3,3,3-Trifluoropropene

Other names: 1,1,1-Trifluoropropene

1,1,1-trifluoro-2-propene 1-Propene, 3,3,3-trifluoro-3,3,3-Trifluoro-1-propene 3,3,3-Trifluoropropylene Propene, 3,3,3-trifluoro-

R-1243zf

Tifluoromethylethylene Trifluoromethylethylene

Inchi: InChI=1S/C3H3F3/c1-2-3(4,5)6/h2H,1H2
InchiKey: FDMFUZHCIRHGRG-UHFFFAOYSA-N

Formula: C3H3F3SMILES: C=CC(F)(F)F

Mol. weight [g/mol]: 96.05 CAS: 677-21-4

Physical Properties

Property code	Value	Unit	Source
chg	-1532.00 ± 6.70	kJ/mol	NIST Webbook
gf	-519.37	kJ/mol	Joback Method
hf	-614.20 ± 6.70	kJ/mol	NIST Webbook
hfus	4.07	kJ/mol	Joback Method
hvap	22.00	kJ/mol	NIST Webbook
ie	10.95	eV	NIST Webbook
ie	11.24 ± 0.04	eV	NIST Webbook
ie	10.90	eV	NIST Webbook
log10ws	-1.59		Crippen Method
logp	1.735		Crippen Method
mcvol	54.140	ml/mol	McGowan Method
рс	3609.00 ± 7.00	kPa	NIST Webbook
rinpol	315.00		NIST Webbook
tb	255.00	K	NIST Webbook
tc	378.59 ± 0.20	K	NIST Webbook
tf	126.00	K	Joback Method
VC	0.228	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [[K] Source	
cpg	78.97	J/mol×K	259.30	Joback Method	
cpg	85.02	J/mol×K	283.42	Joback Method	
cpg	90.76	J/mol×K	307.53	Joback Method	
cpg	96.18	J/mol×K	331.65	Joback Method	
cpg	101.32	J/mol×K	355.77	Joback Method	
cpg	106.17	J/mol×K	379.88	Joback Method	
cpg	110.74	J/mol×K	404.00	Joback Method	
pvap	174.00	kPa	261.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98	
pvap	103.00	kPa	248.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98	
pvap	108.00	kPa	249.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98	
pvap	117.00	kPa	251.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98	
pvap	127.00	kPa	253.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98	

pvap	138.00	kPa	255.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	149.00	kPa	257.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	161.00	kPa	259.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	99.00	kPa	247.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	188.00	kPa	263.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	202.00	kPa	265.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	217.00	kPa	267.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98

pvap	234.00	kPa	269.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	251.00	kPa	271.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	269.00	kPa	273.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	288.00	kPa	275.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	308.00	kPa	277.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	329.00	kPa	279.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	351.00	kPa	281.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98

pvap	374.00	kPa	283.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	399.00	kPa	285.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	424.00	kPa	287.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	451.00	kPa	289.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	479.00	kPa	291.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	509.00	kPa	293.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	539.00	kPa	295.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98

pvap	572.00	kPa	297.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	606.00	kPa	299.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	641.00	kPa	301.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	677.00	kPa	303.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	715.00	kPa	305.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	755.00	kPa	307.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	796.00	kPa	309.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98

pvap	839.00	kPa	311.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	883.00	kPa	313.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	930.00	kPa	315.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	978.00	kPa	317.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	1028.00	kPa	319.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	1080.00	kPa	321.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	1133.00	kPa	323.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98

pvap	1189.00	kPa	325.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	1247.00	kPa	327.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	1306.00	kPa	329.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	1369.00	kPa	331.16	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	1432.00	kPa	333.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	1498.00	kPa	335.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	1567.00	kPa	337.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98

pvap	1638.00	kPa	339.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	1711.00	kPa	341.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	1787.00	kPa	343.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	1865.00	kPa	345.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	1945.00	kPa	347.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	2030.00	kPa	349.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	2116.00	kPa	351.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98

pvap	2205.00	kPa	353.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	53.00	kPa	233.80	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	67.00	kPa	238.36	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	84.00	kPa	243.30	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	104.00	kPa	248.26	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	128.00	kPa	253.29	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	156.00	kPa	258.19	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98

pvap	189.00	kPa	263.27	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	225.00	kPa	268.16	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	269.00	kPa	273.12	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	316.00	kPa	277.88	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	371.00	kPa	282.84	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	434.00	kPa	287.82	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	589.00	kPa	298.16	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98

pvap	678.00	kPa	303.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	776.00	kPa	308.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	884.00	kPa	313.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	1003.00	kPa	318.15	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	1133.00	kPa	323.16	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	1277.00	kPa	328.17	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	1432.00	kPa	333.13	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98

pvap	1598.00	kPa	338.03	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	1782.00	kPa	343.02	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	1986.00	kPa	348.08	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	2197.00	kPa	352.94	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	2432.00	kPa	357.94	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	2697.00	kPa	363.14	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	2960.00	kPa	367.90	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98

pvap	3255.00	kPa	372.86	Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98
pvap	268.80	kPa	273.17	Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system
pvap	318.40	kPa	278.17	Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system
pvap	373.60	kPa	283.16	Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system
pvap	437.60	kPa	288.16	Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system

pvap	510.00	kPa	293.15	Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system
pvap	590.10	kPa	298.15	Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system
pvap	678.20	kPa	303.15	Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system
pvap	776.70	kPa	308.15	Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system
pvap	883.60	kPa	313.15	Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system

pvap	1001.80	kPa	318.15	Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system
pvap	1130.40	kPa	323.14	Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system
pvap	1274.90	kPa	328.14	Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system
pvap	1431.60	kPa	333.14	Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system
pvap	1600.50	kPa	338.14	Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system

pva	ap	1785.70	kPa	343.14	Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroetha (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system	
pva	пр	1986.40	kPa	348.13	Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroetha (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system	
pva	ар	2203.10	kPa	353.13	Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroetha (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system	
pva	ıр	815.40	kPa	310.00	Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropend (R1243zf)	е
pva	ар	815.10	kPa	310.00	Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropend (R1243zf)	е
pva	ар	927.20	kPa	315.00	Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropend (R1243zf)	e
pva	ар	1050.10	kPa	320.00	Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropen (R1243zf)	e

pvap	1185.60	kPa	325.00	Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf)
pvap	1333.10	kPa	330.00	Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf)
pvap	1494.30	kPa	335.00	Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf)
pvap	1669.50	kPa	340.00	Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf)
pvap	1860.00	kPa	345.00	Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf)
pvap	1860.00	kPa	345.00	Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf)
pvap	2066.60	kPa	350.00	Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf)
pvap	2290.30	kPa	355.00	Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf)

pvap	2532.60	kPa	360.00	Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf)
pvap	2532.40	kPa	360.00	Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf)
pvap	2794.90	kPa	365.00	Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf)
pvap	3080.00	kPa	370.00	Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf)
pvap	3262.70	kPa	373.00	Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf)
pvap	3390.00	kPa	375.00	Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf)
pvap	3390.00	kPa	375.00	Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf)
pvap	3518.30	kPa	376.93	Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf)

Datasets

Mass density, kg/m3

Temperature, K - Gas	Pressure, kPa - Gas	Mass density, kg/m3 - Gas
330.00	1111.50	50.0
340.00	1167.60	49.9
350.00	1222.40	49.9
360.00	1276.20	49.9
370.00	1329.20	49.9
380.00	1381.90	49.9
390.00	1433.60	49.9
400.00	1484.40	49.8
410.00	1534.90	49.8
420.00	1584.70	49.7
430.00	1633.50	49.7
355.00	2036.40	99.8
360.00	2101.20	99.8
370.00	2227.80	99.8
380.00	2351.30	99.8
390.00	2472.50	99.7
400.00	2591.10	99.7
410.00	2708.00	99.6
420.00	2823.00	99.5
430.00	2936.00	99.3
380.00	3350.90	199.9
385.00	3499.40	199.9
390.00	3645.50	199.8
395.00	3789.80	199.8
400.00	3931.90	199.7
405.00	4073.00	199.7
410.00	4212.50	199.6
415.00	4350.80	199.5
420.00	4487.80	199.4
425.00	4623.80	199.2
430.00	4758.70	199.1
379.00	3659.30	408.6
380.00	3727.70	408.6
385.00	4070.40	408.5
390.00	4415.70	408.4

395.00	4762.20	408.3
400.00	5109.30	408.2
405.00	5458.70	408.1
410.00	5806.10	407.9
415.00	6157.70	407.7
420.00	6507.10	407.5
425.00	6857.20	407.2

Reference

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https://www.doi.org/10.1016/j.fluid.2019.06.020

1.1.1.2-Tetrafluoroethane (HFC-134a) + 1.1.1.2-Tetrafluoroethane (HFC-134a) + 1.1.2-Tetrafluorobene (HFC-134a) + 1.1.2-Te (HFO1243zf):

https://www.cheric.org/files/research/kdb/mol/mol1734.mol

https://www.doi.org/10.1021/acs.jced.8b00452

Legend

Standard gas enthalpy of combustion chg:

cpg: Ideal gas heat capacity

gf: Standard Gibbs free energy of formation hf: Enthalpy of formation at standard conditions hfus: Enthalpy of fusion at standard conditions

Enthalpy of vaporization at standard conditions hvap:

Ionization energy ie:

log10ws: Log10 of Water solubility in mol/l Octanol/Water partition coefficient logp: mcvol: McGowan's characteristic volume

Critical Pressure pc: Vapor pressure pvap:

rhog: Gas Density

rinpol: Non-polar retention indices

tb: Normal Boiling Point Temperature

tc: Critical Temperature

tf: Normal melting (fusion) point

vc: Critical Volume

Latest version available from:

https://www.chemeo.com/cid/37-893-0/3-3-3-Trifluoropropene.pdf

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