

# Propane, 1,1,1,3,3,3-hexafluoro-

<b>Other names:</b>	1,1,1,3,3,3-Hexafluoropropane 2,2-Dihydroperfluoropropane Bistrifluoromethylmethane HFC 236fa HFC-236fa R 236fa R-236fa bis(trifluoromethyl)methane
<b>Inchi:</b>	InChI=1S/C3H2F6/c4-2(5,6)1-3(7,8)9/h1H2
<b>InchiKey:</b>	NSGXIBWMJZWTPY-UHFFFAOYSA-N
<b>Formula:</b>	C3H2F6
<b>SMILES:</b>	FC(F)(F)CC(F)(F)F
<b>Mol. weight [g/mol]:</b>	152.04
<b>CAS:</b>	690-39-1

## Physical Properties

Property code	Value	Unit	Source
gf	-1188.80	kJ/mol	Joback Method
hf	-1299.41	kJ/mol	Joback Method
hfus	7.18	kJ/mol	Joback Method
hvap	14.78	kJ/mol	Joback Method
log10ws	-2.40		Crippen Method
logp	2.501		Crippen Method
mcvol	63.750	ml/mol	McGowan Method
pc	3310.55	kPa	Joback Method
tb	272.10 ± 0.50	K	NIST Webbook
tc	384.08	K	Joback Method
tf	131.95	K	Joback Method
vc	0.289	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	109.94	J/mol×K	257.20	Joback Method

cpg	117.20	J/molxK	278.35	Joback Method
cpg	124.09	J/molxK	299.49	Joback Method
cpg	130.62	J/molxK	320.64	Joback Method
cpg	136.80	J/molxK	341.78	Joback Method
cpg	142.65	J/molxK	362.93	Joback Method
cpg	148.18	J/molxK	384.08	Joback Method
hvapt	24.50	kJ/mol	303.00	NIST Webbook
pvap	35.98	kPa	249.30	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	21.95	kPa	240.10	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	25.66	kPa	242.86	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	26.02	kPa	243.17	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	26.19	kPa	243.26	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	28.60	kPa	244.90	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	31.96	kPa	247.01	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	35.66	kPa	249.11	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane

pvap	20.71	kPa	239.02	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	39.62	kPa	251.19	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	43.66	kPa	253.11	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	43.74	kPa	253.18	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	43.96	kPa	253.29	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	44.11	kPa	253.33	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	48.33	kPa	255.21	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	53.21	kPa	257.22	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	58.54	kPa	259.25	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	63.74	kPa	261.09	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane

pvap	69.34	kPa	262.94	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	69.79	kPa	263.10	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	70.19	kPa	263.20	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	72.93	kPa	264.08	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	75.59	kPa	264.88	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	82.80	kPa	266.95	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	90.55	kPa	269.03	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	98.85	kPa	271.10	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	107.93	kPa	273.22	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	108.24	kPa	273.31	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane

pvap	108.34	kPa	273.32	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	108.71	kPa	273.40	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	117.09	kPa	275.23	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	127.30	kPa	277.32	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	137.56	kPa	279.29	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	146.78	kPa	280.96	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	160.12	kPa	283.24	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	160.26	kPa	283.27	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	172.59	kPa	285.26	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	185.57	kPa	287.23	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane

pvap	199.50	kPa	289.23	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	214.00	kPa	291.20	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	229.27	kPa	293.16	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	230.28	kPa	293.29	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	238.65	kPa	294.32	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	246.45	kPa	295.26	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	263.72	kPa	297.25	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	282.86	kPa	299.35	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	302.67	kPa	301.40	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	319.32	kPa	303.06	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane

pvap	321.23	kPa	303.24	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	321.84	kPa	303.30	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	324.31	kPa	303.55	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	342.11	kPa	305.21	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	352.04	kPa	306.13	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	364.17	kPa	307.21	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	372.01	kPa	307.88	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	375.53	kPa	308.18	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	375.70	kPa	308.20	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	391.11	kPa	309.52	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane

pvap	412.03	kPa	311.21	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	412.84	kPa	311.29	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	424.67	kPa	312.22	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	436.99	kPa	313.16	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	438.48	kPa	313.29	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	445.61	kPa	313.85	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	465.57	kPa	315.31	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	491.51	kPa	317.16	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	522.37	kPa	319.27	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	547.63	kPa	320.93	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane



pvap	552.10	kPa	321.21	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	587.43	kPa	323.44	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	628.19	kPa	325.87	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	628.25	kPa	325.87	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	651.86	kPa	327.21	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	669.95	kPa	328.24	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	687.47	kPa	329.19	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	707.58	kPa	330.27	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	710.54	kPa	330.43	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	718.92	kPa	330.87	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane

pvap	744.56	kPa	332.20	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	752.25	kPa	332.59	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	809.53	kPa	335.42	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	851.82	kPa	337.41	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	862.00	kPa	337.88	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	906.21	kPa	339.87	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	953.67	kPa	341.92	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	1002.94	kPa	343.98	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	1043.49	kPa	345.61	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	1059.65	kPa	346.25	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane

pvap	1111.23	kPa	348.23	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	1168.74	kPa	350.37	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	1215.71	kPa	352.05	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	1226.94	kPa	352.45	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	1249.28	kPa	353.22	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	1320.47	kPa	355.64	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	1352.63	kPa	356.70	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	1431.41	kPa	359.21	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	1500.78	kPa	361.34	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	1572.33	kPa	363.46	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane

pvap	1647.11	kPa	365.60	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	1714.41	kPa	367.45	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	1790.45	kPa	369.49	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	1862.24	kPa	371.35	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	1892.76	kPa	372.12	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	1945.57	kPa	373.44	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	1946.78	kPa	373.47	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	1994.08	kPa	374.62	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	2029.38	kPa	375.47	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	2120.24	kPa	377.60	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane

pvap	2144.10	kPa	378.14	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	2214.51	kPa	379.74	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	2310.19	kPa	381.83	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	2406.69	kPa	383.87	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	2500.76	kPa	385.80	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	2601.63	kPa	387.80	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	2726.95	kPa	390.19	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	2828.09	kPa	392.05	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	2907.55	kPa	393.47	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	2922.21	kPa	393.73	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane

pvap	2939.99	kPa	394.04	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	3057.02	kPa	396.05	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	3085.75	kPa	396.52	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane
pvap	3174.16	kPa	397.97	Vapor pressures of 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,3,3,3-hexafluoropropane and 1,1,1,3,3-pentafluoropropane

## Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.36658e+01
Coeff. B	-1.91902e+03
Coeff. C	-5.95530e+01
Temperature range (K), min.	203.00
Temperature range (K), max.	398.07

## Datasets

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

Temperature, K - Liquid	Pressure, kPa - Liquid	Mass density, kg/m <sup>3</sup> - Liquid
293.38	1000.00	1380.41
293.38	3000.00	1389.7

293.38	5000.00	1398.14
293.38	10000.00	1417.22
293.38	15000.00	1434.22
293.38	20000.00	1449.45
293.38	25000.00	1463.39
293.38	30000.00	1476.18
293.38	35000.00	1488.18
293.38	40000.00	1499.36
293.38	50000.00	1519.84
293.38	60000.00	1538.35
293.38	70000.00	1555.2
303.23	1000.00	1346.41
303.23	3000.00	1356.85
303.23	5000.00	1366.62
303.23	10000.00	1388.23
303.23	15000.00	1407.04
303.23	20000.00	1423.79
303.23	25000.00	1438.88
303.23	30000.00	1452.75
303.23	35000.00	1465.54
303.23	40000.00	1477.52
303.23	50000.00	1499.35
303.23	60000.00	1518.78
303.23	70000.00	1536.58
313.10	1000.00	1310.15
313.10	3000.00	1322.54
313.10	5000.00	1333.75
313.10	10000.00	1358.32
313.10	15000.00	1379.33
313.10	20000.00	1397.77
313.10	25000.00	1414.16
313.10	30000.00	1429.13
313.10	35000.00	1442.8
313.10	40000.00	1455.53
313.10	50000.00	1478.52
313.10	60000.00	1499.21
313.10	70000.00	1517.63
322.94	1000.00	1272.73
322.94	3000.00	1287.52
322.94	5000.00	1300.71
322.94	10000.00	1328.74
322.94	15000.00	1352.16
322.94	20000.00	1372.4
322.94	25000.00	1390.33

322.94	30000.00	1406.5
322.94	35000.00	1421.01
322.94	40000.00	1434.57
322.94	50000.00	1459.05
322.94	60000.00	1480.75
322.94	70000.00	1500.21
333.06	1000.00	1230.59
333.06	3000.00	1248.74
333.06	5000.00	1264.58
333.06	10000.00	1297.09
333.06	15000.00	1323.56
333.06	20000.00	1345.92
333.06	25000.00	1365.48
333.06	30000.00	1382.82
333.06	35000.00	1398.61
333.06	40000.00	1413.18
333.06	50000.00	1439.06
333.06	60000.00	1461.86
333.06	70000.00	1482.19
343.19	3000.00	1207.31
343.19	5000.00	1226.45
343.19	10000.00	1264.58
343.19	15000.00	1294.29
343.19	20000.00	1319.04
343.19	25000.00	1340.43
343.19	30000.00	1359.27
343.19	35000.00	1376.24
343.19	40000.00	1391.75
343.19	50000.00	1419.24
343.19	60000.00	1443.29
343.19	70000.00	1464.6
353.23	3000.00	1161.43
353.23	5000.00	1185.57
353.23	10000.00	1230.77
353.23	15000.00	1264.63
353.23	20000.00	1292.08
353.23	25000.00	1315.3
353.23	30000.00	1335.89
353.23	35000.00	1354.11
353.23	40000.00	1370.58
353.23	50000.00	1399.7
353.23	60000.00	1424.96
353.23	70000.00	1447.34
363.22	5000.00	1140.64



363.22	10000.00	1195.26
363.22	15000.00	1233.73
363.22	20000.00	1264.17
363.22	25000.00	1289.66
363.22	30000.00	1311.7
363.22	35000.00	1331.22
363.22	40000.00	1348.77
363.22	50000.00	1379.54
363.22	60000.00	1406.01
363.22	70000.00	1429.34
373.17	5000.00	1091.26
373.17	10000.00	1158.13
373.17	15000.00	1202.21
373.17	20000.00	1236.05
373.17	25000.00	1263.9
373.17	30000.00	1287.72
373.17	35000.00	1308.62
373.17	40000.00	1327.34
373.17	50000.00	1359.88
373.17	60000.00	1387.66
373.17	70000.00	1412.03

Reference

<https://www.doi.org/10.1016/j.fluid.2011.04.022>

## Thermal conductivity, W/m/K

Temperature, K - Liquid	Pressure, kPa - Liquid	Thermal conductivity, W/m/K - Liquid
252.57	10000.00	0.0912
252.80	5000.00	0.0891
252.87	100.00	0.0873
252.92	10000.00	0.0914
253.16	5000.00	0.0887
253.24	20000.00	0.0955
253.38	100.00	0.0872
253.41	30000.00	0.0972
253.47	20000.00	0.0949
253.51	20000.00	0.0952
253.60	10000.00	0.0911
253.65	5000.00	0.0891
253.66	100.00	0.0872
253.86	30000.00	0.0971

255.05	30000.00	0.0973
272.91	30000.00	0.0926
273.36	10000.00	0.0847
273.45	20000.00	0.0896
273.49	1000.00	0.0814
273.66	10000.00	0.0851
273.82	5000.00	0.0833
273.85	1000.00	0.0810
273.86	1000.00	0.0812
273.95	30000.00	0.0929
274.06	20000.00	0.0895
274.16	5000.00	0.0832
274.27	10000.00	0.0855
274.33	30000.00	0.0927
274.57	20000.00	0.0892
274.63	5000.00	0.0835
293.15	10000.00	0.0802
293.22	1000.00	0.0762
293.42	30000.00	0.0894
293.49	1000.00	0.0767
293.61	5000.00	0.0782
293.65	10000.00	0.0805
293.76	5000.00	0.0781
293.76	30000.00	0.0891
293.85	10000.00	0.0802
293.95	5000.00	0.0783
294.47	1000.00	0.0764
294.54	30000.00	0.0893
312.50	5000.00	0.0705
312.59	1000.00	0.0682
312.89	5000.00	0.0709
313.01	1000.00	0.0683
313.28	5000.00	0.0706
313.39	1000.00	0.0680
313.53	20000.00	0.0809
313.55	10000.00	0.0757
313.85	10000.00	0.0761
313.86	30000.00	0.0853
314.04	10000.00	0.0758
314.06	30000.00	0.0850
314.20	20000.00	0.0809
315.13	20000.00	0.0815
315.13	30000.00	0.0852
332.48	10000.00	0.0699

332.49	5000.00	0.0654
332.51	1000.00	0.0623
332.72	30000.00	0.0805
332.79	20000.00	0.0756
332.84	30000.00	0.0813
332.85	10000.00	0.0695
332.87	1000.00	0.0624
332.89	5000.00	0.0651
333.20	10000.00	0.0695
333.24	1000.00	0.0623
333.26	5000.00	0.0648
333.48	30000.00	0.0802
333.59	20000.00	0.0755
334.42	20000.00	0.0761
353.02	30000.00	0.0749
353.17	10000.00	0.0636
353.29	20000.00	0.0705
353.35	2000.00	0.0565
353.35	5000.00	0.0593
353.57	30000.00	0.0744
353.68	2000.00	0.0564
353.74	5000.00	0.0592
353.74	20000.00	0.0701
353.82	10000.00	0.0635
353.95	30000.00	0.0741
354.09	20000.00	0.0699
354.12	2000.00	0.0560
354.24	10000.00	0.0633
354.40	5000.00	0.0594
373.08	10000.00	0.0597
373.15	30000.00	0.0726
373.22	5000.00	0.0554
373.40	20000.00	0.0672
373.46	3000.00	0.0525
373.56	10000.00	0.0596
373.72	5000.00	0.0559
373.80	30000.00	0.0727
373.84	3000.00	0.0524
373.87	20000.00	0.0677
374.10	10000.00	0.0601
374.21	30000.00	0.0724
374.24	5000.00	0.0557
374.26	3000.00	0.0526
374.57	20000.00	0.0672

**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
315.15	1480.00	195.67
320.15	1480.00	198.71
325.15	1480.00	202.06
330.15	1480.00	205.71
335.15	1480.00	209.36
340.15	1480.00	213.46
345.15	1480.00	218.02
350.15	1480.00	223.34
315.15	2490.00	193.70
320.15	2490.00	196.59
325.15	2490.00	199.78
330.15	2490.00	203.28
335.15	2490.00	207.08
340.15	2490.00	210.73
345.15	2490.00	214.83
350.15	2490.00	219.24
355.15	2490.00	224.56
360.15	2490.00	231.10
365.15	2490.00	239.92
315.15	3540.00	192.48
320.15	3540.00	194.91
325.15	3540.00	197.95
330.15	3540.00	201.45
335.15	3540.00	205.10
340.15	3540.00	208.60
345.15	3540.00	212.25
350.15	3540.00	216.35
355.15	3540.00	221.22
360.15	3540.00	226.84
365.15	3540.00	233.53
315.15	4560.00	191.42
320.15	4560.00	193.70
325.15	4560.00	196.43
330.15	4560.00	199.78
335.15	4560.00	203.28

340.15	4560.00	206.77
345.15	4560.00	210.27
350.15	4560.00	214.07
355.15	4560.00	218.33
360.15	4560.00	223.50
365.15	4560.00	230.49
315.15	5410.00	190.05
320.15	5410.00	192.78
325.15	5410.00	195.67
330.15	5410.00	199.02
335.15	5410.00	202.21
340.15	5410.00	205.56
345.15	5410.00	208.90
350.15	5410.00	212.40
355.15	5410.00	216.35
360.15	5410.00	221.06
365.15	5410.00	227.45

Reference

<https://www.doi.org/10.1016/j.jct.2015.06.014>

## Viscosity, Pa\*s

Temperature, K - Liquid	Pressure, kPa - Liquid	Viscosity, Pa*s - Liquid
253.15	1000.00	0.0005347
253.15	5000.00	0.0005621
253.15	10000.00	0.0005982
253.15	15000.00	0.0006363
253.15	20000.00	0.0006710
253.15	25000.00	0.0007092
253.15	30000.00	0.0007510
253.15	35000.00	0.0007898
253.15	40000.00	0.0008347
263.16	1000.00	0.0004612
263.16	5000.00	0.0004857
263.16	10000.00	0.0005184
263.16	15000.00	0.0005511
263.16	20000.00	0.0005830
263.16	25000.00	0.0006154
263.16	30000.00	0.0006508
263.16	35000.00	0.0006835
263.16	40000.00	0.0007189

273.14	1000.00	0.0003999
273.14	5000.00	0.0004237
273.14	10000.00	0.0004520
273.14	15000.00	0.0004821
273.14	20000.00	0.0005127
273.14	25000.00	0.0005412
273.14	30000.00	0.0005699
273.14	35000.00	0.0006012
273.14	40000.00	0.0006317
283.14	1000.00	0.0003500
283.14	5000.00	0.0003722
283.14	10000.00	0.0003989
283.14	15000.00	0.0004259
283.14	20000.00	0.0004534
283.14	25000.00	0.0004798
283.14	30000.00	0.0005054
283.14	35000.00	0.0005325
283.14	40000.00	0.0005603
293.14	1000.00	0.0003074
293.14	5000.00	0.0003281
293.14	10000.00	0.0003534
293.14	15000.00	0.0003789
293.14	20000.00	0.0004034
293.14	25000.00	0.0004271
293.14	30000.00	0.0004520
293.14	35000.00	0.0004757
293.14	40000.00	0.0005014
303.14	1000.00	0.0002708
303.14	5000.00	0.0002906
303.14	10000.00	0.0003141
303.14	15000.00	0.0003383
303.14	20000.00	0.0003620
303.14	25000.00	0.0003838
303.14	30000.00	0.0004053
303.14	35000.00	0.0004290
303.14	40000.00	0.0004513
313.14	1000.00	0.0002385
313.14	5000.00	0.0002585
313.14	10000.00	0.0002817
313.14	15000.00	0.0003041
313.14	20000.00	0.0003268
313.14	25000.00	0.0003467
313.14	30000.00	0.0003678
313.14	35000.00	0.0003897

313.14	40000.00	0.0004100
323.13	1000.00	0.0002100
323.13	5000.00	0.0002306
323.13	10000.00	0.0002530
323.13	15000.00	0.0002742
323.13	20000.00	0.0002950
323.13	25000.00	0.0003155
323.13	30000.00	0.0003353
323.13	35000.00	0.0003544
323.13	40000.00	0.0003744
333.13	1000.00	0.0001844
333.13	5000.00	0.0002046
333.13	10000.00	0.0002274
333.13	15000.00	0.0002481
333.13	20000.00	0.0002683
333.13	25000.00	0.0002868
333.13	30000.00	0.0003059
333.13	35000.00	0.0003248
333.13	40000.00	0.0003434
343.13	2000.00	0.0001669
343.13	5000.00	0.0001825
343.13	10000.00	0.0002044
343.13	15000.00	0.0002255
343.13	20000.00	0.0002447
343.13	25000.00	0.0002631
343.13	30000.00	0.0002805
343.13	35000.00	0.0002994
343.13	40000.00	0.0003154
353.13	2000.00	0.0001456
353.13	5000.00	0.0001618
353.13	10000.00	0.0001858
353.13	15000.00	0.0002064
353.13	20000.00	0.0002239
353.13	25000.00	0.0002427
353.13	30000.00	0.0002591
353.13	35000.00	0.0002761
353.13	40000.00	0.0002925
363.14	2000.00	0.0001248
363.14	5000.00	0.0001432
363.14	10000.00	0.0001663
363.14	15000.00	0.0001863
363.14	20000.00	0.0002051
363.14	25000.00	0.0002226
363.14	30000.00	0.0002395

363.14	35000.00	0.0002555
363.14	40000.00	0.0002713
373.14	2000.00	0.0001074
373.14	5000.00	0.0001287
373.14	10000.00	0.0001531
373.14	15000.00	0.0001718
373.14	20000.00	0.0001886
373.14	25000.00	0.0002056
373.14	30000.00	0.0002222
373.14	35000.00	0.0002366
373.14	40000.00	0.0002495

Reference

<https://www.doi.org/10.1021/je200854k>

## Sources

Crippen Method:

[https://www.chemeo.com/doc/models/crippen\\_log10ws](https://www.chemeo.com/doc/models/crippen_log10ws)

Thermal conductivity of liquid

<https://www.doi.org/10.1016/j.fluid.2011.02.015>

1,1,1,3,3,3-hexafluoropropane

NIST Webbook

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C690391&Units=SI>

from 253 K to 373 K and

pressure up to 30 MPa:

<http://pubs.acs.org/doi/abs/10.1021/ci9903071>

Crippen Method:

Solubilities and diffusivities of R227ea,

<https://www.doi.org/10.1016/j.jct.2018.04.004>

R236fa and R245fa in

The Yaws Handbook of Vapor

<https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure>

Pressure Promethylsulfonyl Imide:

Isobaric heat capacities of R245fa and

<https://www.doi.org/10.1016/j.jct.2015.06.014>

R236fa in liquid phase at temperatures

from 253 K and pressures up to

<https://www.doi.org/10.1016/j.fluid.2011.04.022>

5.5 MPa: 2,2,2-pentafluoropropane

and Correlation of

<https://www.doi.org/10.1021/je500801w>

isothermal vapor-liquid equilibria of

1,1,1,3,3,3-hexafluoropropane (R245fa)

with N,N-dimethylacetamide, N,N-dimethylformamide, Diethyl

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

ether, and Diethyl Ether Systems:

(R236fa):

<https://www.doi.org/10.1021/je200854k>

isothermal vapor-liquid equilibrium

measurements and assessments of

<https://www.doi.org/10.1016/j.fluid.2015.08.003>

vapor pressure of 1,1,1,3,3,3-hexafluoropropane+N,N-dimethylformamide/N-methyl-2-pyrrolidone

working pairs for absorption power

cycles: 1,1,1,3,3,3-hexafluoropropane and

1,1,1,3,3,3-pentafluoropropane:

<https://www.doi.org/10.1016/j.fluid.2009.08.023>

## Legend

cpg:	Ideal gas heat capacity
cpl:	Liquid phase heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions



<b>h<sub>vap</sub>:</b>	Enthalpy of vaporization at standard conditions
<b>h<sub>vapt</sub>:</b>	Enthalpy of vaporization at a given temperature
<b>log<sub>10</sub>w<sub>s</sub>:</b>	Log10 of Water solubility in mol/l
<b>log<sub>p</sub>:</b>	Octanol/Water partition coefficient
<b>mc<sub>vol</sub>:</b>	McGowan's characteristic volume
<b>p<sub>c</sub>:</b>	Critical Pressure
<b>p<sub>vap</sub>:</b>	Vapor pressure
<b>ρ<sub>l</sub>:</b>	Liquid Density
<b>t<sub>b</sub>:</b>	Normal Boiling Point Temperature
<b>t<sub>c</sub>:</b>	Critical Temperature
<b>t<sub>condl</sub>:</b>	Liquid thermal conductivity
<b>t<sub>f</sub>:</b>	Normal melting (fusion) point
<b>v<sub>c</sub>:</b>	Critical Volume

Latest version available from:

<https://www.cheméo.com/cid/42-504-5/Propane-1-1-1-3-3-3-hexafluoro.pdf>

Generated by Cheméo on 2024-04-25 16:39:27.392781917 +0000 UTC m=+16352416.313359234.

Cheméo (<https://www.cheméo.com>) is the biggest free database of chemical and physical data for the process industry.