

Fluid Fluid Helium Critical Temperature
Critical Pressure

2.276 bar A
5.1953 K

Compressibility Factor

The graph plots the Compressibility Factor Z (Y-axis, 0.00 to 1.00) against Temperature K (X-axis, 0.0 to 20.0). Six curves are shown for different pressures: 1.0 bar A (blue), 2.0 bar A (red), 3.0 bar A (green), 4.5 bar A (orange), 5.5 bar A (purple), and 3.0 bar A (light green). The curves show a minimum value at a specific temperature, which shifts to higher temperatures as pressure increases. The 3.0 bar A curve is identical to the 5.5 bar A curve.

Pressure Label	bar A					
	1.0 bar A	2.0 bar A	3.0 bar A	4.5 bar A	5.5 bar A	
Reduced pressure	0.439	0.879	1.318	1.977	2.417	
Temperature K	Reduced Temperature K					
4.0	0.77	#N/A	#N/A	0.263	0.382	0.460
4.1	0.79	#N/A	#N/A	0.259	0.376	0.452
4.2	0.81	#N/A	#N/A	0.255	0.370	0.445
4.3	0.83	0.718	#N/A	0.252	0.365	0.438
4.4	0.85	0.739	#N/A	0.250	0.360	0.431
4.5	0.87	0.758	#N/A	0.247	0.356	0.425
4.6	0.89	0.774	#N/A	0.246	0.352	0.420
4.7	0.90	0.788	#N/A	0.245	0.348	0.415
4.8	0.92	0.801	#N/A	0.244	0.346	0.411
4.9	0.94	0.813	#N/A	0.245	0.343	0.407
5.0	0.96	0.824	#N/A	0.246	0.341	0.404
5.1	0.98	0.833	0.545	0.249	0.340	0.401
5.2	1.00	0.842	0.592	0.253	0.340	0.399
5.3	1.02	0.850	0.627	0.261	0.340	0.398
5.4	1.04	0.858	0.655	0.276	0.342	0.397
5.5	1.06	0.865	0.679	0.307	0.344	0.397
5.6	1.08	0.871	0.700	0.370	0.348	0.397
5.7	1.10	0.877	0.718	0.445	0.354	0.399
5.8	1.12	0.883	0.734	0.504	0.362	0.401
6.0	1.15	0.893	0.762	0.583	0.388	0.411
6.2	1.19	0.902	0.786	0.638	0.429	0.426
6.4	1.23	0.910	0.806	0.680	0.480	0.450
6.5	1.25	0.914	0.815	0.697	0.507	0.465
6.6	1.27	0.917	0.823	0.713	0.534	0.482
6.8	1.31	0.923	0.838	0.741	0.582	0.518
7.0	1.35	0.929	0.851	0.764	0.625	0.556
7.2	1.39	0.934	0.863	0.785	0.661	0.593
7.4	1.42	0.939	0.873	0.802	0.692	0.627
7.6	1.46	0.943	0.882	0.818	0.718	0.659
7.8	1.50	0.947	0.891	0.832	0.742	0.687
8.0	1.54	0.950	0.898	0.844	0.762	0.712
8.5	1.64	0.958	0.914	0.870	0.804	0.763
9.0	1.73	0.964	0.927	0.890	0.836	0.802
9.5	1.83	0.969	0.938	0.907	0.862	0.834
10.0	1.92	0.973	0.947	0.920	0.882	0.859
11.0	2.12	0.980	0.960	0.941	0.913	0.896
12.0	2.31	0.985	0.970	0.955	0.935	0.922
13.0	2.50	0.988	0.977	0.966	0.951	0.942
14.0	2.69	0.991	0.982	0.974	0.963	0.956
15.0	2.89	0.993	0.986	0.980	0.972	0.967
16.0	3.08	0.995	0.990	0.985	0.979	0.976
18.0	3.46	0.997	0.994	0.992	0.989	0.988
20.0	3.85	0.999	0.998	0.997	0.996	0.996

