
369.49	296.60	98.9
369.49	444.60	150.5
369.49	661.60	229.1

369.49	973.60	348.7
369.49	1407.00	530.7
369.49	1975.90	807.7
374.64	132.60	42.8
374.64	200.40	65.2
374.64	302.10	99.3
374.64	453.20	151.1
374.64	675.10	229.9
374.64	994.80	350.0
374.64	1440.50	532.6
374.64	2029.10	810.7
374.64	2729.90	1233.8
379.80	103.80	33.1
379.80	157.10	50.3
379.80	237.50	76.6
379.80	357.90	116.6
379.80	536.50	177.5
379.80	797.90	270.1
379.80	1171.80	411.1
379.80	1687.20	625.7
379.80	2352.90	952.3
379.80	3118.30	1449.4
384.95	128.90	40.7
384.95	195.10	62.0
384.95	294.60	94.3
384.95	443.10	143.6
384.95	662.20	218.5
384.95	980.30	332.6
384.95	1429.40	506.2
384.95	2045.70	770.4
384.95	2791.00	1172.5
384.95	3591.80	1784.6
390.14	197.50	61.7
390.14	298.40	94.0
390.14	448.90	143.0
390.14	671.40	217.7
390.14	995.20	331.4
390.14	1454.00	504.3
390.14	2077.00	767.6
390.14	2861.50	1168.2
390.14	3721.90	1778.0
390.15	224.40	69.7
390.15	338.00	106.2
390.15	507.00	161.6

[illegible]

Measurement of the Critical Parameters and the Saturation Densities of Isothermic Heat Capacity Measurements for Dimethyl Ether and Hydrofluorocarbonants and Liquid Phase Density-Volume Coefficients at 365 K for Propyl Propanoate and dimethyl ether from propane and 3-butene

Yanqin Liou et al.

Abstract: The liquid phase density-volume coefficients (R_{13}) for the liquid phase of propyl propanoate and dimethyl ether were measured by means of a dilatometer at temperatures ranging from 298.15 to 399.15 K and pressures up to about 3 MPa up to about 3 MPa.

<https://www.doi.org/10.1021/je800375t>

<https://www.doi.org/10.1016/j.fluid.2010.07.009>

<https://www.doi.org/10.1021/acs.jced.5b00973>

<https://www.doi.org/10.1021/je050327l>

<https://www.doi.org/10.1021/acs.jced.8b00037>

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<https://www.doi.org/10.1016/j.jct.2005.08.004>

<https://www.doi.org/10.1021/je500665h>

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<https://www.doi.org/10.1021/jc301302g>

<https://www.doi.org/10.1016/j.ijot.2006.04.009>

<https://www.doi.org/10.1021/jc0602574>

<https://www.doi.org/10.1021/jc050205z>

<https://www.doi.org/10.1016/j.fluid.2010.07.026>

<http://webbook.nist.gov/cgi/check.cgi?ID=C115106&Units=SI>

<https://www.doi.org/10.1021/jc024251.v>

<https://doi.org/10.1001/ja.5005106>

<https://www.doi.org/10.1001/ja.2020.0906>

<https://www.doi.org/10.1001/ja.2025.6000>

<https://www.doi.org/10.1016/j.fluid.2025.01.001>

[illegible]

Legend

af:	Acentric Factor
affp:	Proton affinity
agtt:	Autoignition Temperature
basg:	Gas basicity
chg:	Standard gas enthalpy of combustion
cpg:	Ideal gas heat capacity
cpl:	Liquid phase heat capacity
dm:	Dipole Moment
dvisc:	Dynamic viscosity
fl:	Lower Flammability Limit
flu:	Upper Flammability Limit
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hfust:	Enthalpy of fusion at a given temperature
hvac:	Enthalpy of vaporization at standard conditions
hvapt:	Enthalpy of vaporization at a given temperature
ie:	Ionization energy
kvisc:	Kinematic viscosity
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mccol:	McGowan's characteristic volume
nfpaf:	NFPA Fire Rating
nfpah:	NFPA Health Rating
pc:	Critical Pressure
pvap:	Vapor pressure
rhoc:	Critical density
rhog:	Gas Density
rhof:	Liquid Density
rhomg:	Gas Amount Density
rinpol:	Non-polar retention indices
ripol:	Polar retention indices
sfust:	Entropy of fusion at a given temperature
sl:	Liquid phase molar entropy at standard conditions
srf:	Surface Tension
svapt:	Entropy of vaporization at a given temperature

tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tcondg:	Gas thermal conductivity
tcondl:	Liquid thermal conductivity
tf:	Normal melting (fusion) point
tt:	Triple Point Temperature
vc:	Critical Volume
virco2:	2nd virial coefficient
zc:	Critical Compressibility
zra:	Rackett Parameter

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