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Specific Gravities/ Weights/ Freezing Points: Sulfuric Acid

* Values determined at a temperature of 60 degrees F / 15.6 degrees C

* For corrections to these values for other temperatures, see table 4

| Percent sulfuric acid H ₂ SO ₄ | Degrees Baumé | Specific gravity 60/60°F | Weight of 1 US gal in lbs. av. | Weight of 1 l in Kg | Freezing (melting) point °F | Freezing (melting) point °C | Percent sulfuric acid H ₂ SO ₄ | Degrees Baumé | Specific gravity 60/60°F | Weight of 1 US gal in lbs. av. | Weight of 1 l in Kg | Freezing (melting) point °F | Freezing (melting) point °C |
|--|---------------|--------------------------|--------------------------------|---------------------|-----------------------------|-----------------------------|--|---------------|--------------------------|--------------------------------|---------------------|-----------------------------|-----------------------------|
| 0.00 | 0.00 | 1.0000 | 8.3373 | 0.9990 | 32.00 | 0.00 | 49.47 | 41.00 | 1.3942 | 11.623 | 1.3927 | -33.00 | -36.11 |
| 1.02 | 1.00 | 1.0069 | 8.396 | 1.0059 | 31.30 | -0.39 | 50.87 | 42.00 | 1.4078 | 11.737 | 1.4064 | -28.60 | -33.67 |
| 2.08 | 2.00 | 1.0140 | 8.454 | 1.0130 | 30.50 | -0.83 | 52.28 | 43.00 | 1.4216 | 11.852 | 1.4202 | -25.50 | -31.94 |
| 3.13 | 3.00 | 1.0211 | 8.513 | 1.0201 | 29.70 | -1.28 | 53.68 | 44.00 | 1.4358 | 11.969 | 1.4342 | -22.80 | -30.44 |
| 4.21 | 4.00 | 1.0284 | 8.574 | 1.0274 | 28.90 | -1.72 | 55.07 | 45.00 | 1.4500 | 12.089 | 1.4486 | -20.90 | -29.39 |
| 5.28 | 5.00 | 1.0357 | 8.636 | 1.0347 | 28.00 | -2.22 | 56.48 | 46.00 | 1.4646 | 12.210 | 1.4631 | -19.30 | -28.50 |
| 6.37 | 6.00 | 1.0432 | 8.697 | 1.0421 | 27.00 | -2.78 | 57.90 | 47.00 | 1.4796 | 12.335 | 1.4781 | -19.10 | -28.39 |
| 7.45 | 7.00 | 1.0507 | 8.760 | 1.0497 | 25.80 | -3.44 | 59.32 | 48.00 | 1.4948 | 12.462 | 1.4933 | -19.80 | -28.78 |
| 8.55 | 8.00 | 1.0584 | 8.824 | 1.0573 | 24.60 | -4.11 | 60.75 | 49.00 | 1.5104 | 12.592 | 1.5089 | -22.00 | -30.00 |
| 9.66 | 9.00 | 1.0662 | 8.889 | 1.0651 | 23.50 | -4.72 | 62.18 | 50.00 | 1.5263 | 12.726 | 1.5248 | -25.40 | -31.89 |
| 10.77 | 10.00 | 1.0741 | 8.955 | 1.0730 | 22.30 | -5.39 | 63.66 | 51.00 | 1.5426 | 12.861 | 1.5411 | -29.60 | -34.22 |
| 11.89 | 11.00 | 1.0821 | 9.021 | 1.0810 | 21.00 | -6.11 | 65.13 | 52.00 | 1.5591 | 12.998 | 1.5575 | -34.20 | -38.78 |
| 13.01 | 12.00 | 1.0902 | 9.089 | 1.0891 | 19.40 | -7.00 | 66.63 | 53.00 | 1.5761 | 13.140 | 1.5745 | -36.00 | -37.78 |
| 14.13 | 13.00 | 1.0985 | 9.158 | 1.0974 | 17.70 | -7.94 | 68.13 | 54.00 | 1.5934 | 13.284 | 1.5918 | -39.60 | -39.72 |
| 15.25 | 14.00 | 1.1069 | 9.228 | 1.1058 | 16.30 | -8.72 | 69.65 | 55.00 | 1.6111 | 13.432 | 1.6095 | -45.00 | -42.78 |
| 16.38 | 15.00 | 1.1154 | 9.299 | 1.1143 | 14.00 | -10.00 | 71.17 | 56.00 | 1.6292 | 13.583 | 1.6276 | -40.80 | -40.44 |
| 17.53 | 16.00 | 1.1240 | 9.371 | 1.1229 | 12.00 | -11.11 | 72.75 | 57.00 | 1.6477 | 13.737 | 1.6461 | -39.40 | -39.67 |
| 18.71 | 17.00 | 1.1328 | 9.444 | 1.1316 | 9.90 | -12.28 | 74.36 | 58.00 | 1.6667 | 13.895 | 1.6650 | -28.40 | -33.56 |
| 19.89 | 18.00 | 1.1417 | 9.518 | 1.1405 | 7.50 | -13.51 | 75.99 | 59.00 | 1.6860 | 14.058 | 1.6843 | -9.00 | -22.78 |
| 21.07 | 19.00 | 1.1508 | 9.594 | 1.1496 | 4.40 | -15.33 | 77.67 | 60.00 | 1.7066 | 14.222 | 1.7042 | 11.50 | -11.39 |
| 22.25 | 20.00 | 1.1600 | 9.671 | 1.1588 | 1.00 | -17.22 | 79.43 | 61.00 | 1.7282 | 14.391 | 1.7244 | 29.30 | -1.50 |
| 23.43 | 21.00 | 1.1694 | 9.750 | 1.1683 | -2.50 | -19.17 | 81.30 | 62.00 | 1.7507 | 14.565 | 1.7453 | 39.50 | 4.17 |
| 24.61 | 22.00 | 1.1789 | 9.828 | 1.1777 | -6.50 | -21.39 | 83.34 | 63.00 | 1.7683 | 14.742 | 1.7665 | 45.60 | 7.56 |
| 25.81 | 23.00 | 1.1885 | 9.909 | 1.1874 | -11.10 | -23.94 | 85.66 | 64.00 | 1.7901 | 14.924 | 1.7883 | 44.80 | 7.11 |
| 27.03 | 24.00 | 1.1983 | 9.992 | 1.1971 | -16.00 | -26.67 | 88.33 | 64.25 | 1.7957 | 14.971 | 1.7939 | 42.90 | 6.06 |
| 28.28 | 25.00 | 1.2083 | 10.074 | 1.2071 | -21.90 | -29.94 | 91.04 | 64.50 | 1.8012 | 15.017 | 1.7994 | 40.00 | 4.44 |
| 29.53 | 26.00 | 1.2185 | 10.159 | 1.2173 | -28.00 | -33.33 | 93.81 | 64.75 | 1.8068 | 15.063 | 1.8049 | 36.00 | 2.22 |
| 30.79 | 27.00 | 1.2289 | 10.246 | 1.2277 | -35.60 | -37.56 | 96.65 | 65.00 | 1.8125 | 15.111 | 1.8107 | 31.20 | -0.44 |
| 32.05 | 28.00 | 1.2393 | 10.332 | 1.2380 | -44.30 | -42.99 | 99.55 | 65.25 | 1.8182 | 15.158 | 1.8163 | 24.50 | -4.17 |
| 33.33 | 29.00 | 1.2500 | 10.421 | 1.2487 | -55.30 | -48.50 | 96.60 | 65.50 | 1.8239 | 15.206 | 1.8221 | 15.00 | -8.44 |
| 34.63 | 30.00 | 1.2609 | 10.512 | 1.2596 | -69.50 | -56.39 | 91.80 | 65.75 | 1.8297 | 15.254 | 1.8278 | 2.50 | -16.39 |
| 35.93 | 31.00 | 1.2719 | 10.604 | 1.2706 | -78.70 | -61.50 | 93.19 | 66.00 | 1.8354 | 15.302 | 1.8336 | -21.00 | -29.44 |
| 37.26 | 32.00 | 1.2832 | 10.698 | 1.2819 | -75.20 | -59.56 | 93.77 | | 1.8373 | 15.318 | 1.8355 | -30.80 | -34.89 |
| 38.58 | 33.00 | 1.2946 | 10.793 | 1.2933 | -72.00 | -57.78 | 94.00 | | 1.8381 | 15.324 | 1.8362 | -26.00 | -33.33 |
| 39.82 | 34.00 | 1.3063 | 10.891 | 1.3050 | -69.30 | -56.28 | 95.00 | | 1.8407 | 15.346 | 1.8389 | -8.00 | -22.22 |
| 41.27 | 35.00 | 1.3182 | 10.990 | 1.3169 | -66.50 | -54.72 | 96.00 | | 1.8427 | 15.3630 | 1.8409 | 7.00 | -13.89 |
| 42.63 | 36.00 | 1.3303 | 11.091 | 1.3290 | -44.50 | -42.50 | 97.00 | | 1.8437 | 15.3710 | 1.8419 | 19.50 | -6.94 |
| 43.99 | 37.00 | 1.3426 | 11.193 | 1.3412 | -57.00 | -49.44 | 98.00 | | 1.8437 | 15.371 | 1.8419 | 30.00 | -1.11 |
| 45.35 | 38.00 | 1.3551 | 11.297 | 1.3537 | -50.60 | -45.89 | 99.00 | | 1.8424 | 15.360 | 1.8405 | 41.00 | 5.00 |
| 46.72 | 39.00 | 1.3679 | 11.404 | 1.3665 | -44.00 | -42.22 | 100.00 | | 1.8391 | 15.333 | 1.8373 | 51.70 | 10.94 |
| 48.10 | 40.00 | 1.3810 | 11.513 | 1.3796 | -38.20 | -39.00 | | | | | | | |

* To calculate weight in pounds per imperial gallon, multiply specific gravity (above) by 10.