

Substance: R1234ze(Z)

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Table Measured capillary constant and surface tension for R1234ze(Z)

Date	Temperature (ITS-90)	Vapor density	Liquid density	Capillary constant	Surface tension	Measurement uncertainty
-	T / [K]	ρ_V / [kg/m ³]	ρ_L / [kg/m ³]	a^2 / [mm ²]	σ / [mN/m]	$U\sigma$ / [mN/m]
series1	294.00	7.67	1231.44	2.19	13.15	0.28
	310.61	13.09	1187.64	1.98	11.38	0.27
	319.97	17.29	1161.56	1.83	10.23	0.26
	330.01	22.96	1132.27	1.65	8.95	0.25
	339.94	30.01	1101.73	1.52	7.96	0.24
	350.03	38.00	1068.67	1.32	6.66	0.23
	273.22	3.58	1282.53	2.60	16.26	0.30
	277.34	4.20	1272.71	2.50	15.51	0.29
series2	283.24	5.24	1258.37	2.46	14.47	0.29
	293.20	7.46	1233.48	2.33	13.35	0.28
	303.19	10.38	1207.58	2.18	12.19	0.27
	313.05	14.09	1180.96	2.00	10.83	0.26
	323.05	18.89	1152.75	1.87	9.78	0.25

Kondou, C., Nagata, R., Nii, N., Koyama, S., Higashi, Y., 2015. Surface tension of low GWP refrigerants R1243zf, R1234ze(Z), and R1233zd(E). *Int. J. Refrig.* 53, 80789. doi:10.1016/j.ijrefrig.2015.01.005

$$\sigma = 0.05657(1 - T/423.27)^{1.220} [\text{N m}^{-1}] \quad \text{for R1234ze(Z)}$$

