

# R 245fa

1,1,1,3,3-Pentafluorethan



## Dampfdrucktabelle

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| Temperatur<br>[°C] | Druck<br>[bar] | Dichte<br>[kg/m <sup>3</sup> ] |           | Enthalpie<br>[kJ/kg] |           | Entropie<br>[J/kg*K] |           |
|--------------------|----------------|--------------------------------|-----------|----------------------|-----------|----------------------|-----------|
|                    |                | flüssig                        | gasförmig | flüssig              | gasförmig | flüssig              | gasförmig |
| -5,0               | 0,422          | 1416,5                         | 2,597     | 193,71               | 400,98    | 0,9768               | 1,7497    |
| -4,0               | 0,443          | 1414,0                         | 2,715     | 194,97               | 401,73    | 0,9815               | 1,7497    |
| -3,0               | 0,464          | 1411,5                         | 2,837     | 196,22               | 402,47    | 0,9861               | 1,7496    |
| -2,0               | 0,486          | 1409,0                         | 2,964     | 197,48               | 403,22    | 0,9908               | 1,7495    |
| -1,0               | 0,509          | 1406,4                         | 3,095     | 198,74               | 403,97    | 0,9954               | 1,7495    |
| 0,0                | 0,533          | 1403,9                         | 3,231     | 200,00               | 404,72    | 1,0000               | 1,7495    |
| 1,0                | 0,557          | 1401,4                         | 3,372     | 201,26               | 405,47    | 1,0046               | 1,7495    |
| 2,0                | 0,583          | 1398,8                         | 3,518     | 202,53               | 406,22    | 1,0092               | 1,7495    |
| 3,0                | 0,610          | 1396,3                         | 3,668     | 203,80               | 406,97    | 1,0138               | 1,7495    |
| 4,0                | 0,637          | 1393,7                         | 3,824     | 205,07               | 407,72    | 1,0184               | 1,7496    |
| 5,0                | 0,666          | 1391,2                         | 3,984     | 206,34               | 408,47    | 1,0230               | 1,7497    |
| 6,0                | 0,695          | 1388,6                         | 4,151     | 207,61               | 409,22    | 1,0275               | 1,7497    |
| 7,0                | 0,726          | 1386,0                         | 4,322     | 208,89               | 409,97    | 1,0321               | 1,7498    |
| 8,0                | 0,758          | 1383,4                         | 4,499     | 210,17               | 410,72    | 1,0366               | 1,7500    |
| 9,0                | 0,790          | 1380,8                         | 4,682     | 211,45               | 411,47    | 1,0412               | 1,7501    |
| 10,0               | 0,824          | 1378,3                         | 4,871     | 212,73               | 412,22    | 1,0457               | 1,7502    |
| 11,0               | 0,859          | 1375,7                         | 5,066     | 214,01               | 412,97    | 1,0502               | 1,7504    |
| 12,0               | 0,895          | 1373,0                         | 5,267     | 215,30               | 413,72    | 1,0547               | 1,7506    |
| 13,0               | 0,933          | 1370,4                         | 5,474     | 216,59               | 414,47    | 1,0592               | 1,7508    |
| 14,0               | 0,971          | 1367,8                         | 5,688     | 217,88               | 415,22    | 1,0637               | 1,7510    |
| 15,0               | 1,011          | 1365,2                         | 5,908     | 219,17               | 415,97    | 1,0682               | 1,7512    |
| 16,0               | 1,053          | 1362,5                         | 6,135     | 220,47               | 416,72    | 1,0727               | 1,7514    |
| 17,0               | 1,095          | 1359,9                         | 6,368     | 221,77               | 417,47    | 1,0772               | 1,7516    |
| 18,0               | 1,139          | 1357,2                         | 6,609     | 223,07               | 418,22    | 1,0816               | 1,7519    |
| 19,0               | 1,184          | 1354,6                         | 6,857     | 224,37               | 418,97    | 1,0861               | 1,7522    |
| 20,0               | 1,231          | 1351,9                         | 7,112     | 225,68               | 419,72    | 1,0905               | 1,7524    |
| 21,0               | 1,279          | 1349,2                         | 7,375     | 226,98               | 420,47    | 1,0950               | 1,7527    |
| 22,0               | 1,328          | 1346,6                         | 7,645     | 228,29               | 421,22    | 1,0994               | 1,7530    |
| 23,0               | 1,379          | 1343,9                         | 7,923     | 229,60               | 421,97    | 1,1038               | 1,7534    |
| 24,0               | 1,432          | 1341,2                         | 8,209     | 230,92               | 422,71    | 1,1082               | 1,7537    |
| 25,0               | 1,486          | 1338,5                         | 8,503     | 232,24               | 423,46    | 1,1126               | 1,7540    |
| 26,0               | 1,542          | 1335,7                         | 8,806     | 233,56               | 424,21    | 1,1170               | 1,7544    |
| 27,0               | 1,599          | 1333,0                         | 9,117     | 234,88               | 424,96    | 1,1214               | 1,7547    |
| 28,0               | 1,658          | 1330,3                         | 9,436     | 236,20               | 425,70    | 1,1258               | 1,7551    |
| 29,0               | 1,718          | 1327,5                         | 9,765     | 237,53               | 426,45    | 1,1302               | 1,7555    |
| 30,0               | 1,781          | 1324,8                         | 10,10     | 238,86               | 427,19    | 1,1346               | 1,7559    |
| 31,0               | 1,845          | 1322,0                         | 10,45     | 240,19               | 427,94    | 1,1390               | 1,7563    |
| 32,0               | 1,911          | 1319,3                         | 10,80     | 241,52               | 428,68    | 1,1433               | 1,7567    |
| 33,0               | 1,979          | 1316,5                         | 11,17     | 242,86               | 429,42    | 1,1477               | 1,7571    |
| 34,0               | 2,048          | 1313,7                         | 11,55     | 244,20               | 430,17    | 1,1520               | 1,7575    |
| 35,0               | 2,120          | 1310,9                         | 11,93     | 245,54               | 430,91    | 1,1564               | 1,7579    |

| Temperatur<br>[°C] | Druck<br>[bar] | Dichte<br>[kg/m <sup>3</sup> ] |           | Enthalpie<br>[kJ/kg] |           | Entropie<br>[J/kg*K] |           |
|--------------------|----------------|--------------------------------|-----------|----------------------|-----------|----------------------|-----------|
|                    |                | flüssig                        | gasförmig | flüssig              | gasförmig | flüssig              | gasförmig |
| 36,0               | 2,193          | 1308,1                         | 12,33     | 246,89               | 431,65    | 1,1607               | 1,7584    |
| 37,0               | 2,268          | 1305,2                         | 12,73     | 248,23               | 432,39    | 1,1651               | 1,7588    |
| 38,0               | 2,346          | 1302,4                         | 13,15     | 249,58               | 433,13    | 1,1694               | 1,7593    |
| 39,0               | 2,425          | 1299,6                         | 13,57     | 250,94               | 433,87    | 1,1737               | 1,7597    |
| 40,0               | 2,507          | 1296,7                         | 14,01     | 252,29               | 434,61    | 1,1780               | 1,7602    |
| 41,0               | 2,590          | 1293,8                         | 14,46     | 253,65               | 435,34    | 1,1823               | 1,7607    |
| 42,0               | 2,676          | 1291,0                         | 14,92     | 255,01               | 436,08    | 1,1866               | 1,7612    |
| 43,0               | 2,764          | 1288,1                         | 15,39     | 256,37               | 436,81    | 1,1909               | 1,7617    |
| 44,0               | 2,854          | 1285,2                         | 15,88     | 257,74               | 437,55    | 1,1952               | 1,7622    |
| 45,0               | 2,946          | 1282,3                         | 16,37     | 259,11               | 438,28    | 1,1995               | 1,7627    |
| 46,0               | 3,040          | 1279,3                         | 16,88     | 260,48               | 439,01    | 1,2038               | 1,7632    |
| 47,0               | 3,137          | 1276,4                         | 17,40     | 261,86               | 439,74    | 1,2081               | 1,7637    |
| 48,0               | 3,236          | 1273,4                         | 17,94     | 263,23               | 440,47    | 1,2123               | 1,7642    |
| 49,0               | 3,338          | 1270,5                         | 18,49     | 264,61               | 441,20    | 1,2166               | 1,7648    |
| 50,0               | 3,442          | 1267,5                         | 19,05     | 266,00               | 441,93    | 1,2209               | 1,7653    |
| 51,0               | 3,549          | 1264,5                         | 19,62     | 267,38               | 442,65    | 1,2251               | 1,7658    |
| 52,0               | 3,658          | 1261,5                         | 20,21     | 268,77               | 443,38    | 1,2294               | 1,7664    |
| 53,0               | 3,769          | 1258,5                         | 20,81     | 270,16               | 444,10    | 1,2336               | 1,7669    |
| 54,0               | 3,883          | 1255,4                         | 21,43     | 271,56               | 444,82    | 1,2379               | 1,7675    |
| 55,0               | 4,000          | 1252,4                         | 22,06     | 272,96               | 445,54    | 1,2421               | 1,7680    |
| 56,0               | 4,120          | 1249,3                         | 22,70     | 274,36               | 446,26    | 1,2463               | 1,7686    |
| 57,0               | 4,242          | 1246,2                         | 23,37     | 275,76               | 446,97    | 1,2506               | 1,7692    |
| 58,0               | 4,367          | 1243,2                         | 24,04     | 277,17               | 447,69    | 1,2548               | 1,7697    |
| 59,0               | 4,494          | 1240,0                         | 24,74     | 278,58               | 448,40    | 1,2590               | 1,7703    |
| 60,0               | 4,625          | 1236,9                         | 25,45     | 279,99               | 449,11    | 1,2632               | 1,7709    |
| 61,0               | 4,758          | 1233,8                         | 26,17     | 281,41               | 449,82    | 1,2674               | 1,7714    |
| 62,0               | 4,894          | 1230,6                         | 26,92     | 282,83               | 450,53    | 1,2717               | 1,7720    |
| 63,0               | 5,033          | 1227,4                         | 27,68     | 284,25               | 451,24    | 1,2759               | 1,7726    |
| 64,0               | 5,175          | 1224,3                         | 28,45     | 285,68               | 451,94    | 1,2801               | 1,7732    |
| 65,0               | 5,321          | 1221,0                         | 29,25     | 287,11               | 452,64    | 1,2843               | 1,7738    |
| 66,0               | 5,469          | 1217,8                         | 30,07     | 288,54               | 453,34    | 1,2885               | 1,7744    |
| 67,0               | 5,620          | 1214,6                         | 30,90     | 289,98               | 454,04    | 1,2927               | 1,7750    |
| 68,0               | 5,775          | 1211,3                         | 31,75     | 291,42               | 454,73    | 1,2968               | 1,7755    |
| 69,0               | 5,932          | 1208,0                         | 32,62     | 292,86               | 455,42    | 1,3010               | 1,7761    |
| 70,0               | 6,093          | 1204,7                         | 33,52     | 294,31               | 456,11    | 1,3052               | 1,7767    |
| 71,0               | 6,258          | 1201,4                         | 34,43     | 295,76               | 456,80    | 1,3094               | 1,7773    |
| 72,0               | 6,425          | 1198,0                         | 35,36     | 297,22               | 457,48    | 1,3136               | 1,7779    |
| 73,0               | 6,596          | 1194,7                         | 36,32     | 298,67               | 458,16    | 1,3178               | 1,7785    |
| 74,0               | 6,770          | 1191,3                         | 37,30     | 300,13               | 458,84    | 1,3219               | 1,7791    |
| 75,0               | 6,948          | 1187,9                         | 38,30     | 301,60               | 459,52    | 1,3261               | 1,7797    |

| Temperatur<br>[°C] | Druck<br>[bar] | Dichte<br>[kg/m³] |           | Enthalpie<br>[kJ/kg] |           | Entropie<br>[J/kg*K] |           |
|--------------------|----------------|-------------------|-----------|----------------------|-----------|----------------------|-----------|
|                    |                | flüssig           | gasförmig | flüssig              | gasförmig | flüssig              | gasförmig |
| 76,0               | 7,129          | 1184,4            | 39,32     | 303,07               | 460,19    | 1,3303               | 1,7803    |
| 77,0               | 7,314          | 1181,0            | 40,36     | 304,54               | 460,86    | 1,3344               | 1,7809    |
| 78,0               | 7,502          | 1177,5            | 41,43     | 306,02               | 461,53    | 1,3386               | 1,7815    |
| 79,0               | 7,694          | 1174,0            | 42,53     | 307,50               | 462,19    | 1,3428               | 1,7821    |
| 80,0               | 7,890          | 1170,5            | 43,65     | 308,98               | 462,86    | 1,3469               | 1,7826    |
| 81,0               | 8,090          | 1166,9            | 44,79     | 310,47               | 463,51    | 1,3511               | 1,7832    |
| 82,0               | 8,293          | 1163,4            | 45,96     | 311,96               | 464,17    | 1,3552               | 1,7838    |
| 83,0               | 8,500          | 1159,7            | 47,16     | 313,46               | 464,82    | 1,3594               | 1,7844    |
| 84,0               | 8,711          | 1156,1            | 48,39     | 314,96               | 465,46    | 1,3636               | 1,7850    |
| 85,0               | 8,925          | 1152,5            | 49,64     | 316,47               | 466,11    | 1,3677               | 1,7855    |
| 86,0               | 9,144          | 1148,8            | 50,92     | 317,97               | 466,74    | 1,3719               | 1,7861    |
| 87,0               | 9,367          | 1145,1            | 52,23     | 319,49               | 467,38    | 1,3760               | 1,7867    |
| 88,0               | 9,594          | 1141,3            | 53,58     | 321,01               | 468,01    | 1,3802               | 1,7872    |
| 89,0               | 9,824          | 1137,5            | 54,95     | 322,53               | 468,63    | 1,3843               | 1,7878    |
| 90,0               | 10,06          | 1133,7            | 56,36     | 324,06               | 469,26    | 1,3885               | 1,7883    |
| 91,0               | 10,30          | 1129,9            | 57,80     | 325,59               | 469,87    | 1,3926               | 1,7889    |
| 92,0               | 10,54          | 1126,0            | 59,27     | 327,12               | 470,48    | 1,3968               | 1,7894    |
| 93,0               | 10,79          | 1122,1            | 60,78     | 328,67               | 471,09    | 1,4009               | 1,7899    |
| 94,0               | 11,04          | 1118,2            | 62,32     | 330,21               | 471,69    | 1,4051               | 1,7905    |
| 95,0               | 11,30          | 1114,2            | 63,90     | 331,76               | 472,29    | 1,4093               | 1,7910    |
| 96,0               | 11,56          | 1110,2            | 65,52     | 333,32               | 472,88    | 1,4134               | 1,7915    |
| 97,0               | 11,83          | 1106,1            | 67,17     | 334,88               | 473,47    | 1,4176               | 1,7920    |
| 98,0               | 12,10          | 1102,0            | 68,87     | 336,45               | 474,04    | 1,4217               | 1,7925    |
| 99,0               | 12,37          | 1097,9            | 70,61     | 338,02               | 474,62    | 1,4259               | 1,7930    |
| 100,0              | 12,65          | 1093,7            | 72,39     | 339,60               | 475,19    | 1,4301               | 1,7934    |
| 101,0              | 12,93          | 1089,5            | 74,21     | 341,18               | 475,75    | 1,4342               | 1,7939    |
| 102,0              | 13,22          | 1085,2            | 76,08     | 342,77               | 476,30    | 1,4384               | 1,7943    |
| 103,0              | 13,52          | 1080,9            | 78,00     | 344,36               | 476,85    | 1,4426               | 1,7948    |
| 104,0              | 13,81          | 1076,5            | 79,96     | 345,97               | 477,39    | 1,4468               | 1,7952    |
| 105,0              | 14,12          | 1072,1            | 81,98     | 347,57               | 477,92    | 1,4509               | 1,7956    |
| 106,0              | 14,43          | 1067,7            | 84,04     | 349,19               | 478,45    | 1,4551               | 1,7960    |
| 107,0              | 14,74          | 1063,1            | 86,16     | 350,81               | 478,96    | 1,4593               | 1,7964    |
| 108,0              | 15,06          | 1058,6            | 88,33     | 352,43               | 479,47    | 1,4635               | 1,7968    |
| 109,0              | 15,38          | 1053,9            | 90,57     | 354,07               | 479,97    | 1,4677               | 1,7972    |
| 110,0              | 15,71          | 1049,3            | 92,86     | 355,71               | 480,46    | 1,4719               | 1,7975    |
| 111,0              | 16,05          | 1044,5            | 95,21     | 357,35               | 480,94    | 1,4761               | 1,7978    |
| 112,0              | 16,39          | 1039,7            | 97,63     | 359,01               | 481,42    | 1,4803               | 1,7982    |
| 113,0              | 16,73          | 1034,8            | 100,1     | 360,67               | 481,88    | 1,4846               | 1,7984    |
| 114,0              | 17,08          | 1029,9            | 102,7     | 362,34               | 482,33    | 1,4888               | 1,7987    |
| 115,0              | 17,44          | 1024,9            | 105,3     | 364,02               | 482,77    | 1,4930               | 1,7990    |

| Temperatur<br>[°C] | Druck<br>[bar] | Dichte<br>[kg/m³] |           | Enthalpie<br>[kJ/kg] |           | Entropie<br>[J/kg*K] |           |
|--------------------|----------------|-------------------|-----------|----------------------|-----------|----------------------|-----------|
|                    |                | flüssig           | gasförmig | flüssig              | gasförmig | flüssig              | gasförmig |
| 116,0              | 17,80          | 1019,8            | 108,0     | 365,71               | 483,20    | 1,4973               | 1,7992    |
| 117,0              | 18,17          | 1014,6            | 110,8     | 367,40               | 483,61    | 1,5015               | 1,7994    |
| 118,0              | 18,54          | 1009,4            | 113,6     | 369,10               | 484,02    | 1,5058               | 1,7996    |
| 119,0              | 18,92          | 1004,0            | 116,6     | 370,82               | 484,41    | 1,5101               | 1,7998    |
| 120,0              | 19,30          | 998,60            | 119,6     | 372,54               | 484,79    | 1,5144               | 1,7999    |
| 121,0              | 19,70          | 993,08            | 122,7     | 374,27               | 485,15    | 1,5187               | 1,8000    |
| 122,0              | 20,09          | 987,47            | 126,0     | 376,02               | 485,50    | 1,5230               | 1,8001    |
| 123,0              | 20,50          | 981,75            | 129,3     | 377,77               | 485,83    | 1,5273               | 1,8001    |
| 124,0              | 20,90          | 975,93            | 132,8     | 379,54               | 486,15    | 1,5317               | 1,8001    |
| 125,0              | 21,32          | 969,99            | 136,3     | 381,31               | 486,45    | 1,5360               | 1,8001    |
| 126,0              | 21,74          | 963,93            | 140,0     | 383,10               | 486,73    | 1,5404               | 1,8000    |
| 127,0              | 22,17          | 957,75            | 143,8     | 384,90               | 486,99    | 1,5448               | 1,7999    |
| 128,0              | 22,61          | 951,43            | 147,8     | 386,72               | 487,23    | 1,5492               | 1,7998    |
| 129,0              | 23,05          | 944,97            | 151,9     | 388,55               | 487,45    | 1,5537               | 1,7996    |
| 130,0              | 23,50          | 938,36            | 156,1     | 390,39               | 487,64    | 1,5581               | 1,7993    |
| 131,0              | 23,95          | 931,59            | 160,5     | 392,25               | 487,82    | 1,5626               | 1,7991    |
| 132,0              | 24,41          | 924,65            | 165,1     | 394,13               | 487,96    | 1,5671               | 1,7987    |
| 133,0              | 24,88          | 917,52            | 169,9     | 396,02               | 488,08    | 1,5717               | 1,7983    |
| 134,0              | 25,36          | 910,20            | 174,9     | 397,94               | 488,16    | 1,5762               | 1,7978    |
| 135,0              | 25,84          | 902,66            | 180,1     | 399,87               | 488,22    | 1,5809               | 1,7973    |
| 136,0              | 26,33          | 894,89            | 185,5     | 401,82               | 488,24    | 1,5855               | 1,7967    |
| 137,0              | 26,83          | 886,88            | 191,3     | 403,80               | 488,22    | 1,5902               | 1,7960    |
| 138,0              | 27,34          | 878,59            | 197,3     | 405,81               | 488,16    | 1,5949               | 1,7952    |
| 139,0              | 27,85          | 870,01            | 203,6     | 407,84               | 488,06    | 1,5997               | 1,7944    |
| 140,0              | 28,37          | 861,09            | 210,2     | 409,90               | 487,91    | 1,6046               | 1,7934    |
| 141,0              | 28,90          | 851,82            | 217,3     | 411,99               | 487,71    | 1,6095               | 1,7923    |
| 142,0              | 29,44          | 842,13            | 224,8     | 414,13               | 487,44    | 1,6145               | 1,7911    |
| 143,0              | 29,98          | 831,98            | 232,7     | 416,30               | 487,11    | 1,6196               | 1,7897    |
| 144,0              | 30,54          | 821,30            | 241,2     | 418,52               | 486,71    | 1,6247               | 1,7882    |
| 145,0              | 31,10          | 810,00            | 250,4     | 420,80               | 486,22    | 1,6300               | 1,7865    |
| 146,0              | 31,67          | 797,98            | 260,4     | 423,14               | 485,62    | 1,6354               | 1,7845    |
| 147,0              | 32,25          | 785,09            | 271,2     | 425,57               | 484,91    | 1,6410               | 1,7823    |
| 148,0              | 32,84          | 771,10            | 283,2     | 428,09               | 484,04    | 1,6469               | 1,7797    |
| 149,0              | 33,44          | 755,70            | 296,6     | 430,73               | 482,99    | 1,6529               | 1,7767    |
| 150,0              | 34,05          | 738,39            | 312,0     | 433,55               | 481,69    | 1,6594               | 1,7732    |

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1,1,1,3,3-Pentafluorethan

# TEGA

## Dampfdrucktabelle

Seite 5 von 5

| Temperatur<br>[°C] | Druck<br>[bar] | Dichte<br>[kg/m <sup>3</sup> ] |           | Enthalpie<br>[kJ/kg] |           | Entropie<br>[J/kg*K] |           |
|--------------------|----------------|--------------------------------|-----------|----------------------|-----------|----------------------|-----------|
|                    |                | flüssig                        | gasförmig | flüssig              | gasförmig | flüssig              | gasförmig |
| 151,0              | 34,67          | 718,26                         | 330,2     | 436,63               | 480,03    | 1,6665               | 1,7688    |
| 152,0              | 35,30          | 693,36                         | 353,2     | 440,13               | 477,76    | 1,6745               | 1,7630    |
| 153,0              | 35,94          | 657,85                         | 386,6     | 444,60               | 474,17    | 1,6848               | 1,7542    |

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.

Überarbeitet 09.01.2020

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