This table gives coefficients in an equation for the vapor pressure of metallic elements in both the solid and liquid state. Vapor pressure in the range of 10-15 to 10-3‑atmare covered. The equation is:



The equation reproduces the observed vapor pressures to an accuracy of ± 5 % or better.

Reference: Alcock, CB< Itkin, VP, and Horrigan MK Canadian Metallurgical Quartely, 23, 309, 1984.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| element | State | A | B | C | D | T(melt) |
|  |  |  |  |  |  | K |
| 'Li' | 'solid' | 5.667 | -8310 | 0 | 0 | 453 |
| 'Li' | 'liquid' | 5.055 | -8023 | 0 | 0 | 0 |
| 'Na' | 'solid' | 5.298 | -5603 | 0 | 0 | 371 |
| 'Na' | 'liquid' | 4.704 | -5377 | 0 | 0 | 0 |
| 'K' | 'solid' | 4.961 | -4646 | 0 | 0 | 336 |
| 'K' | 'liquid' | 4.402 | -4453 | 0 | 0 | 0 |
| 'Rb' | 'solid' | 4.5857 | -4215 | 0 | 0 | 313 |
| 'Rb' | 'liquid' | 4.312 | -4040 | 0 | 0 | 0 |
| 'Cs' | 'solid' | 4.711 | -3999 | 0 | 0 | 301.6 |
| 'Cs' | 'liquid' | 4.165 | -3830 | 0 | 0 | 0 |
| 'Be' | 'solid' | 8.042 | -17020 | -0.444 | 0 | 1560 |
| 'Be' | 'liquid' | 5.786 | -15731 | 0 | 0 | 0 |
| 'Mg' | 'solid' | 8.489 | -7813 | -0.8253 | 0 | 923 |
| 'Mg' | 'liquid' | 0 | 0 | 0 | 0 | 0 |
| 'Ca' | 'solid' | 10.127 | -9517 | -1.403 | 0 | 1112 |
| 'Ca' | 'liquid' | 0 | 0 | 0 | 0 | 0 |
| 'Sr' | 'solid' | 9.226 | -8572 | -1.1926 | 0 | 1042 |
| 'Sr' | 'liquid' | 0 | 0 | 0 | 0 | 0 |
| 'Ba' | 'solid' | 12.405 | -9690 | -2.289 | 0 | 1002 |
| 'Ba' | 'liquid' | 4.007 | -8163 | 0 | 0 | 0 |
| 'Al' | 'solid' | 9.459 | -17342 | -0.7927 | 0 | 933 |
| 'Al' | 'liquid' | 5.911 | -16211 | 0 | 0 | 0 |
| 'Ga' | 'solid' | 6.657 | -14208 | 0 | 0 | 302.9 |
| 'Ga' | 'liquid' | 6.754 | -13984 | -0.3413 | 0 | 0 |
| 'In' | 'solid' | 5.991 | -12548 | 0 | 0 | 429 |
| 'In' | 'liquid' | 5.374 | -12276 | 0 | 0 | 0 |
| 'Tl' | 'solid' | 5.971 | -9447 | 0 | 0 | 577 |
| 'Tl' | 'liquid' | 5.259 | -9037 | 0 | 0 | 0 |
| 'Sn' | 'solid' | 6.036 | -15710 | 0 | 0 | 508 |
| 'Sn' | 'liquid' | 5.262 | -15332 | 0 | 0 | 0 |
| 'Pb' | 'solid' | 5.643 | -10143 | 0 | 0 | 601 |
| 'Pb' | 'liquid' | 4.911 | -9701 | 0 | 0 | 0 |
| 'Sc' | 'solid' | 6.65 | -19721 | 0.2885 | -0.3663 | 1812 |
| 'Sc' | 'liquid' | 5.795 | -17681 | 0 | 0 | 0 |
| 'Y' | 'solid' | 9.735 | -22306 | -0.8705 | 0 | 1799 |
| 'Y' | 'liquid' | 5.795 | -20341 | 0 | 0 | 0 |
| 'La' | 'solid' | 7.463 | -22551 | -0.3142 | 0 | 1190 |
| 'La' | 'liquid' | 5.911 | -21855 | 0 | 0 | 0 |
| 'Ti' | 'solid' | 11.925 | -24991 | -1.3376 | 0 | 1930 |
| 'Ti' | 'liquid' | 6.358 | -22747 | 0 | 0 | 0 |
| 'Zr' | 'solid' | 10.008 | -31512 | -0.789 | 0 | 2125 |
| 'Zr' | 'liquid' | 6.806 | -30295 | 0 | 0 | 0 |
| 'Hf' | 'solid' | 9.445 | -32482 | -0.6735 | 0 | 2500 |
| 'Hf' | 'liquid' | 0 | 0 | 0 | 0 | 0 |
| 'V' | 'solid' | 9.744 | -27132 | -0.5501 | 0 | 2175 |
| 'V' | 'liquid' | 6.929 | -25011 | 0 | 0 | 0 |
| 'Nb' | 'solid' | 8.822 | -37818 | -0.2575 | 0 | 2741 |
| 'Nb' | 'liquid' | 0 | 0 | 0 | 0 | 0 |
| 'Ta' | 'solid' | 16.807 | -41346 | -3.2152 | 0.7437 | 3269 |
| 'Ta' | 'liquid' | 0 | 0 | 0 | 0 | 0 |
| 'Cr' | 'solid' | 6.8 | -20733 | 0.4391 | -0.4094 | 2130 |
| 'Cr' | 'liquid' | 0 | 0 | 0 | 0 | 0 |
| 'Mo' | 'solid' | 11.529 | -34626 | -1.1331 | 0 | 2890 |
| 'Mo' | 'liquid' | 0 | 0 | 0 | 0 | 0 |
| 'W' | 'solid' | 2.945 | -44094 | 1.3677 | 0 | 3695 |
| 'W' | 'solid2' | -54.527 | -57687 | -12.2231 | 0 | 0 |
| 'Mn' | 'solid' | 12.805 | -15097 | -1.7896 | 0 | 1519 |
| 'Mn' | 'liquid' | 0 | 0 | 0 | 0 | 0 |
| 'Re' | 'solid' | 11.543 | -40726 | -1.1629 | 0 | 3450 |
| 'Re' | 'liquid' | 0 | 0 | 0 | 0 | 0 |
| 'Fe' | 'solid' | 7.1 | -21723 | 0.4536 | -0.5846 | 1808 |
| 'Fe' | 'liquid' | 6.347 | -19574 | 0 | 0 | 0 |
| 'Ru' | 'solid' | 9.755 | -34154 | -0.4723 | 0 | 2520 |
| 'Ru' | 'liquid' | 0 | 0 | 0 | 0 | 0 |
| 'Os' | 'solid' | 9.419 | -41198 | -0.3896 | 0 | 3300 |
| 'Os' | 'liquid' | 0 | 0 | 0 | 0 | 0 |
| 'Co' | 'solid' | 10.976 | -22576 | -1.028 | 0 | 1768 |
| 'Co' | 'liquid' | 6.488 | -20578 | 0 | 0 | 0 |
| 'Rh' | 'solid' | 10.168 | -29010 | -0.7068 | 0 | 2239 |
| 'Rh' | 'liquid' | 6.802 | -26792 | 0 | 0 | 0 |
| 'Ir' | 'solid' | 10.506 | -35099 | -0.75 | 0 | 2716 |
| 'Ir' | 'liquid' | 0 | 0 | 0 | 00 | 0 |
| 'Ni' | 'solid' | 10.557 | -22606 | -0.8717 | 0 | 1726 |
| 'Ni' | 'liquid' | 6.666 | -20765 | 0 | 0 | 0 |
| 'Pd' | 'solid' | 9.502 | -19813 | -0.9258 | 0 | 1825 |
| 'Pd' | 'liquid' | 5.426 | -17899 | 0 | 0 | 0 |
| 'Pt' | 'solid' | 4.882 | -29387 | 1.1039 | -0.4527 | 2045 |
| 'Pt' | 'liquid' | 6.386 | -26856 | 0 | 0 | 0 |
| 'Cu' | 'solid' | 9.123 | -17748 | -0.7317 | 0 | 1358 |
| 'Cu' | 'liquid' | 5.849 | -16415 | 0 | 0 | 0 |
| 'Ag' | 'solid' | 9.127 | -14999 | -0.7845 | 0 | 1234 |
| 'Ag' | 'liquid' | 5.752 | -13827 | 0 | 0 | 0 |
| 'Au' | 'solid' | 9.52 | -19343 | -0.7479 | 0 | 1337 |
| 'Au' | 'liquid' | 5.832 | -18024 | 0 | 0 | 0 |
| 'Zn' | 'solid' | 6.102 | -6776 | 0 | 0 | 692 |
| 'Zn' | 'liquid' | 5.378 | -6286 | 0 | 0 | 0 |
| 'Cd' | 'solid' | 5.939 | -5799 | 0 | 0 | 594 |
| 'Cd' | 'liquid' | 5.242 | -5392 | 0 | 0 | 0 |
| 'Hg' | 'solid' | 0 | 0 | 0 | 0 | 234 |
| 'Hg' | 'liquid' | 5.116 | -3190 | 0 | 0 | 0 |
| 'Ce' | 'solid' | 6.139 | -21752 | 0 | 0 | 1071 |
| 'Ce' | 'liquid' | 5.611 | -21200 | 0 | 0 | 0 |
| 'Pr' | 'solid' | 8.859 | -18720 | -0.9512 | 0 | 1204 |
| 'Pr' | 'liquid' | 4.772 | -17315 | 0 | 0 | 0 |
| 'Nd' | 'solid' | 8.996 | -17264 | -0.9519 | 0 | 1016 |
| 'Nd' | 'liquid' | 4.912 | -15824 | 0 | 0 | 0 |
| 'Sm' | 'solid' | 9.6988 | -11034 | -1.287 | 0 | 1345 |
| 'Sm' | 'liquid' | 0 | 0 | 0 | 0 | 0 |
| 'Eu' | 'solid' | 9.24 | -9459 | -1.1661 | 0 | 1095 |
| 'Eu' | 'liquid' | 0 | 0 | 0 | 0 | 0 |
| 'Gd' | 'solid' | 8.344 | -20861 | -0.5775 | 0 | 1585 |
| 'Gd' | 'liquid' | 5.557 | -19389 | 0 | 0 | 0 |
| 'Tb' | 'solid' | 9.51 | -20457 | -0.9247 | 0 | 1630 |
| 'Tb' | 'liquid' | 5.411 | -18639 | 0 | 0 | 0 |
| 'Dy' | 'solid' | 9.579 | -15336 | -1.1114 | 0 | 1680 |
| 'Dy' | 'liquid' | 0 | 0 | 0 | 0 | 0 |
| 'Ho' | 'solid' | 9.785 | -15899 | -1.1753 | 0 | 1740 |
| 'Ho' | 'liquid' | 0 | 0 | 0 | 0 | 0 |
| 'Er' | 'solid' | 9.916 | -16642 | -1.2154 | 0 | 1795 |
| 'Er' | 'liquid' | 4.668 | -14380 | 0 | 0 | 0 |
| 'Tm' | 'solid' | 8.882 | -1227 | -0.9564 | 0 | 1818 |
| 'Tm' | 'liquid' | 0 | 0 | 0 | 0 | 0 |
| 'Yb' | 'solid' | 9.111 | -8111 | -1.0849 | 0 | 1097 |
| 'Yb' | 'liquid' | 0 | 0 | 0 | 0 | 0 |
| 'Lu' | 'solid' | 8.793 | -22423 | -0.62 | 0 | 1936 |
| 'Lu' | 'liquid' | 5.648 | -20302 | 0 | 0 | 0 |
| 'Th' | 'solid' | 8.668 | -31483 | -0.5288 | 0 | 2028 |
| 'Th' | 'liquid' | -18.453 | -24569 | 6.6473 | 0 | 0 |
| 'Pa' | 'solid' | 10.552 | 0.34869 | -1.0075 | 0 | 1870 |
| 'Pa' | 'liquid' | 6.177 | 32874 | 0 | 0 | 0 |