

Diisodecyl phthalate

Other names:	1,2-benzenedicarboxylic acid, diisodecyl ester 3-methylnonyl 1,2-benzenedioate
Inchi:	InChI=1S/C28H46O4/c1-23(2)17-11-7-5-9-15-21-31-27(29)25-19-13-14-20-26(25)28(30)
InchiKey:	ZVFDTKUVRCTHQE-UHFFFAOYSA-N
Formula:	C28H46O4
SMILES:	CC(C)CCCCCCCCOC(=O)c1ccccc1C(=O)OCCCCCCCCC(C)C
Mol. weight [g/mol]:	446.67
CAS:	26761-40-0

Physical Properties

Property code	Value	Unit	Source
af	1.2313		Cheméo Relay (1.0)
hf	-1017.03	kJ/mol	Cheméo Relay (1.0)
hfus	60.46	kJ/mol	Joback Method
hvap	120.28	kJ/mol	Cheméo Relay (1.0)
ie	9.39	eV	Cheméo Relay (1.0)
log10ws	-7.99		Cheméo Relay (1.0)
logp	7.993		Crippen Method
mcvol	396.500	ml/mol	McGowan Method
pc	824.79	kPa	Joback Method
tb	686.66	K	Cheméo Relay (1.0)
tc	887.56	K	Cheméo Relay (1.0)
tf	288.66	K	Cheméo Relay (1.0)
vc	1.486	m3/kmol	Cheméo Relay (1.0)

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1370.15	J/mol×K	1023.40	Joback Method
cpg	1452.37	J/mol×K	1255.68	Joback Method
cpg	1442.65	J/mol×K	1216.97	Joback Method
cpg	1431.44	J/mol×K	1178.25	Joback Method
cpg	1418.64	J/mol×K	1139.54	Joback Method
cpg	1404.21	J/mol×K	1100.83	Joback Method

cpg	1388.07	J/mol×K	1062.11	Joback Method
dvisc	0.0238500	Pa×s	323.15	Density and Viscosity of Diisodecyl Phthalate C ₆ H ₄ (COOC ₁₀ H ₂₁) ₂ , with Nominal Viscosity at T) 298 K and p) 0.1 MPa of 87 mPaas, at Temperatures from (298.15 to 423.15) K and Pressures up to 70 MPa
dvisc	0.0877000	Pa×s	298.15	Temperature and Pressure Dependence of the Viscosity of Diisodecyl Phthalate at Temperatures between (0 and 100) deg C and at Pressures to 1 GPa
dvisc	0.0235100	Pa×s	323.15	Study of the effects of pressure on the viscosity and density of diisodecyl phthalate
dvisc	0.0191300	Pa×s	328.15	Study of the effects of pressure on the viscosity and density of diisodecyl phthalate
dvisc	0.0157900	Pa×s	333.15	Study of the effects of pressure on the viscosity and density of diisodecyl phthalate
dvisc	0.0132100	Pa×s	338.15	Study of the effects of pressure on the viscosity and density of diisodecyl phthalate
dvisc	0.0111800	Pa×s	343.15	Study of the effects of pressure on the viscosity and density of diisodecyl phthalate

dvisc	0.0095610	Pa×s	348.15	Study of the effects of pressure on the viscosity and density of diisodecyl phthalate
dvisc	0.0082570	Pa×s	353.15	Study of the effects of pressure on the viscosity and density of diisodecyl phthalate
dvisc	0.0071930	Pa×s	358.15	Study of the effects of pressure on the viscosity and density of diisodecyl phthalate
dvisc	0.0063290	Pa×s	363.15	Study of the effects of pressure on the viscosity and density of diisodecyl phthalate
dvisc	0.0056020	Pa×s	368.15	Study of the effects of pressure on the viscosity and density of diisodecyl phthalate
dvisc	0.0049890	Pa×s	373.15	Study of the effects of pressure on the viscosity and density of diisodecyl phthalate
dvisc	0.1233000	Pa×s	293.15	Densities, refractive indices, and viscosities of N,N-diethylethanol ammonium chloride - glycerol or - ethylene glycol deep eutectic solvents and their aqueous solutions

dvisc	0.0883800	Pa×s	298.15	Densities, refractive indices, and viscosities of N,N-diethylethanol ammonium chloride - glycerol or - ethylene glycol deep eutectic solvents and their aqueous solutions
dvisc	0.0652400	Pa×s	303.15	Densities, refractive indices, and viscosities of N,N-diethylethanol ammonium chloride - glycerol or - ethylene glycol deep eutectic solvents and their aqueous solutions
dvisc	0.0378500	Pa×s	313.15	Densities, refractive indices, and viscosities of N,N-diethylethanol ammonium chloride - glycerol or - ethylene glycol deep eutectic solvents and their aqueous solutions
dvisc	0.0237300	Pa×s	323.15	Densities, refractive indices, and viscosities of N,N-diethylethanol ammonium chloride - glycerol or - ethylene glycol deep eutectic solvents and their aqueous solutions
dvisc	0.0160300	Pa×s	333.15	Densities, refractive indices, and viscosities of N,N-diethylethanol ammonium chloride - glycerol or - ethylene glycol deep eutectic solvents and their aqueous solutions

dvisc	0.0113100	Pa×s	343.15	Densities, refractive indices, and viscosities of N,N-diethylethanol ammonium chloride - glycerol or - ethylene glycol deep eutectic solvents and their aqueous solutions
dvisc	0.2656000	Pa×s	283.15	Viscosity of Diisodecyl Phthalate by Surface Light Scattering (SLS)
dvisc	0.3935000	Pa×s	278.15	Temperature and Pressure Dependence of the Viscosity of Diisodecyl Phthalate at Temperatures between (0 and 100) deg C and at Pressures to 1 GPa
dvisc	0.2552000	Pa×s	283.15	Temperature and Pressure Dependence of the Viscosity of Diisodecyl Phthalate at Temperatures between (0 and 100) deg C and at Pressures to 1 GPa
dvisc	0.1709000	Pa×s	288.15	Temperature and Pressure Dependence of the Viscosity of Diisodecyl Phthalate at Temperatures between (0 and 100) deg C and at Pressures to 1 GPa
dvisc	0.1226000	Pa×s	293.15	Temperature and Pressure Dependence of the Viscosity of Diisodecyl Phthalate at Temperatures between (0 and 100) deg C and at Pressures to 1 GPa

dvisc	0.1238000	Pa×s	293.15	Viscosity of Diisodecyl Phthalate by Surface Light Scattering (SLS)
dvisc	0.0841000	Pa×s	298.15	Temperature and Pressure Dependence of the Viscosity of Diisodecyl Phthalate at Temperatures between (0 and 100) deg C and at Pressures to 1 GPa
dvisc	0.0646000	Pa×s	303.15	Temperature and Pressure Dependence of the Viscosity of Diisodecyl Phthalate at Temperatures between (0 and 100) deg C and at Pressures to 1 GPa
dvisc	0.0638000	Pa×s	303.15	Temperature and Pressure Dependence of the Viscosity of Diisodecyl Phthalate at Temperatures between (0 and 100) deg C and at Pressures to 1 GPa
dvisc	0.0489000	Pa×s	308.15	Temperature and Pressure Dependence of the Viscosity of Diisodecyl Phthalate at Temperatures between (0 and 100) deg C and at Pressures to 1 GPa
dvisc	0.0476000	Pa×s	308.15	Temperature and Pressure Dependence of the Viscosity of Diisodecyl Phthalate at Temperatures between (0 and 100) deg C and at Pressures to 1 GPa

dvisc	0.0366000	Pa×s	313.15	Temperature and Pressure Dependence of the Viscosity of Diisodecyl Phthalate at Temperatures between (0 and 100) deg C and at Pressures to 1 GPa
dvisc	0.0230000	Pa×s	323.15	Temperature and Pressure Dependence of the Viscosity of Diisodecyl Phthalate at Temperatures between (0 and 100) deg C and at Pressures to 1 GPa
dvisc	0.0155000	Pa×s	333.15	Temperature and Pressure Dependence of the Viscosity of Diisodecyl Phthalate at Temperatures between (0 and 100) deg C and at Pressures to 1 GPa
dvisc	0.0110000	Pa×s	343.15	Temperature and Pressure Dependence of the Viscosity of Diisodecyl Phthalate at Temperatures between (0 and 100) deg C and at Pressures to 1 GPa
dvisc	0.0081200	Pa×s	353.15	Temperature and Pressure Dependence of the Viscosity of Diisodecyl Phthalate at Temperatures between (0 and 100) deg C and at Pressures to 1 GPa

dvisc	0.0872000	Pa×s	298.15	Density and Viscosity of Diisodecyl Phthalate C ₆ H ₄ (COOC ₁₀ H ₂₁) ₂ , with Nominal Viscosity at T) 298 K and p) 0.1 MPa of 87 mPaas, at Temperatures from (298.15 to 423.15) K and Pressures up to 70 MPa
dvisc	0.4046000	Pa×s	278.15	Study of the effects of pressure on the viscosity and density of diisodecyl phthalate
dvisc	0.0097100	Pa×s	348.15	Density and Viscosity of Diisodecyl Phthalate C ₆ H ₄ (COOC ₁₀ H ₂₁) ₂ , with Nominal Viscosity at T) 298 K and p) 0.1 MPa of 87 mPaas, at Temperatures from (298.15 to 423.15) K and Pressures up to 70 MPa
dvisc	0.0063900	Pa×s	363.15	Density and Viscosity of Diisodecyl Phthalate C ₆ H ₄ (COOC ₁₀ H ₂₁) ₂ , with Nominal Viscosity at T) 298 K and p) 0.1 MPa of 87 mPaas, at Temperatures from (298.15 to 423.15) K and Pressures up to 70 MPa
dvisc	0.6276000	Pa×s	273.15	Temperature and Pressure Dependence of the Viscosity of Diisodecyl Phthalate at Temperatures between (0 and 100) deg C and at Pressures to 1 GPa

dvisc	0.2612000	Pa×s	283.15	Study of the effects of pressure on the viscosity and density of diisodecyl phthalate	
dvisc	0.0293800	Pa×s	318.15	Study of the effects of pressure on the viscosity and density of diisodecyl phthalate	
dvisc	0.0884400	Pa×s	298.15	Viscosity of Diisodecyl Phthalate by Surface Light Scattering (SLS)	
dvisc	0.0648400	Pa×s	303.15	Viscosity of Diisodecyl Phthalate by Surface Light Scattering (SLS)	
dvisc	0.0489800	Pa×s	308.15	Viscosity of Diisodecyl Phthalate by Surface Light Scattering (SLS)	
dvisc	0.0380100	Pa×s	313.15	Viscosity of Diisodecyl Phthalate by Surface Light Scattering (SLS)	
dvisc	0.2648800	Pa×s	283.03	Viscosity Measurements of Diisodecyl Phthalate Using a Vibrating Wire Instrument Operated In Free Decay Mode: Comparison with Results Obtained with the Forced Mode of Operation	
dvisc	0.1763500	Pa×s	288.23	Viscosity Measurements of Diisodecyl Phthalate Using a Vibrating Wire Instrument Operated In Free Decay Mode: Comparison with Results Obtained with the Forced Mode of Operation	

dvisc	0.1739200	Pa×s	288.36	Viscosity Measurements of Diisodecyl Phthalate Using a Vibrating Wire Instrument Operated In Free Decay Mode: Comparison with Results Obtained with the Forced Mode of Operation
dvisc	0.1223400	Pa×s	293.23	Viscosity Measurements of Diisodecyl Phthalate Using a Vibrating Wire Instrument Operated In Free Decay Mode: Comparison with Results Obtained with the Forced Mode of Operation
dvisc	0.1165100	Pa×s	293.93	Viscosity Measurements of Diisodecyl Phthalate Using a Vibrating Wire Instrument Operated In Free Decay Mode: Comparison with Results Obtained with the Forced Mode of Operation
dvisc	0.0877600	Pa×s	298.13	Viscosity Measurements of Diisodecyl Phthalate Using a Vibrating Wire Instrument Operated In Free Decay Mode: Comparison with Results Obtained with the Forced Mode of Operation
dvisc	0.0853000	Pa×s	298.58	Viscosity Measurements of Diisodecyl Phthalate Using a Vibrating Wire Instrument Operated In Free Decay Mode: Comparison with Results Obtained with the Forced Mode of Operation

dvisc	0.0645100	Pa×s	303.18	Viscosity Measurements of Diisodecyl Phthalate Using a Vibrating Wire Instrument Operated In Free Decay Mode: Comparison with Results Obtained with the Forced Mode of Operation
dvisc	0.0632500	Pa×s	303.50	Viscosity Measurements of Diisodecyl Phthalate Using a Vibrating Wire Instrument Operated In Free Decay Mode: Comparison with Results Obtained with the Forced Mode of Operation
dvisc	0.1759000	Pa×s	288.15	Study of the effects of pressure on the viscosity and density of diisodecyl phthalate
dvisc	0.1223000	Pa×s	293.15	Study of the effects of pressure on the viscosity and density of diisodecyl phthalate
dvisc	0.0875200	Pa×s	298.15	Study of the effects of pressure on the viscosity and density of diisodecyl phthalate
dvisc	0.1774000	Pa×s	288.15	Viscosity of Diisodecyl Phthalate by Surface Light Scattering (SLS)
dvisc	0.0643100	Pa×s	303.15	Study of the effects of pressure on the viscosity and density of diisodecyl phthalate

dvisc	0.0484600	Pa×s	308.15	Study of the effects of pressure on the viscosity and density of diisodecyl phthalate
dvisc	0.0373500	Pa×s	313.15	Study of the effects of pressure on the viscosity and density of diisodecyl phthalate
rfi	1.48450		293.15	New Measurements of the Viscosity of Diisodecyl Phthalate Using a Vibrating Wire Technique
rhoI	962.88	kg/m3	298.25	Thermodynamic properties and equation of state of liquid di-isodecyl phthalate at temperature between (273 and 423) K and at pressures up to 140 MPa
rhoI	952.15	kg/m3	313.27	Thermodynamic properties and equation of state of liquid di-isodecyl phthalate at temperature between (273 and 423) K and at pressures up to 140 MPa
rhoI	937.93	kg/m3	333.28	Thermodynamic properties and equation of state of liquid di-isodecyl phthalate at temperature between (273 and 423) K and at pressures up to 140 MPa

rhoI	923.76	kg/m3	353.29	Thermodynamic properties and equation of state of liquid di-isodecyl phthalate at temperature between (273 and 423) K and at pressures up to 140 MPa
rhoI	909.62	kg/m3	373.29	Thermodynamic properties and equation of state of liquid di-isodecyl phthalate at temperature between (273 and 423) K and at pressures up to 140 MPa
rhoI	895.47	kg/m3	393.31	Thermodynamic properties and equation of state of liquid di-isodecyl phthalate at temperature between (273 and 423) K and at pressures up to 140 MPa
rhoI	881.29	kg/m3	413.33	Thermodynamic properties and equation of state of liquid di-isodecyl phthalate at temperature between (273 and 423) K and at pressures up to 140 MPa
rhoI	973.75	kg/m3	282.95	Thermodynamic properties and equation of state of liquid di-isodecyl phthalate at temperature between (273 and 423) K and at pressures up to 140 MPa

rhoI	962.83	kg/m3	298.28	Thermodynamic properties and equation of state of liquid di-isodecyl phthalate at temperature between (273 and 423) K and at pressures up to 140 MPa
rhoI	957.83	kg/m3	305.26	Thermodynamic properties and equation of state of liquid di-isodecyl phthalate at temperature between (273 and 423) K and at pressures up to 140 MPa
rhoI	980.07	kg/m3	274.06	Thermodynamic properties and equation of state of liquid di-isodecyl phthalate at temperature between (273 and 423) K and at pressures up to 140 MPa
rhoI	980.08	kg/m3	274.07	Thermodynamic properties and equation of state of liquid di-isodecyl phthalate at temperature between (273 and 423) K and at pressures up to 140 MPa
rhoI	952.21	kg/m3	313.27	Thermodynamic properties and equation of state of liquid di-isodecyl phthalate at temperature between (273 and 423) K and at pressures up to 140 MPa

rhoI	980.22	kg/m3	273.84	Thermodynamic properties and equation of state of liquid di-isodecyl phthalate at temperature between (273 and 423) K and at pressures up to 140 MPa
rhoI	979.86	kg/m3	274.35	Thermodynamic properties and equation of state of liquid di-isodecyl phthalate at temperature between (273 and 423) K and at pressures up to 140 MPa
srf	0.03	N/m	288.15	Diisodecylphthalate (DIDP)-a potential standard of moderate viscosity: Surface tension measurements and water content effect on viscosity
srf	0.03	N/m	293.15	Diisodecylphthalate (DIDP)-a potential standard of moderate viscosity: Surface tension measurements and water content effect on viscosity
srf	0.03	N/m	298.15	Diisodecylphthalate (DIDP)-a potential standard of moderate viscosity: Surface tension measurements and water content effect on viscosity

srf	0.03	N/m	303.15	Diisodecylphthalate (DIDP)-a potential standard of moderate viscosity: Surface tension measurements and water content effect on viscosity
srf	0.03	N/m	308.15	Diisodecylphthalate (DIDP)-a potential standard of moderate viscosity: Surface tension measurements and water content effect on viscosity

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/T + C \cdot \ln(T) + D \cdot T^2$
Coeff. A	1.24183e+02
Coeff. B	-1.55755e+04
Coeff. C	-1.56745e+01
Coeff. D	9.93021e-06
Temperature range (K), min.	233.00
Temperature range (K), max.	723.00

Datasets

Mass density, kg/m3

Temperature, K - Liquid	Pressure, kPa - Liquid	Mass density, kg/m3 - Liquid
283.15	100.00	974.5

283.15	200.00	974.5
283.15	400.00	974.6
283.15	600.00	974.7
283.15	800.00	974.9
283.15	1010.00	975.0
283.15	2000.00	975.5
283.15	3020.00	976.0
283.15	4000.00	976.6
283.15	5000.00	977.1
283.15	6000.00	977.7
283.15	6980.00	978.2
283.15	8010.00	978.7
283.15	9020.00	979.3
283.15	10030.00	979.8
283.15	15000.00	982.4
283.15	19970.00	985.0
283.15	25030.00	987.3
283.15	29980.00	989.8
283.15	35030.00	992.1
283.15	40000.00	994.5
283.15	45030.00	996.6
283.15	49980.00	998.8
283.15	55030.00	1000.9
283.15	59990.00	1002.6
283.15	64990.00	1005.1
288.15	100.00	970.7
288.15	200.00	970.8
288.15	420.00	970.9
288.15	600.00	971.0
288.15	790.00	971.1
288.15	1000.00	971.2
288.15	1990.00	971.7
288.15	3020.00	972.3
288.15	4010.00	972.9
288.15	5000.00	973.4
288.15	6010.00	974.0
288.15	7020.00	974.5
288.15	7980.00	975.0
288.15	9000.00	975.5
288.15	10000.00	976.1
288.15	14990.00	978.7
288.15	19970.00	981.4
288.15	25000.00	983.8
288.15	30000.00	986.4

288.15	34990.00	988.8
288.15	40020.00	991.1
288.15	45000.00	993.3
288.15	49980.00	995.7
288.15	54980.00	997.7
288.15	60000.00	999.9
288.15	65000.00	1002.0
293.15	100.00	967.0
293.15	200.00	967.1
293.15	400.00	967.2
293.15	630.00	967.3
293.15	790.00	967.4
293.15	1000.00	967.5
293.15	2010.00	968.1
293.15	3020.00	968.7
293.15	4020.00	969.2
293.15	4970.00	969.8
293.15	5980.00	970.3
293.15	7020.00	970.9
293.15	8000.00	971.5
293.15	9020.00	972.0
293.15	10010.00	972.6
293.15	15010.00	975.2
293.15	20000.00	977.9
293.15	25030.00	980.5
293.15	30020.00	983.0
293.15	35030.00	985.4
293.15	40010.00	987.8
293.15	44980.00	990.1
293.15	50020.00	992.4
293.15	55020.00	994.6
293.15	60020.00	996.8
293.15	65000.00	998.9
298.15	100.00	963.4
298.15	200.00	963.4
298.15	410.00	963.6
298.15	620.00	963.7
298.15	820.00	963.8
298.15	1000.00	963.9
298.15	2020.00	964.5
298.15	3040.00	965.0
298.15	4030.00	965.7
298.15	4980.00	966.2
298.15	6070.00	966.8

298.15	7020.00	967.3
298.15	8040.00	967.9
298.15	9040.00	968.5
298.15	10030.00	969.0
298.15	15010.00	971.7
298.15	19990.00	974.4
298.15	25000.00	977.0
298.15	30020.00	979.6
298.15	35000.00	982.1
298.15	40020.00	984.5
298.15	44970.00	986.9
298.15	49990.00	989.2
298.15	54970.00	991.4
298.15	60000.00	993.7
298.15	65020.00	995.8
303.15	100.00	959.7
303.15	200.00	959.8
303.15	400.00	959.9
303.15	580.00	960.0
303.15	800.00	960.2
303.15	1000.00	960.3
303.15	2000.00	960.9
303.15	2990.00	961.4
303.15	4000.00	962.0
303.15	5000.00	962.6
303.15	6000.00	963.2
303.15	7000.00	963.8
303.15	7980.00	964.3
303.15	9000.00	964.9
303.15	10020.00	965.5
303.15	14970.00	968.2
303.15	20010.00	971.0
303.15	25030.00	973.6
303.15	30020.00	976.3
303.15	35000.00	978.8
303.15	40000.00	981.2
303.15	45000.00	983.6
303.15	50010.00	986.0
303.15	54980.00	988.3
303.15	60000.00	990.5
303.15	64990.00	992.7
308.15	100.00	956.2
308.15	200.00	956.2
308.15	410.00	956.4

308.15	610.00	956.5
308.15	800.00	956.6
308.15	1000.00	956.7
308.15	2010.00	957.3
308.15	3020.00	957.9
308.15	4000.00	958.5
308.15	5000.00	959.1
308.15	6000.00	959.7
308.15	7020.00	960.3
308.15	8000.00	960.8
308.15	9020.00	961.4
308.15	10000.00	962.0
308.15	15010.00	964.8
308.15	19990.00	967.6
308.15	25000.00	970.3
308.15	30010.00	973.0
308.15	35000.00	975.5
308.15	39990.00	978.0
308.15	44990.00	980.4
308.15	50010.00	982.9
308.15	55000.00	985.2
308.15	60000.00	987.4
308.15	65000.00	989.7
313.15	100.00	952.6
313.15	200.00	952.6
313.15	400.00	952.8
313.15	620.00	952.9
313.15	800.00	953.0
313.15	1030.00	953.1
313.15	2010.00	953.7
313.15	3000.00	954.3
313.15	4000.00	955.0
313.15	5020.00	955.5
313.15	5990.00	956.2
313.15	7030.00	956.7
313.15	8000.00	957.4
313.15	9020.00	957.9
313.15	10010.00	958.5
313.15	15010.00	961.4
313.15	20000.00	964.2
313.15	25030.00	967.0
313.15	30000.00	969.7
313.15	35020.00	972.2
313.15	40020.00	974.8

313.15	45010.00	977.2
313.15	49970.00	979.7
313.15	55000.00	982.0
313.15	59980.00	984.4
313.15	64970.00	986.6
323.15	100.00	945.4
323.15	210.00	945.5
323.15	400.00	945.6
323.15	600.00	945.7
323.15	800.00	945.9
323.15	1000.00	946.0
323.15	2000.00	946.6
323.15	3030.00	947.2
323.15	4030.00	947.9
323.15	5020.00	948.5
323.15	6010.00	949.1
323.15	7000.00	949.7
323.15	8000.00	950.3
323.15	9010.00	950.9
323.15	10020.00	951.6
323.15	15000.00	954.5
323.15	20010.00	957.5
323.15	25030.00	960.3
323.15	30010.00	963.2
323.15	34970.00	965.8
323.15	40000.00	968.5
323.15	45000.00	970.9
323.15	49980.00	973.5
323.15	54980.00	975.8
323.15	60000.00	978.3
323.15	65000.00	980.6
333.15	100.00	938.3
333.15	200.00	938.4
333.15	400.00	938.5
333.15	630.00	938.7
333.15	800.00	938.8
333.15	1000.00	938.9
333.15	2010.00	939.6
333.15	3000.00	940.2
333.15	4000.00	940.9
333.15	5000.00	941.5
333.15	6000.00	942.2
333.15	7030.00	942.8
333.15	7980.00	943.5

333.15	9010.00	944.1
333.15	10030.00	944.8
333.15	14990.00	947.9
333.15	20000.00	951.0
333.15	25000.00	953.8
333.15	30020.00	956.7
333.15	34990.00	959.4
333.15	39970.00	962.2
333.15	45020.00	964.8
333.15	50000.00	967.4
333.15	55020.00	969.8
333.15	60000.00	972.3
333.15	65000.00	974.7
343.15	100.00	931.2
343.15	220.00	931.3
343.15	430.00	931.5
343.15	610.00	931.6
343.15	810.00	931.8
343.15	1000.00	931.9
343.15	2000.00	932.6
343.15	3000.00	933.3
343.15	3980.00	934.0
343.15	5010.00	934.6
343.15	5980.00	935.3
343.15	7000.00	936.0
343.15	7990.00	936.6
343.15	9020.00	937.3
343.15	9980.00	937.9
343.15	15010.00	941.2
343.15	19990.00	944.3
343.15	25010.00	947.4
343.15	29980.00	950.4
343.15	35030.00	953.3
343.15	40030.00	956.1
343.15	45010.00	958.7
343.15	50050.00	961.4
343.15	55000.00	964.0
343.15	60000.00	966.5
343.15	65020.00	968.9
353.15	100.00	924.2
353.15	200.00	924.3
353.15	410.00	924.5
353.15	630.00	924.6
353.15	800.00	924.8

353.15	1010.00	924.9
353.15	2000.00	925.6
353.15	3000.00	926.3
353.15	3980.00	927.0
353.15	4990.00	927.7
353.15	6000.00	928.4
353.15	7000.00	929.1
353.15	8010.00	929.8
353.15	9000.00	930.5
353.15	10010.00	931.2
353.15	15040.00	934.6
353.15	20000.00	937.9
353.15	24970.00	941.0
353.15	29980.00	944.1
353.15	35010.00	947.1
353.15	40000.00	950.0
353.15	45000.00	952.7
353.15	49990.00	955.5
353.15	55000.00	958.1
353.15	60010.00	960.7
353.15	65020.00	963.2
363.15	100.00	917.2
363.15	200.00	917.3
363.15	420.00	917.4
363.15	600.00	917.6
363.15	800.00	917.7
363.15	990.00	917.9
363.15	2000.00	918.6
363.15	2980.00	919.4
363.15	3960.00	920.1
363.15	4970.00	920.9
363.15	5990.00	921.6
363.15	7020.00	922.3
363.15	7980.00	923.0
363.15	9030.00	923.8
363.15	10000.00	924.5
363.15	15000.00	928.0
363.15	19990.00	931.4
363.15	25010.00	934.7
363.15	30020.00	937.9
363.15	34980.00	940.9
363.15	39990.00	943.9
363.15	44980.00	946.8
363.15	49990.00	949.6

363.15	55000.00	952.3
363.15	60040.00	955.0
363.15	64990.00	957.6
Reference		https://www.doi.org/10.1021/je1001413

Viscosity, Pa*s

Temperature, K - Liquid	Pressure, kPa - Liquid	Viscosity, Pa*s - Liquid
298.15	200.00	0.0875700
298.15	10000.00	0.1120800
298.15	20000.00	0.1434100
298.15	40000.00	0.2309300
298.15	200.00	0.0875800
298.15	10000.00	0.1120800
298.15	20000.00	0.1434200
298.15	40000.00	0.2310100
298.15	200.00	0.0876200
298.15	10000.00	0.1122600
298.15	20000.00	0.1436700
298.15	40000.00	0.2310900
298.15	200.00	0.0876300
298.15	40000.00	0.2313900
298.15	200.00	0.0876300
298.15	40000.00	0.2315500
298.15	200.00	0.0876400
298.15	40000.00	0.2316100
298.15	200.00	0.0877100
298.15	200.00	0.0876100
298.15	200.00	0.0876600
298.15	200.00	0.0877100
305.15	200.00	0.0570400
305.15	200.00	0.0571000
305.15	200.00	0.0571200
305.15	200.00	0.0571300
305.15	200.00	0.0571800
313.15	200.00	0.0373800
313.15	10100.00	0.0463400
313.15	20000.00	0.0572800
313.15	40000.00	0.0871500
313.15	59900.00	0.1304900

313.15	60000.00	0.1303300
313.15	80000.00	0.1940800
313.15	200.00	0.0373800
313.15	10100.00	0.0463300
313.15	20000.00	0.0573500
313.15	40000.00	0.0871300
313.15	59900.00	0.1302900
313.15	80000.00	0.1944100
313.15	200.00	0.0373200
313.15	10100.00	0.0462300
313.15	20000.00	0.0573200
313.15	40000.00	0.0870300
313.15	80000.00	0.1952000
313.15	200.00	0.0370800
313.15	200.00	0.0370600
313.15	200.00	0.0371000
343.15	200.00	0.0112000
343.15	10100.00	0.0133300
343.15	20100.00	0.0158500
343.15	40000.00	0.0220400
343.15	80100.00	0.0412200
343.15	137100.00	0.0955600
343.15	200.00	0.0111900
343.15	10100.00	0.0133300
343.15	20100.00	0.0158600
343.15	40000.00	0.0220500
343.15	80100.00	0.0412400
343.15	137100.00	0.0956100
343.15	200.00	0.0112000
343.15	10100.00	0.0133500
343.15	20100.00	0.0158600
343.15	40000.00	0.0220500
343.15	80100.00	0.0412400
343.15	137100.00	0.0956100
343.15	200.00	0.0109900
343.15	200.00	0.0109700
343.15	200.00	0.0109600
368.15	300.00	0.0056500
368.15	300.00	0.0056500
368.15	300.00	0.0056500
368.15	300.00	0.0056500
373.15	300.00	0.0050400
373.15	20100.00	0.0068760
373.15	40000.00	0.0090550

373.15	80100.00	0.0152200
373.15	137200.00	0.0301100
373.15	300.00	0.0050500
373.15	20100.00	0.0068760
373.15	40000.00	0.0090750
373.15	80100.00	0.0152300
373.15	137200.00	0.0301200
373.15	300.00	0.0050500
373.15	20100.00	0.0068660
373.15	40000.00	0.0090850
373.15	80100.00	0.0152300
373.15	137200.00	0.0301500
373.15	300.00	0.0049200
373.15	300.00	0.0049200
373.15	300.00	0.0049200

Reference

<https://www.doi.org/10.1021/je101256z>

Pressure, kPa	Temperature, K	Viscosity, Pa*s
2460.00	302.75	0.0704400
2460.00	302.75	0.0706250
2450.00	302.75	0.0701440
4510.00	302.75	0.0740370
4510.00	302.75	0.0739690
6440.00	302.75	0.0773130
6440.00	302.75	0.0776160
8390.00	302.75	0.0810720
10250.00	302.75	0.0850250
10250.00	302.75	0.0853500
11190.00	302.75	0.0872220
13300.00	302.75	0.0922490
15370.00	302.75	0.0963220
17310.00	302.75	0.1012500
2430.00	342.69	0.0117870
2430.00	342.69	0.0118210
2420.00	342.69	0.0118680
4260.00	342.69	0.0121400
6130.00	342.69	0.0125350
7970.00	342.67	0.0130560
7970.00	342.67	0.0129650
9700.00	342.67	0.0133500
9700.00	342.67	0.0134390
10950.00	342.90	0.0137360

10970.00	342.90	0.0137330
13180.00	342.90	0.0142540
13180.00	342.90	0.0142660
15220.00	342.90	0.0147260
15220.00	342.90	0.0147110
17130.00	342.94	0.0151390

Reference

<https://www.doi.org/10.1021/je301306e>

Temperature, K	Pressure, kPa	Viscosity, Pa*s
273.15	100.00	0.6258000
273.15	9900.00	0.8451000
298.15	100.00	0.0873700
298.15	9600.00	0.1107000
298.15	20600.00	0.1450000
298.15	20700.00	0.1455000
298.15	30100.00	0.1825000
298.15	30300.00	0.1830000
298.15	40700.00	0.2342000
298.15	50200.00	0.2894000
298.15	59200.00	0.3562000
298.15	71600.00	0.4654000
298.15	82000.00	0.5890000
298.15	83300.00	0.6084000
298.15	100.00	0.0874100
313.15	100.00	0.0377100
313.15	10900.00	0.0472900
313.15	21200.00	0.0589500
313.15	30600.00	0.0715400
313.15	40900.00	0.0889900
313.15	51600.00	0.1091000
313.15	62400.00	0.1367000
313.15	71300.00	0.1608000
313.15	80300.00	0.1924000
313.15	89800.00	0.2344000
338.15	100.00	0.0131400
338.15	9700.00	0.0155400
338.15	10700.00	0.0162800
338.15	19400.00	0.0186200
338.15	20500.00	0.0193800
338.15	31000.00	0.0232900
338.15	31770.00	0.0230400
338.15	40100.00	0.0272400

338.15	41110.00	0.0269100
338.15	50300.00	0.0324200
338.15	51100.00	0.0318600
338.15	60400.00	0.0383100
338.15	60510.00	0.0373400
338.15	70700.00	0.0452500
338.15	70710.00	0.0436000
338.15	80200.00	0.0525300
338.15	80970.00	0.0517300
338.15	100.00	0.0133700
338.15	100.00	0.0133800
338.15	100.00	0.0133600
348.15	100.00	0.0097100
348.15	9800.00	0.0114700
348.15	20600.00	0.0137100
348.15	30230.00	0.0159600
348.15	31300.00	0.0163400
348.15	40810.00	0.0189100
348.15	50600.00	0.0221500
348.15	50710.00	0.0220500
348.15	61220.00	0.0258900
348.15	69800.00	0.0297700
348.15	72330.00	0.0305500
348.15	85770.00	0.0372300

Reference

<https://www.doi.org/10.1021/je900284z>

Sources

Crippen Method:

https://www.chemeo.com/doc/models/crippen_log10ws

Densities, refractive indices, and viscosities of N,N-diethylethanol amine and Diisodecyl Phthalate at temperatures from (283.15 to 360.15) K (0.01 to 0.55 MPa):

<https://www.doi.org/10.1016/j.jct.2013.05.041>

<https://www.doi.org/10.1021/je1001413>

<https://www.thermo.com/research/kdb/hcprop/showprop.php?cmpid=1159>

Crippen Method:

<http://pubs.acs.org/doi/abs/10.1021/ci990307l>

Cheméo Relay (1.0):

Viscosity Measurements of Diisodecyl Phthalate Using a Vibrating Wire Interferometer and Free Decay Mode: Comparison with Results Obtained with the Forced Mode of Operation: Temperature and Pressure Dependence of the Viscosity of Diisodecyl Phthalate at Temperatures between (100 and 100) K and Pressures up to 0.1 MPa: Density and Viscosity of Diisodecyl Phthalate C₆H₄(COOC₁₀H₂₁)₂, with Nominal Viscosity at T) 298 K and p) 0.1 MPa of 87 mPaas, at Temperatures from (298.15 to 423.15) K and Pressures up to 70 MPa:

<https://www.doi.org/10.1021/je900113f>

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

<https://www.doi.org/10.1021/je060382+>

<https://www.doi.org/10.1021/je7001623>

<https://www.doi.org/10.1021/je600562n>

McGowan Method:

<http://link.springer.com/article/10.1007/BF02311772>

Thermodynamic properties and equation of state of liquid di-isodecyl phthalate at temperatures between 273 and 340 K and pressures between 0.1 and 0.3 MPa and up to 100 MPa viscosity liquids at moderate pressure: diisodecyl phthalate (DIDP)-a potential standard of moderate viscosity: Surface tension measurements and viscosity measurements of the viscosity of diisodecyl phthalate using a vibrating temperature and pressure dependence of the viscosities of 2-Ethylhexyl Benzoate, Bis(2-ethylhexyl) Phthalate, 2,6,10,15,19,23-Hexamethyltetracosane (Squalane), and Diisodecyl Phthalate:

<https://www.doi.org/10.1016/j.jct.2009.12.002>

<https://www.doi.org/10.1021/je101256z>

<https://www.doi.org/10.1021/je301306e>

<https://www.doi.org/10.1016/j.fluid.2006.03.012>

<https://www.doi.org/10.1016/j.jct.2009.04.002>

<https://www.doi.org/10.1021/je050151n>

<https://www.doi.org/10.1021/je900284z>

Legend

af:	Acentric Factor
cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvac:	Enthalpy of vaporization at standard conditions
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
pvap:	Vapor pressure
rfi:	Refractive Index
rho:	Liquid Density
srf:	Surface Tension
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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