

# Hexanoic acid, methyl ester

<b>Other names:</b>	Caproic acid, methyl ester Methyl caproate Methyl capronate Methyl ester of hexanoic acid Methyl hexanoate Methyl hexoate Methyl hexylate Methyl n-hexanoate Methyl n-hexoate NSC 5023 n-Caproic acid methyl ester
<b>Inchi:</b>	InChI=1S/C7H14O2/c1-3-4-5-6-7(8)9-2/h3-6H2,1-2H3
<b>InchiKey:</b>	NUKZAGXMHTUAFE-UHFFFAOYSA-N
<b>Formula:</b>	C7H14O2
<b>SMILES:</b>	CCCCCC(=O)OC
<b>Mol. weight [g/mol]:</b>	130.18
<b>CAS:</b>	106-70-7

## Physical Properties

Property code	Value	Unit	Source
chl	-4215.00 ± 0.60	kJ/mol	NIST Webbook
chl	-4184.00 ± 0.40	kJ/mol	NIST Webbook
gf	-225.86	kJ/mol	Joback Method
hf	-494.00 ± 2.00	kJ/mol	NIST Webbook
hfl	-540.20 ± 1.00	kJ/mol	NIST Webbook
hfus	16.67	kJ/mol	Joback Method
hvap	47.70 ± 0.10	kJ/mol	NIST Webbook
hvap	46.20	kJ/mol	NIST Webbook
hvap	46.00 ± 1.00	kJ/mol	NIST Webbook
hvap	48.00 ± 0.10	kJ/mol	NIST Webbook
hvap	48.40 ± 0.20	kJ/mol	NIST Webbook
hvap	48.70 ± 0.30	kJ/mol	NIST Webbook
hvap	47.80 ± 0.50	kJ/mol	NIST Webbook
hvap	47.90	kJ/mol	NIST Webbook
hvap	48.04 ± 0.12	kJ/mol	NIST Webbook
hvap	48.20	kJ/mol	NIST Webbook

log10ws	-1.87		Estimated Solubility Method
log10ws	-2.00		Aqueous Solubility Prediction Method
logp	1.740		Crippen Method
mcvol	116.930	ml/mol	McGowan Method
pc	2940.89	kPa	Joback Method
rinpol	913.00		NIST Webbook
rinpol	907.00		NIST Webbook
rinpol	931.00		NIST Webbook
rinpol	910.00		NIST Webbook
rinpol	915.00		NIST Webbook
rinpol	902.00		NIST Webbook
rinpol	925.00		NIST Webbook
rinpol	915.00		NIST Webbook
rinpol	936.00		NIST Webbook
rinpol	924.00		NIST Webbook
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rinpol	911.00		NIST Webbook
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rinpol	911.00	NIST Webbook
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rinpol	142.00	NIST Webbook
rinpol	148.05	NIST Webbook
rinpol	919.00	NIST Webbook
rinpol	924.00	NIST Webbook
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rinpol	907.00	NIST Webbook
ripol	1177.00	NIST Webbook
ripol	1188.00	NIST Webbook
ripol	1184.00	NIST Webbook
ripol	1190.00	NIST Webbook
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ripol	1194.00	NIST Webbook
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ripol	1192.00	NIST Webbook
ripol	1174.00	NIST Webbook
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ripol	1183.00	NIST Webbook
ripol	1200.00	NIST Webbook
ripol	1178.00	NIST Webbook
ripol	1177.00	NIST Webbook
ripol	1186.00	NIST Webbook

tb	435.85	K	Joback Method
tc	612.24	K	Joback Method
tf	202.20 ± 0.50	K	NIST Webbook
tf	203.60 ± 0.05	K	NIST Webbook
vc	0.452	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	238.65	J/mol×K	435.85	Joback Method
cpg	280.85	J/mol×K	553.44	Joback Method
cpg	270.86	J/mol×K	524.04	Joback Method
cpg	260.50	J/mol×K	494.65	Joback Method
cpg	249.76	J/mol×K	465.25	Joback Method
cpg	299.73	J/mol×K	612.24	Joback Method
cpg	290.48	J/mol×K	582.84	Joback Method
cpl	246.40	J/mol×K	303.15	Heat capacities and thermal diffusivities of some n-alkanoic acid methyl esters
cpl	261.50	J/mol×K	353.15	Heat capacities and thermal diffusivities of some n-alkanoic acid methyl esters
cpl	248.80	J/mol×K	313.15	Heat capacities and thermal diffusivities of some n-alkanoic acid methyl esters
cpl	251.50	J/mol×K	323.15	Heat capacities and thermal diffusivities of some n-alkanoic acid methyl esters
cpl	254.60	J/mol×K	333.15	Heat capacities and thermal diffusivities of some n-alkanoic acid methyl esters

cpl	269.60	J/mol×K	373.15	Heat capacities and thermal diffusivities of some n-alkanoic acid methyl esters
cpl	265.50	J/mol×K	363.15	Heat capacities and thermal diffusivities of some n-alkanoic acid methyl esters
cpl	257.90	J/mol×K	343.15	Heat capacities and thermal diffusivities of some n-alkanoic acid methyl esters
dvisc	0.0031909	Paxs	240.81	Joback Method
dvisc	0.0016480	Paxs	273.32	Joback Method
dvisc	0.0009795	Paxs	305.82	Joback Method
dvisc	0.0006434	Paxs	338.33	Joback Method
dvisc	0.0003401	Paxs	403.34	Joback Method
dvisc	0.0002656	Paxs	435.85	Joback Method
dvisc	0.0004549	Paxs	370.84	Joback Method
hvapt	45.20	kJ/mol	350.00	NIST Webbook
hvapt	46.40 ± 0.10	kJ/mol	325.00	NIST Webbook
hvapt	45.30	kJ/mol	349.00	NIST Webbook
pvap	2.22	kPa	324.40	Transpiration method: Vapor pressures and enthalpies of vaporization of some low-boiling esters
pvap	2.68	kPa	328.40	Transpiration method: Vapor pressures and enthalpies of vaporization of some low-boiling esters
pvap	3.18	kPa	331.40	Transpiration method: Vapor pressures and enthalpies of vaporization of some low-boiling esters



pvap	0.03	kPa	262.64	Experimental vapor pressures (from 1 Pa to 100 kPa) of six saturated Fatty Acid Methyl Esters (FAMEs): Methyl hexanoate, methyl octanoate, methyl decanoate, methyl dodecanoate, methyl tetradecanoate and methyl hexadecanoate
pvap	0.08	kPa	272.74	Experimental vapor pressures (from 1 Pa to 100 kPa) of six saturated Fatty Acid Methyl Esters (FAMEs): Methyl hexanoate, methyl octanoate, methyl decanoate, methyl dodecanoate, methyl tetradecanoate and methyl hexadecanoate
pvap	0.16	kPa	282.84	Experimental vapor pressures (from 1 Pa to 100 kPa) of six saturated Fatty Acid Methyl Esters (FAMEs): Methyl hexanoate, methyl octanoate, methyl decanoate, methyl dodecanoate, methyl tetradecanoate and methyl hexadecanoate

pvap	0.34	kPa	292.87	Experimental vapor pressures (from 1 Pa to 100 kPa) of six saturated Fatty Acid Methyl Esters (FAMEs): Methyl hexanoate, methyl octanoate, methyl decanoate, methyl dodecanoate, methyl tetradecanoate and methyl hexadecanoate
pvap	0.89	kPa	307.63	Experimental vapor pressures (from 1 Pa to 100 kPa) of six saturated Fatty Acid Methyl Esters (FAMEs): Methyl hexanoate, methyl octanoate, methyl decanoate, methyl dodecanoate, methyl tetradecanoate and methyl hexadecanoate
pvap	1.76	kPa	320.40	Transpiration method: Vapor pressures and enthalpies of vaporization of some low-boiling esters
pvap	1.60	kPa	317.65	Experimental vapor pressures (from 1 Pa to 100 kPa) of six saturated Fatty Acid Methyl Esters (FAMEs): Methyl hexanoate, methyl octanoate, methyl decanoate, methyl dodecanoate, methyl tetradecanoate and methyl hexadecanoate

pvap	3.53	kPa	332.72	Experimental vapor pressures (from 1 Pa to 100 kPa) of six saturated Fatty Acid Methyl Esters (FAMEs): Methyl hexanoate, methyl octanoate, methyl decanoate, methyl dodecanoate, methyl tetradecanoate and methyl hexadecanoate
pvap	7.13	kPa	347.57	Experimental vapor pressures (from 1 Pa to 100 kPa) of six saturated Fatty Acid Methyl Esters (FAMEs): Methyl hexanoate, methyl octanoate, methyl decanoate, methyl dodecanoate, methyl tetradecanoate and methyl hexadecanoate
pvap	13.06	kPa	362.19	Experimental vapor pressures (from 1 Pa to 100 kPa) of six saturated Fatty Acid Methyl Esters (FAMEs): Methyl hexanoate, methyl octanoate, methyl decanoate, methyl dodecanoate, methyl tetradecanoate and methyl hexadecanoate

pvap	23.11	kPa	377.31	Experimental vapor pressures (from 1 Pa to 100 kPa) of six saturated Fatty Acid Methyl Esters (FAMEs): Methyl hexanoate, methyl octanoate, methyl decanoate, methyl dodecanoate, methyl tetradecanoate and methyl hexadecanoate
pvap	38.94	kPa	392.48	Experimental vapor pressures (from 1 Pa to 100 kPa) of six saturated Fatty Acid Methyl Esters (FAMEs): Methyl hexanoate, methyl octanoate, methyl decanoate, methyl dodecanoate, methyl tetradecanoate and methyl hexadecanoate
pvap	62.31	kPa	407.40	Experimental vapor pressures (from 1 Pa to 100 kPa) of six saturated Fatty Acid Methyl Esters (FAMEs): Methyl hexanoate, methyl octanoate, methyl decanoate, methyl dodecanoate, methyl tetradecanoate and methyl hexadecanoate

pvap	0.90	kPa	307.90	Experimental vapor pressures (from 1 Pa to 100 kPa) of six saturated Fatty Acid Methyl Esters (FAMES): Methyl hexanoate, methyl octanoate, methyl decanoate, methyl dodecanoate, methyl tetradecanoate and methyl hexadecanoate
pvap	1.46	kPa	316.30	Transpiration method: Vapor pressures and enthalpies of vaporization of some low-boiling esters
pvap	1.05	kPa	312.30	Transpiration method: Vapor pressures and enthalpies of vaporization of some low-boiling esters
pvap	1.15	kPa	312.30	Transpiration method: Vapor pressures and enthalpies of vaporization of some low-boiling esters
pvap	0.92	kPa	309.30	Transpiration method: Vapor pressures and enthalpies of vaporization of some low-boiling esters
pvap	0.89	kPa	308.30	Transpiration method: Vapor pressures and enthalpies of vaporization of some low-boiling esters
pvap	0.73	kPa	304.30	Transpiration method: Vapor pressures and enthalpies of vaporization of some low-boiling esters

pvap	0.65	kPa	303.30	Transpiration method: Vapor pressures and enthalpies of vaporization of some low-boiling esters
pvap	0.54	kPa	300.30	Transpiration method: Vapor pressures and enthalpies of vaporization of some low-boiling esters
pvap	0.47	kPa	298.40	Transpiration method: Vapor pressures and enthalpies of vaporization of some low-boiling esters
pvap	0.46	kPa	298.30	Transpiration method: Vapor pressures and enthalpies of vaporization of some low-boiling esters
pvap	0.42	kPa	296.40	Transpiration method: Vapor pressures and enthalpies of vaporization of some low-boiling esters
pvap	0.39	kPa	295.40	Transpiration method: Vapor pressures and enthalpies of vaporization of some low-boiling esters
pvap	96.03	kPa	422.29	Experimental vapor pressures (from 1 Pa to 100 kPa) of six saturated Fatty Acid Methyl Esters (FAMEs): Methyl hexanoate, methyl octanoate, methyl decanoate, methyl dodecanoate, methyl tetradecanoate and methyl hexadecanoate

pvap	0.34	kPa	293.50	Transpiration method: Vapor pressures and enthalpies of vaporization of some low-boiling esters
pvap	0.35	kPa	293.40	Transpiration method: Vapor pressures and enthalpies of vaporization of some low-boiling esters
pvap	0.34	kPa	293.30	Transpiration method: Vapor pressures and enthalpies of vaporization of some low-boiling esters
pvap	0.27	kPa	290.50	Transpiration method: Vapor pressures and enthalpies of vaporization of some low-boiling esters
pvap	0.28	kPa	290.50	Transpiration method: Vapor pressures and enthalpies of vaporization of some low-boiling esters
pvap	0.26	kPa	289.50	Transpiration method: Vapor pressures and enthalpies of vaporization of some low-boiling esters
pvap	0.22	kPa	287.60	Transpiration method: Vapor pressures and enthalpies of vaporization of some low-boiling esters
pvap	0.21	kPa	286.60	Transpiration method: Vapor pressures and enthalpies of vaporization of some low-boiling esters
pvap	0.18	kPa	284.60	Transpiration method: Vapor pressures and enthalpies of vaporization of some low-boiling esters

pvap	0.17	kPa	283.60	Transpiration method: Vapor pressures and enthalpies of vaporization of some low-boiling esters
pvap	0.31	kPa	292.50	Transpiration method: Vapor pressures and enthalpies of vaporization of some low-boiling esters
pvap	0.14	kPa	280.70	Transpiration method: Vapor pressures and enthalpies of vaporization of some low-boiling esters
rfi	1.39136		323.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.40480		298.15	Vapor-Liquid Equilibrium Data for the Binary Methyl Esters (Butyrate, Pentanoate, and Hexanoate) (1) + Propanenitrile (2) Systems at 93.32 kPa
rfi	1.41212		278.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.40984		283.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.40757		288.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.38432		338.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.40529		293.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.40300		298.15	Thermophysical properties of fatty acid methyl and ethyl esters



rfi	1.40070	303.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.39841	308.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.39610	313.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.39373	318.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.37490	358.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.38902	328.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.38667	333.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.37725	353.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.38169	343.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.37961	348.15	Thermophysical properties of fatty acid methyl and ethyl esters
rfi	1.40480	298.15	Vapor-Liquid Equilibrium Data for the Binary Methyl Esters (Butyrate, Pentanoate, and Hexanoate) (1) + Acetonitrile (2) Systems at 93.32 kPa

rhoI	879.76	kg/m <sup>3</sup>	298.15	Densities and interfacial tensions for fatty acid methyl esters (from methyl formate to methyl heptanoate) + water demixed mixtures at atmospheric pressure conditions
tcondI	0.13	W/m×K	333.52	Experimental investigations on the liquid thermal conductivity of five saturated fatty acid methyl esters components of biodiesel
tcondI	0.12	W/m×K	363.41	Experimental investigations on the liquid thermal conductivity of five saturated fatty acid methyl esters components of biodiesel
tcondI	0.12	W/m×K	368.50	Experimental investigations on the liquid thermal conductivity of five saturated fatty acid methyl esters components of biodiesel
tcondI	0.12	W/m×K	353.70	Experimental investigations on the liquid thermal conductivity of five saturated fatty acid methyl esters components of biodiesel
tcondI	0.12	W/m×K	348.48	Experimental investigations on the liquid thermal conductivity of five saturated fatty acid methyl esters components of biodiesel

tcondl	0.12	W/m×K	358.38	Experimental investigations on the liquid thermal conductivity of five saturated fatty acid methyl esters components of biodiesel
tcondl	0.13	W/m×K	343.49	Experimental investigations on the liquid thermal conductivity of five saturated fatty acid methyl esters components of biodiesel
tcondl	0.13	W/m×K	338.55	Experimental investigations on the liquid thermal conductivity of five saturated fatty acid methyl esters components of biodiesel
tcondl	0.13	W/m×K	328.54	Experimental investigations on the liquid thermal conductivity of five saturated fatty acid methyl esters components of biodiesel
tcondl	0.13	W/m×K	321.08	Experimental investigations on the liquid thermal conductivity of five saturated fatty acid methyl esters components of biodiesel
tcondl	0.13	W/m×K	313.60	Experimental investigations on the liquid thermal conductivity of five saturated fatty acid methyl esters components of biodiesel
tcondl	0.13	W/m×K	308.61	Experimental investigations on the liquid thermal conductivity of five saturated fatty acid methyl esters components of biodiesel

tcondl	0.14	W/m×K	303.63	Experimental investigations on the liquid thermal conductivity of five saturated fatty acid methyl esters components of biodiesel
tcondl	0.14	W/m×K	298.72	Experimental investigations on the liquid thermal conductivity of five saturated fatty acid methyl esters components of biodiesel
tcondl	0.14	W/m×K	293.64	Experimental investigations on the liquid thermal conductivity of five saturated fatty acid methyl esters components of biodiesel
tcondl	0.14	W/m×K	288.67	Experimental investigations on the liquid thermal conductivity of five saturated fatty acid methyl esters components of biodiesel
tcondl	0.14	W/m×K	283.75	Experimental investigations on the liquid thermal conductivity of five saturated fatty acid methyl esters components of biodiesel
tcondl	0.14	W/m×K	273.70	Experimental investigations on the liquid thermal conductivity of five saturated fatty acid methyl esters components of biodiesel
tcondl	0.15	W/m×K	268.65	Experimental investigations on the liquid thermal conductivity of five saturated fatty acid methyl esters components of biodiesel

tcondl	0.15	W/m×K	263.83	Experimental investigations on the liquid thermal conductivity of five saturated fatty acid methyl esters components of biodiesel
tcondl	0.14	W/m×K	278.59	Experimental investigations on the liquid thermal conductivity of five saturated fatty acid methyl esters components of biodiesel

## Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	325.20	K	2.00	NIST Webbook

## Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.49142e+01
Coeff. B	-3.75133e+03
Coeff. C	-5.86470e+01
Temperature range (K), min.	315.12
Temperature range (K), max.	449.30

## Datasets

**Mass density, kg/m<sup>3</sup>**

Temperature, K - Liquid	Pressure, kPa - Liquid	Mass density, kg/m3 - Liquid
293.15	100.00	884.48
293.15	1000.00	884.65
293.15	3000.00	886.42
293.15	5000.00	887.67
293.15	10000.00	891.64
293.15	15000.00	895.33
293.15	20000.00	898.81
293.15	25000.00	902.28
293.15	30000.00	905.55
293.15	35000.00	908.69
293.15	40000.00	911.73
293.15	50000.00	917.83
293.15	60000.00	923.06
303.15	100.00	874.56
303.15	1000.00	875.42
303.15	3000.00	877.13
303.15	5000.00	878.76
303.15	10000.00	882.75
303.15	15000.00	886.63
303.15	20000.00	890.21
303.15	25000.00	893.78
303.15	30000.00	897.24
303.15	35000.00	900.52
303.15	40000.00	903.67
303.15	50000.00	909.79
303.15	60000.00	915.57
313.15	100.00	865.26
313.15	1000.00	865.64
313.15	3000.00	867.5
313.15	5000.00	869.26
313.15	10000.00	873.55
313.15	15000.00	877.59
313.15	20000.00	881.48
313.15	25000.00	885.29
313.15	30000.00	888.86
313.15	35000.00	892.33
313.15	40000.00	895.54
313.15	50000.00	901.99
313.15	60000.00	907.83
323.15	100.00	855.18
323.15	1000.00	856.16
323.15	3000.00	858.01
323.15	5000.00	859.89

323.15	10000.00	864.44
323.15	15000.00	868.76
323.15	20000.00	872.98
323.15	25000.00	876.76
323.15	30000.00	880.55
323.15	35000.00	884.15
323.15	40000.00	887.68
323.15	50000.00	894.33
323.15	60000.00	900.65
333.15	100.00	845.43
333.15	1000.00	846.26
333.15	3000.00	848.43
333.15	5000.00	850.38
333.15	10000.00	855.15
333.15	15000.00	859.63
333.15	20000.00	864.0
333.15	25000.00	868.18
333.15	30000.00	871.99
333.15	35000.00	875.8
333.15	40000.00	879.63
333.15	50000.00	886.48
333.15	60000.00	892.97
343.15	100.00	835.2
343.15	1000.00	836.39
343.15	3000.00	838.54
343.15	5000.00	840.78
343.15	10000.00	845.7
343.15	15000.00	850.49
343.15	20000.00	855.28
343.15	25000.00	859.46
343.15	30000.00	863.7
343.15	35000.00	867.75
343.15	40000.00	871.46
343.15	50000.00	878.77
343.15	60000.00	885.3
353.15	100.00	825.57
353.15	1000.00	826.5
353.15	3000.00	828.96
353.15	5000.00	831.13
353.15	10000.00	836.55
353.15	15000.00	841.75
353.15	20000.00	846.44
353.15	25000.00	851.08
353.15	30000.00	855.46

353.15	35000.00	859.68
353.15	40000.00	863.59
353.15	50000.00	871.08
353.15	60000.00	878.16
363.15	100.00	815.64
363.15	1000.00	816.87
363.15	3000.00	819.47
363.15	5000.00	821.87
363.15	10000.00	827.32
363.15	15000.00	833.11
363.15	20000.00	837.93
363.15	25000.00	842.64
363.15	30000.00	847.27
363.15	35000.00	851.7
363.15	40000.00	856.02
363.15	50000.00	863.88
363.15	60000.00	871.24

Reference

<https://www.doi.org/10.1016/j.fluid.2018.04.024>

## Speed of sound, m/s

Temperature, K - Liquid	Pressure, kPa - Liquid	Speed of sound, m/s - Liquid
297.83	110.00	1225.1
306.48	110.00	1182.9
317.92	100.00	1137.0
327.21	110.00	1090.2
336.91	100.00	1055.2
346.90	100.00	1021.1
357.28	100.00	970.4
367.48	100.00	938.2
377.88	110.00	903.5
387.73	100.00	866.5
398.60	90.00	827.8
407.93	100.00	799.0
417.52	110.00	764.3
298.76	1010.00	1231.7
308.59	1010.00	1186.9
318.30	1000.00	1142.6
327.58	1010.00	1097.9
337.95	1000.00	1065.3



346.56	1010.00	1029.7
357.85	1010.00	989.8
367.24	1010.00	947.2
377.91	1010.00	910.8
387.01	1010.00	874.2
397.64	1010.00	842.1
406.65	1010.00	810.8
417.08	1010.00	775.9
427.06	1000.00	746.0
436.99	1010.00	714.9
447.88	1000.00	672.6
457.84	990.00	642.8
466.46	1010.00	613.5
478.01	1010.00	570.1
417.21	5010.00	808.2
427.25	5000.00	786.5
437.07	5000.00	751.6
447.00	4990.00	723.0
456.84	5000.00	695.3
466.28	5000.00	663.1
478.34	5010.00	623.4
487.67	5000.00	595.0
497.36	5000.00	568.5
507.11	5010.00	535.1
517.60	5010.00	504.9
528.29	5000.00	472.6
538.26	5010.00	439.9
547.96	5000.00	406.1
558.34	5000.00	378.3
567.58	5000.00	346.5
575.39	5000.00	317.9
586.99	5010.00	275.0
298.35	7010.00	1261.9
308.90	7000.00	1221.1
317.60	7010.00	1175.8
327.38	7010.00	1130.2
337.21	7010.00	1102.7
347.43	7000.00	1067.3
357.33	7010.00	1033.1
367.18	7000.00	989.6
377.97	7000.00	961.0
387.07	7000.00	922.0
397.54	7020.00	891.4
406.79	7020.00	857.7

416.99	7010.00	835.1
427.33	7000.00	805.5
487.58	1000.00	535.4
497.17	1010.00	499.6
506.88	1000.00	464.6
516.99	1010.00	426.2
298.85	3000.00	1240.3
309.19	3010.00	1197.6
319.17	3010.00	1152.2
327.90	3000.00	1107.9
337.97	3000.00	1078.0
347.71	3010.00	1040.3
356.24	3010.00	1011.9
366.38	3010.00	970.6
377.25	3000.00	927.9
386.63	3000.00	894.6
396.70	3000.00	862.0
406.78	3010.00	828.8
417.12	3000.00	796.9
427.25	3000.00	770.6
439.30	3000.00	727.5
446.68	3010.00	706.2
456.61	3000.00	673.8
466.22	3010.00	642.9
478.43	3010.00	596.3
487.67	3010.00	565.4
497.43	3010.00	534.1
506.49	3000.00	503.9
517.56	3000.00	468.7
529.52	3000.00	426.0
538.04	3000.00	396.8
547.56	3000.00	362.7
557.68	3000.00	321.9
566.56	3010.00	285.3
576.45	3010.00	241.0
437.97	6990.00	771.5
447.38	7000.00	744.5
457.10	7010.00	715.1
466.30	7000.00	689.7
478.28	7000.00	646.3
487.69	7000.00	617.0
497.38	7000.00	591.6
506.97	7010.00	563.3
517.52	7010.00	531.6

528.46	7000.00	504.0
538.26	7000.00	472.1
548.26	7000.00	446.0
557.89	7010.00	423.0
567.72	7010.00	390.1
576.35	7000.00	365.2
587.76	7000.00	334.6
298.17	10000.00	1274.4
308.58	10010.00	1227.8
317.52	10010.00	1181.0
327.40	10010.00	1143.2
337.71	10010.00	1111.9
346.92	10020.00	1081.3
356.68	10010.00	1048.7
366.89	10000.00	1005.5
377.70	10000.00	974.3
386.85	10000.00	945.8
397.25	10010.00	909.9
406.89	10000.00	885.7
417.21	10020.00	864.4
427.38	10010.00	833.5
438.10	9980.00	802.1
447.21	10010.00	776.0
456.81	9990.00	747.0
586.48	3000.00	197.5
298.56	5000.00	1252.4
309.13	5010.00	1210.5
318.41	5010.00	1160.9
327.64	5010.00	1120.6
337.21	5000.00	1091.3
347.75	5010.00	1054.8
357.35	5000.00	1022.1
366.68	5000.00	980.4
377.72	5000.00	939.5
387.29	5000.00	908.4
397.83	5000.00	875.5
406.99	5010.00	841.7
466.30	10010.00	720.4
478.28	10000.00	677.8
487.71	10000.00	653.5
497.44	10000.00	629.4
507.02	10020.00	599.2
517.63	10010.00	571.0
528.65	10010.00	547.3

538.35	10000.00	516.1
548.18	9980.00	498.8
558.07	10000.00	472.6
565.69	10010.00	446.4
577.04	10010.00	420.8
588.07	10030.00	393.2

Reference

<https://www.doi.org/10.1021/acs.jced.9b00704>

## Viscosity, Pa\*s

Temperature, K - Liquid	Pressure, kPa - Liquid	Viscosity, Pa*s - Liquid
294.86	105.00	0.0008700
294.75	5079.00	0.0009200
294.63	9980.00	0.0009600
294.34	15024.00	0.0010100
293.98	19999.00	0.0010600
293.48	25055.00	0.0011100
292.99	29973.00	0.0011600
303.12	107.00	0.0007700
303.09	5026.00	0.0008100
303.05	10031.00	0.0008600
303.01	15014.00	0.0008900
302.98	19967.00	0.0009300
302.89	24988.00	0.0009700
302.79	29963.00	0.0010100
312.74	103.00	0.0006800
312.70	4988.00	0.0007100
312.71	10033.00	0.0007500
312.69	15010.00	0.0007800
312.69	20046.00	0.0008200
312.62	24986.00	0.0008500
312.57	29951.00	0.0008900
322.29	98.00	0.0006100
322.29	5048.00	0.0006400
322.08	9972.00	0.0006700
322.32	15008.00	0.0007000
322.12	19979.00	0.0007400
322.14	24972.00	0.0007700
321.96	29975.00	0.0008000
331.89	9984.00	0.0006000

331.83	14994.00	0.0006300
331.93	20001.00	0.0006600
331.80	25008.00	0.0006900
331.74	30010.00	0.0007200
341.39	20015.00	0.0005900
341.41	25042.00	0.0006200
341.38	29965.00	0.0006400

Reference

<https://www.doi.org/10.1016/j.jct.2019.02.026>

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**Experimental Vapor Pressures of Binary Methyl Esters (Hexanoate methyl hexanoate, hexyl acetate, and hexyl butyrate):** <https://www.doi.org/10.1016/j.jct.2019.02.026>

**Experimental Vapor Pressures of Binary Methyl Esters (Hexanoate methyl hexanoate, hexyl acetate, and hexyl butyrate):** <https://www.doi.org/10.1016/j.jct.2018.09.024>

## Legend

- chl: Standard liquid enthalpy of combustion
- cpg: Ideal gas heat capacity

<b>cpl:</b>	Liquid phase heat capacity
<b>dvisc:</b>	Dynamic viscosity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfl:</b>	Liquid phase enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>hvap:</b>	Enthalpy of vaporization at standard conditions
<b>hvapt:</b>	Enthalpy of vaporization at a given temperature
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mcvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>pvap:</b>	Vapor pressure
<b>rfi:</b>	Refractive Index
<b>rho:</b>	Liquid Density
<b>rinpol:</b>	Non-polar retention indices
<b>ripol:</b>	Polar retention indices
<b>speedsl:</b>	Speed of sound in fluid
<b>tb:</b>	Normal Boiling Point Temperature
<b>tbrp:</b>	Boiling point at reduced pressure
<b>tc:</b>	Critical Temperature
<b>tcondl:</b>	Liquid thermal conductivity
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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