

| Temperatur [°C] | Druck [bar] | | Dichte [kg/m ³] | | Enthalpie [kJ/kg] | | Entropie [J/kg*K] | |
|--------------------|----------------|-----------|--------------------------------|-----------|----------------------|-----------|----------------------|-----------|
| | flüssig | gasförmig | flüssig | gasförmig | flüssig | gasförmig | flüssig | gasförmig |
| -65,0 | 0,482 | 0,480 | 1391,6 | 2,070 | 107,87 | 391,98 | 0,6182 | 1,9834 |
| -64,0 | 0,511 | 0,509 | 1388,5 | 2,187 | 109,23 | 392,53 | 0,6247 | 1,9795 |
| -63,0 | 0,542 | 0,540 | 1385,5 | 2,310 | 110,58 | 393,08 | 0,6311 | 1,9757 |
| -62,0 | 0,574 | 0,571 | 1382,4 | 2,437 | 111,94 | 393,63 | 0,6376 | 1,9719 |
| -61,0 | 0,607 | 0,605 | 1379,4 | 2,570 | 113,30 | 394,18 | 0,6440 | 1,9682 |
| -60,0 | 0,642 | 0,640 | 1376,3 | 2,709 | 114,66 | 394,72 | 0,6504 | 1,9645 |
| -59,0 | 0,679 | 0,676 | 1373,2 | 2,854 | 116,02 | 395,26 | 0,6567 | 1,9609 |
| -58,0 | 0,717 | 0,714 | 1370,1 | 3,005 | 117,38 | 395,80 | 0,6631 | 1,9574 |
| -57,0 | 0,757 | 0,754 | 1367,0 | 3,162 | 118,74 | 396,33 | 0,6694 | 1,9538 |
| -56,0 | 0,799 | 0,796 | 1363,9 | 3,326 | 120,11 | 396,87 | 0,6756 | 1,9504 |
| -55,0 | 0,843 | 0,839 | 1360,8 | 3,496 | 121,47 | 397,40 | 0,6819 | 1,9470 |
| -54,0 | 0,888 | 0,884 | 1357,7 | 3,673 | 122,84 | 397,93 | 0,6881 | 1,9436 |
| -53,0 | 0,935 | 0,932 | 1354,6 | 3,857 | 124,21 | 398,45 | 0,6944 | 1,9403 |
| -52,0 | 0,985 | 0,981 | 1351,4 | 4,049 | 125,58 | 398,98 | 0,7006 | 1,9370 |
| -51,0 | 1,036 | 1,032 | 1348,3 | 4,247 | 126,95 | 399,50 | 0,7067 | 1,9338 |
| -50,0 | 1,090 | 1,086 | 1345,1 | 4,454 | 128,32 | 400,02 | 0,7129 | 1,9306 |
| -49,0 | 1,146 | 1,141 | 1342,0 | 4,668 | 129,70 | 400,53 | 0,7190 | 1,9275 |
| -48,0 | 1,204 | 1,199 | 1338,8 | 4,891 | 131,08 | 401,04 | 0,7251 | 1,9244 |
| -47,0 | 1,264 | 1,259 | 1335,6 | 5,122 | 132,45 | 401,55 | 0,7312 | 1,9213 |
| -46,0 | 1,326 | 1,321 | 1332,4 | 5,361 | 133,83 | 402,06 | 0,7373 | 1,9183 |
| -45,0 | 1,391 | 1,386 | 1329,2 | 5,609 | 135,21 | 402,57 | 0,7433 | 1,9153 |
| -44,0 | 1,459 | 1,453 | 1326,0 | 5,866 | 136,60 | 403,07 | 0,7493 | 1,9124 |
| -43,0 | 1,529 | 1,523 | 1322,8 | 6,132 | 137,98 | 403,57 | 0,7553 | 1,9095 |
| -42,0 | 1,602 | 1,596 | 1319,5 | 6,408 | 139,37 | 404,06 | 0,7613 | 1,9066 |
| -41,0 | 1,677 | 1,671 | 1316,3 | 6,693 | 140,76 | 404,55 | 0,7673 | 1,9038 |
| -40,0 | 1,755 | 1,749 | 1313,0 | 6,989 | 142,15 | 405,04 | 0,7732 | 1,9010 |
| -39,0 | 1,836 | 1,829 | 1309,8 | 7,294 | 143,54 | 405,53 | 0,7792 | 1,8983 |
| -38,0 | 1,920 | 1,913 | 1306,5 | 7,610 | 144,93 | 406,01 | 0,7851 | 1,8956 |
| -37,0 | 2,007 | 1,999 | 1303,2 | 7,937 | 146,33 | 406,49 | 0,7910 | 1,8929 |
| -36,0 | 2,096 | 2,089 | 1299,9 | 8,275 | 147,73 | 406,97 | 0,7969 | 1,8902 |
| -35,0 | 2,189 | 2,181 | 1296,6 | 8,624 | 149,13 | 407,44 | 0,8027 | 1,8876 |
| -34,0 | 2,285 | 2,277 | 1293,2 | 8,984 | 150,53 | 407,91 | 0,8086 | 1,8850 |
| -33,0 | 2,385 | 2,376 | 1289,9 | 9,357 | 151,94 | 408,38 | 0,8144 | 1,8824 |
| -32,0 | 2,487 | 2,479 | 1286,5 | 9,741 | 153,34 | 408,84 | 0,8202 | 1,8799 |
| -31,0 | 2,593 | 2,584 | 1283,2 | 10,14 | 154,75 | 409,30 | 0,8260 | 1,8774 |
| -30,0 | 2,703 | 2,694 | 1279,8 | 10,55 | 156,17 | 409,75 | 0,8318 | 1,8749 |
| -29,0 | 2,816 | 2,806 | 1276,4 | 10,97 | 157,58 | 410,20 | 0,8376 | 1,8725 |
| -28,0 | 2,933 | 2,923 | 1273,0 | 11,41 | 159,00 | 410,65 | 0,8433 | 1,8700 |
| -27,0 | 3,053 | 3,043 | 1269,6 | 11,86 | 160,42 | 411,09 | 0,8491 | 1,8677 |
| -26,0 | 3,177 | 3,166 | 1266,1 | 12,32 | 161,84 | 411,53 | 0,8548 | 1,8653 |
| -25,0 | 3,306 | 3,294 | 1262,7 | 12,80 | 163,27 | 411,97 | 0,8605 | 1,8629 |

| Temperatur [°C] | Druck [bar] | | Dichte [kg/m³] | | Enthalpie [kJ/kg] | | Entropie [J/kg*K] | |
|--------------------|----------------|-----------|-------------------|-----------|----------------------|-----------|----------------------|-----------|
| | flüssig | gasförmig | flüssig | gasförmig | flüssig | gasförmig | flüssig | gasförmig |
| -24,0 | 3,438 | 3,426 | 1259,2 | 13,29 | 164,70 | 412,40 | 0,8662 | 1,8606 |
| -23,0 | 3,574 | 3,561 | 1255,7 | 13,80 | 166,13 | 412,83 | 0,8719 | 1,8583 |
| -22,0 | 3,714 | 3,701 | 1252,2 | 14,32 | 167,56 | 413,25 | 0,8776 | 1,8560 |
| -21,0 | 3,858 | 3,845 | 1248,7 | 14,86 | 169,00 | 413,67 | 0,8833 | 1,8538 |
| -20,0 | 4,007 | 3,993 | 1245,1 | 15,42 | 170,44 | 414,08 | 0,8889 | 1,8515 |
| -19,0 | 4,160 | 4,145 | 1241,6 | 15,99 | 171,88 | 414,49 | 0,8946 | 1,8493 |
| -18,0 | 4,317 | 4,302 | 1238,0 | 16,58 | 173,33 | 414,90 | 0,9002 | 1,8471 |
| -17,0 | 4,479 | 4,464 | 1234,4 | 17,18 | 174,78 | 415,30 | 0,9058 | 1,8450 |
| -16,0 | 4,645 | 4,630 | 1230,8 | 17,81 | 176,23 | 415,70 | 0,9114 | 1,8428 |
| -15,0 | 4,817 | 4,800 | 1227,1 | 18,45 | 177,69 | 416,09 | 0,9170 | 1,8407 |
| -14,0 | 4,992 | 4,976 | 1223,5 | 19,11 | 179,15 | 416,47 | 0,9226 | 1,8386 |
| -13,0 | 5,173 | 5,156 | 1219,8 | 19,79 | 180,61 | 416,85 | 0,9282 | 1,8365 |
| -12,0 | 5,359 | 5,341 | 1216,1 | 20,48 | 182,08 | 417,23 | 0,9337 | 1,8344 |
| -11,0 | 5,550 | 5,531 | 1212,4 | 21,20 | 183,55 | 417,60 | 0,9393 | 1,8323 |
| -10,0 | 5,746 | 5,727 | 1208,7 | 21,94 | 185,02 | 417,97 | 0,9449 | 1,8302 |
| -9,0 | 5,947 | 5,927 | 1204,9 | 22,70 | 186,50 | 418,33 | 0,9504 | 1,8282 |
| -8,0 | 6,153 | 6,133 | 1201,1 | 23,48 | 187,99 | 418,68 | 0,9559 | 1,8262 |
| -7,0 | 6,365 | 6,344 | 1197,3 | 24,29 | 189,47 | 419,03 | 0,9615 | 1,8242 |
| -6,0 | 6,583 | 6,561 | 1193,5 | 25,11 | 190,96 | 419,37 | 0,9670 | 1,8222 |
| -5,0 | 6,806 | 6,783 | 1189,6 | 25,96 | 192,46 | 419,71 | 0,9725 | 1,8202 |
| -4,0 | 7,034 | 7,011 | 1185,8 | 26,84 | 193,96 | 420,04 | 0,9780 | 1,8182 |
| -3,0 | 7,268 | 7,244 | 1181,9 | 27,73 | 195,46 | 420,37 | 0,9835 | 1,8162 |
| -2,0 | 7,509 | 7,484 | 1177,9 | 28,66 | 196,97 | 420,69 | 0,9890 | 1,8143 |
| -1,0 | 7,755 | 7,729 | 1174,0 | 29,60 | 198,48 | 421,00 | 0,9945 | 1,8123 |
| 0,0 | 8,007 | 7,981 | 1170,0 | 30,58 | 200,00 | 421,31 | 1,0000 | 1,8104 |
| 1,0 | 8,265 | 8,238 | 1166,0 | 31,58 | 201,52 | 421,60 | 1,0055 | 1,8084 |
| 2,0 | 8,530 | 8,502 | 1161,9 | 32,61 | 203,05 | 421,90 | 1,0110 | 1,8065 |
| 3,0 | 8,801 | 8,772 | 1157,8 | 33,66 | 204,58 | 422,18 | 1,0164 | 1,8046 |
| 4,0 | 9,078 | 9,049 | 1153,7 | 34,75 | 206,12 | 422,46 | 1,0219 | 1,8027 |
| 5,0 | 9,362 | 9,332 | 1149,6 | 35,86 | 207,66 | 422,73 | 1,0274 | 1,8007 |
| 6,0 | 9,653 | 9,621 | 1145,4 | 37,01 | 209,21 | 422,99 | 1,0328 | 1,7988 |
| 7,0 | 9,950 | 9,918 | 1141,2 | 38,19 | 210,77 | 423,25 | 1,0383 | 1,7969 |
| 8,0 | 10,25 | 10,22 | 1137,0 | 39,40 | 212,33 | 423,49 | 1,0438 | 1,7950 |
| 9,0 | 10,57 | 10,53 | 1132,7 | 40,64 | 213,89 | 423,73 | 1,0492 | 1,7931 |
| 10,0 | 10,88 | 10,85 | 1128,4 | 41,92 | 215,46 | 423,96 | 1,0547 | 1,7912 |
| 11,0 | 11,21 | 11,17 | 1124,0 | 43,23 | 217,04 | 424,18 | 1,0602 | 1,7893 |
| 12,0 | 11,54 | 11,50 | 1119,7 | 44,58 | 218,63 | 424,39 | 1,0656 | 1,7874 |
| 13,0 | 11,88 | 11,84 | 1115,2 | 45,97 | 220,22 | 424,59 | 1,0711 | 1,7855 |
| 14,0 | 12,23 | 12,19 | 1110,8 | 47,39 | 221,81 | 424,79 | 1,0765 | 1,7836 |
| 15,0 | 12,58 | 12,54 | 1106,3 | 48,86 | 223,42 | 424,97 | 1,0820 | 1,7816 |

| Temperatur [°C] | Druck [bar] | | Dichte [kg/m³] | | Enthalpie [kJ/kg] | | Entropie [J/kg*K] | |
|--------------------|----------------|-----------|-------------------|-----------|----------------------|-----------|----------------------|-----------|
| | flüssig | gasförmig | flüssig | gasförmig | flüssig | gasförmig | flüssig | gasförmig |
| 16,0 | 12,95 | 12,91 | 1101,7 | 50,36 | 225,03 | 425,14 | 1,0875 | 1,7797 |
| 17,0 | 13,32 | 13,27 | 1097,1 | 51,91 | 226,64 | 425,31 | 1,0929 | 1,7778 |
| 18,0 | 13,70 | 13,65 | 1092,5 | 53,50 | 228,27 | 425,46 | 1,0984 | 1,7758 |
| 19,0 | 14,08 | 14,04 | 1087,8 | 55,13 | 229,90 | 425,60 | 1,1039 | 1,7739 |
| 20,0 | 14,48 | 14,43 | 1083,1 | 56,81 | 231,54 | 425,73 | 1,1094 | 1,7719 |
| 21,0 | 14,88 | 14,83 | 1078,3 | 58,54 | 233,19 | 425,85 | 1,1148 | 1,7700 |
| 22,0 | 15,29 | 15,24 | 1073,4 | 60,32 | 234,85 | 425,95 | 1,1203 | 1,7680 |
| 23,0 | 15,71 | 15,66 | 1068,6 | 62,15 | 236,51 | 426,04 | 1,1258 | 1,7660 |
| 24,0 | 16,14 | 16,09 | 1063,6 | 64,04 | 238,18 | 426,12 | 1,1313 | 1,7640 |
| 25,0 | 16,57 | 16,52 | 1058,6 | 65,97 | 239,86 | 426,19 | 1,1368 | 1,7619 |
| 26,0 | 17,02 | 16,97 | 1053,6 | 67,97 | 241,55 | 426,25 | 1,1424 | 1,7599 |
| 27,0 | 17,48 | 17,42 | 1048,4 | 70,02 | 243,25 | 426,28 | 1,1479 | 1,7578 |
| 28,0 | 17,94 | 17,88 | 1043,3 | 72,13 | 244,96 | 426,31 | 1,1534 | 1,7558 |
| 29,0 | 18,41 | 18,35 | 1038,0 | 74,31 | 246,68 | 426,32 | 1,1590 | 1,7537 |
| 30,0 | 18,89 | 18,84 | 1032,7 | 76,55 | 248,41 | 426,31 | 1,1645 | 1,7515 |
| 31,0 | 19,39 | 19,33 | 1027,3 | 78,86 | 250,15 | 426,29 | 1,1701 | 1,7494 |
| 32,0 | 19,89 | 19,83 | 1021,9 | 81,25 | 251,90 | 426,25 | 1,1757 | 1,7472 |
| 33,0 | 20,40 | 20,34 | 1016,4 | 83,70 | 253,66 | 426,20 | 1,1813 | 1,7450 |
| 34,0 | 20,92 | 20,86 | 1010,8 | 86,24 | 255,43 | 426,12 | 1,1869 | 1,7428 |
| 35,0 | 21,45 | 21,39 | 1005,1 | 88,85 | 257,22 | 426,03 | 1,1925 | 1,7405 |
| 36,0 | 21,99 | 21,92 | 999,32 | 91,55 | 259,01 | 425,92 | 1,1982 | 1,7382 |
| 37,0 | 22,54 | 22,47 | 993,47 | 94,34 | 260,82 | 425,79 | 1,2038 | 1,7359 |
| 38,0 | 23,10 | 23,03 | 987,52 | 97,22 | 262,65 | 425,63 | 1,2095 | 1,7335 |
| 39,0 | 23,67 | 23,61 | 981,48 | 100,2 | 264,48 | 425,46 | 1,2152 | 1,7311 |
| 40,0 | 24,26 | 24,19 | 975,33 | 103,3 | 266,33 | 425,26 | 1,2210 | 1,7286 |
| 41,0 | 24,85 | 24,78 | 969,08 | 106,5 | 268,20 | 425,04 | 1,2267 | 1,7261 |
| 42,0 | 25,45 | 25,38 | 962,72 | 109,8 | 270,08 | 424,79 | 1,2325 | 1,7235 |
| 43,0 | 26,07 | 26,00 | 956,23 | 113,2 | 271,98 | 424,52 | 1,2383 | 1,7209 |
| 44,0 | 26,70 | 26,62 | 949,62 | 116,7 | 273,90 | 424,21 | 1,2442 | 1,7182 |
| 45,0 | 27,34 | 27,26 | 942,88 | 120,4 | 275,84 | 423,88 | 1,2501 | 1,7155 |
| 46,0 | 27,99 | 27,91 | 935,99 | 124,2 | 277,80 | 423,52 | 1,2560 | 1,7127 |
| 47,0 | 28,65 | 28,57 | 928,95 | 128,2 | 279,77 | 423,12 | 1,2619 | 1,7098 |
| 48,0 | 29,32 | 29,25 | 921,75 | 132,3 | 281,77 | 422,69 | 1,2680 | 1,7069 |
| 49,0 | 30,01 | 29,93 | 914,37 | 136,6 | 283,80 | 422,22 | 1,2740 | 1,7038 |
| 50,0 | 30,71 | 30,63 | 906,80 | 141,1 | 285,85 | 421,72 | 1,2801 | 1,7007 |
| 51,0 | 31,42 | 31,34 | 899,03 | 145,8 | 287,93 | 421,17 | 1,2863 | 1,6975 |
| 52,0 | 32,14 | 32,06 | 891,03 | 150,7 | 290,03 | 420,57 | 1,2926 | 1,6941 |
| 53,0 | 32,88 | 32,80 | 882,79 | 155,9 | 292,17 | 419,92 | 1,2989 | 1,6906 |
| 54,0 | 33,63 | 33,55 | 874,27 | 161,3 | 294,35 | 419,22 | 1,3053 | 1,6871 |
| 55,0 | 34,39 | 34,31 | 865,46 | 167,0 | 296,57 | 418,46 | 1,3118 | 1,6833 |

| Temperatur [°C] | Druck [bar] | | Dichte [kg/m³] | | Enthalpie [kJ/kg] | | Entropie [J/kg*K] | |
|--------------------|----------------|-----------|-------------------|-----------|----------------------|-----------|----------------------|-----------|
| | flüssig | gasförmig | flüssig | gasförmig | flüssig | gasförmig | flüssig | gasförmig |
| 56,0 | 35,17 | 35,09 | 856,31 | 173,0 | 298,83 | 417,64 | 1,3184 | 1,6794 |
| 57,0 | 35,96 | 35,88 | 846,80 | 179,3 | 301,13 | 416,74 | 1,3251 | 1,6753 |
| 58,0 | 36,76 | 36,69 | 836,86 | 186,0 | 303,50 | 415,77 | 1,3319 | 1,6711 |
| 59,0 | 37,58 | 37,51 | 826,45 | 193,2 | 305,92 | 414,71 | 1,3390 | 1,6665 |
| 60,0 | 38,42 | 38,34 | 815,49 | 200,8 | 308,41 | 413,54 | 1,3461 | 1,6618 |
| 61,0 | 39,27 | 39,20 | 803,90 | 209,0 | 310,99 | 412,27 | 1,3535 | 1,6567 |
| 62,0 | 40,13 | 40,06 | 791,57 | 217,8 | 313,66 | 410,86 | 1,3612 | 1,6513 |
| 63,0 | 41,01 | 40,94 | 778,34 | 227,4 | 316,44 | 409,30 | 1,3691 | 1,6455 |
| 64,0 | 41,91 | 41,84 | 764,04 | 237,9 | 319,35 | 407,56 | 1,3775 | 1,6391 |
| 65,0 | 42,82 | 42,76 | 748,40 | 249,6 | 322,43 | 405,60 | 1,3862 | 1,6322 |
| 66,0 | 43,75 | 43,69 | 731,03 | 262,7 | 325,73 | 403,35 | 1,3956 | 1,6245 |
| 67,0 | 44,70 | 44,65 | 711,34 | 277,7 | 329,32 | 400,74 | 1,4058 | 1,6158 |
| 68,0 | 45,67 | 45,62 | 688,29 | 295,3 | 333,32 | 397,62 | 1,4171 | 1,6056 |
| 69,0 | 46,65 | 46,61 | 659,83 | 317,1 | 338,01 | 393,72 | 1,4304 | 1,5933 |
| 70,0 | 47,65 | 47,62 | 620,47 | 346,4 | 344,10 | 388,43 | 1,4477 | 1,5769 |
| 71,0 | 48,67 | 48,65 | 543,84 | 397,7 | 355,32 | 379,22 | 1,4799 | 1,5493 |

Berechnet mit Refprop Version 10.0

Eine Garantie, Gewährleistung oder Haftung für die Richtigkeit, Vollständigkeit und Aktualität der zur Verfügung gestellten Inhalte und Informationen kann nicht übernommen werden.

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