VAPOR PRESSURE OF MERCURY

The following table gives the vapor pressure of mercury in kilopascals (100 kPa = 1 bar) from the triple point (234.3156 K) to the critical point (1764 K). The data are generated from the formulation of Huber, Laesecke, and Friend in Reference 1, which is based on a critical evaluation of all the published data on mercury vapor pressure and related thermodynamic properties. The estimated uncertainty in the vapor pressure is:

−38 to −10°C	3%
0 to 130°C	1%
140 to 350°C	0.15%
360 to 620°C	0.5%
630 to 1491°C	5%

Most of the entries in this table carry one significant figure beyond the estimated accuracy.

Note that the table refers to mercury vapor in equilibrium with liquid mercury, in the absence of air or other gases.

References

1. Huber, M. L., Laesecke, A., and Friend, D. G., *The Vapor Pressure of Mercury*, NISTIR 6643, National Institute of Standards and Technology, Boulder, CO, March 2006.
2. Huber, M. L., Laesecke, A., and Friend, D. G., *Ind. Eng. Chem. Res.* 45, 7351, 2006.
3. Vargaftik, N. B., Vinogradov, Y. K., and Yargin, V. S., *Handbook of Physical Properties of Liquids and Gases, Third Edition*, Begell House, New York, 1996.

t/°C	*p*/kPa	*t*/°C	*p*/kPa	*t*/°C	*p*/kPa	*t*/°C	*p*/kPa
−38.83	2.985×10^{-7}	38	0.0007350	300	32.965	720	6254
−30	9.451×10^{-7}	39	0.0007929	310	40.856	730	6718
−20	3.160×10^{-6}	40	0.0008551	320	50.260	740	7205
−10	9.625×10^{-6}	41	0.0009216	330	61.396	750	7718
0	2.699×10^{-5}	42	0.0009928	340	74.498	760	8258
1	2.979×10^{-5}	43	0.001069	350	89.823	770	8824
2	3.287×10^{-5}	44	0.001151	360	107.65	780	9417
3	3.623×10^{-5}	45	0.001238	370	128.26	790	10040
4	3.991×10^{-5}	46	0.001331	380	151.99	800	10690
5	4.393×10^{-5}	47	0.001430	390	179.17	810	11370
6	4.833×10^{-5}	48	0.001537	400	210.15	820	12080
7	5.312×10^{-5}	49	0.001650	410	245.32	830	12820
8	5.836×10^{-5}	50	0.001771	420	285.07	840	13600
9	6.406×10^{-5}	55	0.002506	430	329.82	850	14410
10	7.028×10^{-5}	60	0.003508	440	380.00	860	15250
11	7.705×10^{-5}	65	0.004862	450	436.07	870	16120
12	8.441×10^{-5}	70	0.006673	460	498.51	880	17030
13	9.242×10^{-5}	75	0.009075	470	567.81	890	17980
14	0.0001011	80	0.01223	480	644.46	900	18960
15	0.0001106	85	0.01635	490	729.01	910	19980
16	0.0001208	90	0.02167	500	821.99	920	21040
17	0.0001320	95	0.02850	510	923.96	930	22140
18	0.0001440	100	0.03721	520	1035.5	940	23270
19	0.0001571	110	0.06209	530	1157.2	950	24450
20	0.0001713	120	0.1009	540	1289.6	960	25670
21	0.0001866	130	0.1599	550	1433.3	970	26930
22	0.0002032	140	0.2478	560	1589.1	980	28230
23	0.0002211	150	0.3759	570	1757.4	990	29580
24	0.0002404	160	0.5592	580	1939	1000	30970
25	0.0002613	170	0.8168	590	2135	1050	38600
26	0.0002839	180	1.1728	600	2345	1100	47450
27	0.0003082	190	1.6573	610	2570	1150	57590
28	0.0003344	200	2.3071	620	2811	1200	69100
29	0.0003627	210	3.1670	630	3069	1250	82100
30	0.0003931	220	4.2906	640	3344	1300	96600
31	0.0004259	230	5.7414	650	3637	1350	112700
32	0.0004611	240	7.5939	660	3949	1400	130000
33	0.0004990	250	9.9347	670	4281	1450	150000
34	0.0005398	260	12.863	680	4632	1491	167000
35	0.0005835	270	16.494	690	5005		
36	0.0006305	280	20.955	700	5399		
37	0.0006809	290	26.392	710	5815		