## Tabla F.1: Vapor saturado, unidades SI

$V$ = VOLUMEN ESPECÍFICO $cm^3\ g^{-1}$

$U$ = ENERGÍA INTERNA ESPECÍFICA $kJ\ kg^{-1}$

$H$ = ENTALPÍA ESPECÍFICA $kJ\ kg^{-1}$

$S$ = ENTROPÍA ESPECÍFICA $kJ\ kg^{-1}\ K^{-1}$

| | | | VOLUMEN ESPECÍFICO $V$ | | | ENERGÍA INTERNA $U$ | | | ENTALPÍA $H$ | | | ENTROPÍA $S$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $t$ | $T$ | $P$ | líq. | | vap. | líq. | | vap. | líq. | | vap. | líq. | | vap. |
| °C | K | kPa | sat | evap. | sat. | sat. | evap. | sat. | sat. | evap. | sat. | sat. | evap. | sat. |
| 0 | 273.15 | 0.611 | 1.000 | 206300. | 206300. | -0.04 | 2375.7 | 2375.6 | -0.04 | 2501.7 | 2501.6 | 0.0000 | 9.1578 | 9.1578 |
| 0.01 | 273.16 | 0.611 | 1.000 | 206200. | 206200. | 0.00 | 2375.6 | 2375.6 | 0.00 | 2501.6 | 2501.6 | 0.0000 | 9.1575 | 9.1575 |
| 1 | 274.15 | 0.657 | 1.000 | 192600. | 192600. | 4.17 | 2372.7 | 2376.9 | 4.17 | 2499.2 | 2503.4 | 0.0153 | 9.1158 | 9.1311 |
| 2 | 275.15 | 0.705 | 1.000 | 179900. | 179900. | 8.39 | 2369.9 | 2378.3 | 8.39 | 2496.8 | 2505.2 | 0.0306 | 9.0741 | 9.1047 |
| 3 | 276.15 | 0.757 | 1.000 | 168200. | 168200. | 12.60 | 2367.1 | 2379.7 | 12.60 | 2494.5 | 2507.1 | 0.0459 | 9.0326 | 9.0785 |
| 4 | 277.15 | 0.813 | 1.000 | 157300. | 157300. | 16.80 | 2364.3 | 2381.1 | 16.80 | 2492.1 | 2508.9 | 0.0611 | 8.9915 | 9.0526 |
| 5 | 278.15 | 0.872 | 1.000 | 147200. | 147200. | 21.01 | 2361.4 | 2382.4 | 21.01 | 2489.7 | 2510.7 | 0.0762 | 8.9507 | 9.0269 |
| 6 | 279.15 | 0.935 | 1.000 | 137800. | 137800. | 25.21 | 2358.6 | 2383.8 | 25.21 | 2487.4 | 2512.6 | 0.0913 | 8.9102 | 9.0014 |
| 7 | 280.15 | 1.001 | 1.000 | 129100. | 129100. | 29.41 | 2355.8 | 2385.2 | 29.41 | 2485.0 | 2514.4 | 0.1063 | 8.8699 | 8.9762 |
| 8 | 281.15 | 1.072 | 1.000 | 121000. | 121000. | 33.60 | 2353.0 | 2386.6 | 33.60 | 2482.6 | 2516.2 | 0.1213 | 8.8300 | 8.9513 |
| 9 | 282.15 | 1.147 | 1.000 | 113400. | 113400. | 37.80 | 2350.1 | 2387.9 | 37.80 | 2480.3 | 2518.1 | 0.1362 | 8.7903 | 8.9265 |
| 10 | 283.15 | 1.227 | 1.000 | 106400. | 106400. | 41.99 | 2347.3 | 2389.3 | 41.99 | 2477.9 | 2519.9 | 0.1510 | 8.7510 | 8.9020 |
| 11 | 284.15 | 1.312 | 1.000 | 99910. | 99910. | 46.18 | 2344.5 | 2390.7 | 46.19 | 2475.5 | 2521.7 | 0.1658 | 8.7119 | 8.8776 |
| 12 | 285.15 | 1.401 | 1.000 | 93830. | 93840. | 50.38 | 2341.7 | 2392.1 | 50.38 | 2473.2 | 2523.6 | 0.1805 | 8.6731 | 8.8536 |
| 13 | 286.15 | 1.497 | 1.001 | 88180. | 88180 | 54.56 | 2338.9 | 2393.4 | 54.57 | 2470.8 | 2525.4 | 0.1952 | 8.6345 | 8.8297 |
| 14 | 287.15 | 1.597 | 1.001 | 82900. | 82900. | 58.75 | 2336.1 | 2394.8 | 58.75 | 2468.5 | 2527.2 | 0.2098 | 8.5963 | 8.8060 |
| 15 | 288.15 | 1.704 | 1.001 | 77980. | 77980. | 62.94 | 2333.2 | 2396.2 | 62.94 | 2466.1 | 2529.1 | 0.2243 | 8.5582 | 8.7826 |
| 16 | 289.15 | 1.817 | 1.001 | 73380. | 73380. | 67.12 | 2330.4 | 2397.6 | 67.13 | 2463.8 | 2530.9 | 0.2388 | 8.5205 | 8.7593 |
| 17 | 290.15 | 1.936 | 1.001 | 69090. | 69090. | 71.31 | 2327.6 | 2398.9 | 71.31 | 2461.4 | 2532.7 | 0.2533 | 8.4830 | 8.7363 |
| 18 | 291.15 | 2.062 | 1.001 | 65090. | 65090. | 75.49 | 2324.8 | 2400.3 | 75.50 | 2459.0 | 2534.5 | 0.2677 | 8.4458 | 8.7135 |
| 19 | 292.15 | 2.196 | 1.002 | 61340. | 61340. | 79.68 | 2322.0 | 2401.7 | 79.68 | 2456.7 | 2536.4 | 0.2820 | 8.4088 | 8.6908 |
| 20 | 293.15 | 2.337 | 1.002 | 57840. | 57840. | 83.86 | 2319.2 | 2403.0 | 83.86 | 2454.3 | 2538.2 | 0.2963 | 8.3721 | 8.6684 |
| 21 | 294.15 | 2.485 | 1.002 | 54560. | 54560. | 88.04 | 2316.4 | 2404.4 | 88.04 | 2452.0 | 2540.0 | 0.3105 | 8.3356 | 8.6462 |
| 22 | 295.15 | 2.642 | 1.002 | 51490. | 51490. | 92.22 | 2313.6 | 2405.8 | 92.23 | 2449.6 | 2541.8 | 0.3247 | 8.2994 | 8.6241 |
| 23 | 296.15 | 2.808 | 1.002 | 48620. | 48620. | 96.40 | 2310.7 | 2407.1 | 96.41 | 2447.2 | 2543.6 | 0.3389 | 8.2634 | 8.6023 |
| 24 | 297.15 | 2.982 | 1.003 | 45920. | 45930. | 100.6 | 2307.9 | 2408.5 | 100.6 | 2444.9 | 2545.5 | 0.3530 | 8.2277 | 8.5806 |
| 25 | 298.15 | 3.166 | 1.003 | 43400. | 43400. | 104.8 | 2305.1 | 2409.9 | 104.8 | 2442.5 | 2547.3 | 0.3670 | 8.1922 | 8.5592 |
| 26 | 299.15 | 3.360 | 1.003 | 41030. | 41030. | 108.9 | 2302.3 | 2411.2 | 108.9 | 2440.2 | 2549.1 | 0.3810 | 8.1569 | 8.5379 |
| 27 | 300.15 | 3.564 | 1.003 | 38810. | 38810. | 113.1 | 2299.5 | 2412.6 | 113.1 | 2437.8 | 2550.9 | 0.3949 | 8.1218 | 8.5168 |
| 28 | 301.15 | 3.778 | 1.004 | 36730. | 36730. | 117.3 | 2296.7 | 2414.0 | 117.3 | 2435.4 | 2552.7 | 0.4088 | 8.0870 | 8.4959 |
| 29 | 302.15 | 4.004 | 1.004 | 34770. | 34770. | 121.5 | 2293.8 | 2415.3 | 121.5 | 2433.1 | 2554.5 | 0.4227 | 8.0524 | 8.4751 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30 | 303.15 | 4.241 | 1.004 | 32930. | 32930. | 125.7 | 2291.0 | 2416.7 | 125.7 | 2430.7 | 2556.4 | 0.4365 | 8.0180 | 8.4546 |
| 31 | 304.15 | 4.491 | 1.005 | 31200. | 31200. | 129.8 | 2288.2 | 2418.0 | 129.8 | 2428.3 | 2558.2 | 0.4503 | 7.9839 | 8.4342 |
| 32 | 305.15 | 4.753 | 1.005 | 29570. | 29570. | 134.0 | 2285.4 | 2419.4 | 134.0 | 2425.9 | 2560.0 | 0.4640 | 7.9500 | 8.4140 |
| 33 | 306.15 | 5.029 | 1.005 | 28040. | 28040. | 138.2 | 2282.6 | 2420.8 | 138.2 | 2423.6 | 2561.8 | 0.4777 | 7.9163 | 8.3939 |
| 34 | 307.15 | 5.318 | 1.006 | 26600. | 26600. | 142.4 | 2279.7 | 2422.1 | 142.4 | 2421.2 | 2563.6 | 0.4913 | 7.8828 | 8.3740 |
| 35 | 308.15 | 5.622 | 1.006 | 25240. | 25240. | 146.6 | 2276.9 | 2423.5 | 146.6 | 2418.8 | 2565.4 | 0.5049 | 7.8495 | 8.3543 |
| 36 | 309.15 | 5.940 | 1.006 | 23970. | 23970. | 150.7 | 2274.1 | 2424.8 | 150.7 | 2416.4 | 2567.2 | 0.5184 | 7.8164 | 8.3348 |
| 37 | 310.15 | 6.274 | 1.007 | 22760. | 22760. | 154.9 | 2271.3 | 2426.2 | 154.9 | 2414.1 | 2569.0 | 0.5319 | 7.7835 | 8.3154 |
| 38 | 311.15 | 6.624 | 1.007 | 21630. | 21630. | 159.1 | 2268.4 | 2427.5 | 159.1 | 2411.7 | 2570.8 | 0.5453 | 7.7509 | 8.2962 |
| 39 | 312.15 | 6.991 | 1.007 | 20560. | 20560. | 163.3 | 2265.6 | 2428.9 | 163.3 | 2409.3 | 2572.6 | 0.5588 | 7.7184 | 8.2772 |
| 40 | 313.15 | 7.375 | 1.008 | 19550. | 19550. | 167.4 | 2262.8 | 2430.2 | 167.5 | 2406.9 | 2574.4 | 0.5721 | 7.6861 | 8.2583 |
| 41 | 314.15 | 7.777 | 1.008 | 18590. | 18590. | 171.6 | 2259.9 | 2431.6 | 171.6 | 2404.5 | 2576.2 | 0.5854 | 7.6541 | 8.2395 |
| 42 | 315.15 | 8.198 | 1.009 | 17690. | 17690. | 175.8 | 2257.1 | 2432.9 | 175.8 | 2402.1 | 2577.9 | 0.5987 | 7.6222 | 8.2209 |
| 43 | 316.15 | 8.639 | 1.009 | 16840. | 16840. | 180.0 | 2254.3 | 2434.2 | 180.0 | 2399.7 | 2579.7 | 0.6120 | 7.5905 | 8.2025 |
| 44 | 317.15 | 9.100 | 1.009 | 16040. | 16040. | 184.2 | 2251.4 | 2435.6 | 184.2 | 2397.3 | 2581.5 | 0.6252 | 7.5590 | 8.1842 |
| 45 | 318.15 | 9.582 | 1.010 | 15280. | 15280. | 188.3 | 2248.6 | 2436.9 | 188.4 | 2394.9 | 2583.3 | 0.6383 | 7.5277 | 8.1661 |
| 46 | 319.15 | 10.09 | 1.010 | 14560. | 14560. | 192.5 | 2245.7 | 2438.3 | 192.5 | 2392.5 | 2585.1 | 0.6514 | 7.4966 | 8.1481 |
| 47 | 320.15 | 10.61 | 1.011 | 13880. | 13880. | 196.7 | 2242.9 | 2439.6 | 196.7 | 2390.1 | 2586.9 | 0.6645 | 7.4657 | 8.1302 |
| 48 | 321.15 | 11.16 | 1.011 | 13230. | 13230. | 200.9 | 2240.0 | 2440.9 | 200.9 | 2387.7 | 2588.6 | 0.6776 | 7.4350 | 8.1125 |
| 49 | 322.15 | 11.74 | 1.012 | 12620. | 12620. | 205.1 | 2237.2 | 2442.3 | 205.1 | 2385.3 | 2590.4 | 0.6906 | 7.4044 | 8.0950 |
| 50 | 323.15 | 12.34 | 1.012 | 12040. | 12050. | 209.2 | 2234.3 | 2443.6 | 209.3 | 2382.9 | 2592.2 | 0.7035 | 7.3741 | 8.0776 |
| 51 | 324.15 | 12.96 | 1.013 | 11500. | 11500. | 213.4 | 2231.5 | 2444.9 | 213.4 | 2380.5 | 2593.9 | 0.7164 | 7.3439 | 8.0603 |
| 52 | 325.15 | 13.61 | 1.013 | 10980. | 10980. | 217.6 | 2228.6 | 2446.2 | 217.6 | 2378.1 | 2595.7 | 0.7293 | 7.3138 | 8.0432 |
| 53 | 326.15 | 14.29 | 1.014 | 10490. | 10490. | 221.8 | 2225.8 | 2447.6 | 221.8 | 2375.7 | 2597.5 | 0.7422 | 7.2840 | 8.0262 |
| 54 | 327.15 | 15.00 | 1.014 | 10020. | 10020. | 226.0 | 2222.9 | 2448.9 | 226.0 | 2373.2 | 2599.2 | 0.7550 | 7.2543 | 8.0093 |
| 55 | 328.15 | 15.74 | 1.015 | 9577.9 | 9578.9 | 230.2 | 2220.0 | 2450.2 | 230.2 | 2370.8 | 2601.0 | 0.7677 | 7.2248 | 7.9925 |
| 56 | 329.15 | 16.51 | 1.015 | 9157.7 | 9158.7 | 234.3 | 2217.2 | 2451.5 | 234.4 | 2368.4 | 2602.7 | 0.7804 | 7.1955 | 7.9759 |
| 57 | 330.15 | 17.31 | 1.016 | 8758.7 | 8759.8 | 238.5 | 2214.3 | 2452.8 | 238.5 | 2365.9 | 2604.5 | 0.7931 | 7.1663 | 7.9595 |
| 58 | 331.15 | 18.15 | 1.016 | 8379.8 | 8380.8 | 242.7 | 2211.4 | 2454.1 | 242.7 | 2363.5 | 2606.2 | 0.8058 | 7.1373 | 7.9431 |
| 59 | 332.15 | 19.02 | 1.017 | 8019.7 | 8020.8 | 246.9 | 2208.6 | 2455.4 | 246.9 | 2361.1 | 2608.0 | 0.8184 | 7.1085 | 7.9269 |
| 60 | 333.15 | 19.92 | 1.017 | 7677.5 | 7678.5 | 251.1 | 2205.7 | 2456.8 | 251.1 | 2358.6 | 2609.7 | 0.8310 | 7.0798 | 7.9108 |
| 61 | 334.15 | 20.86 | 1.018 | 7352.1 | 7353.2 | 255.3 | 2202.8 | 2458.1 | 255.3 | 2356.2 | 2611.4 | 0.8435 | 7.0513 | 7.8948 |
| 62 | 335.15 | 21.84 | 1.018 | 7042.7 | 7043.7 | 259.4 | 2199.9 | 2459.4 | 259.5 | 2353.7 | 2613.2 | 0.8560 | 7.0230 | 7.8790 |
| 63 | 336.15 | 22.86 | 1.019 | 6748.2 | 6749.3 | 263.6 | 2197.0 | 2460.7 | 263.6 | 2351.3 | 2614.9 | 0.8685 | 6.9948 | 7.8633 |
| 64 | 337.15 | 23.91 | 1.019 | 6468.0 | 6469.0 | 267.8 | 2194.1 | 2462.0 | 267.8 | 2348.8 | 2616.6 | 0.8809 | 6.9667 | 7.8477 |
| 65 | 338.15 | 25.01 | 1.020 | 6201.3 | 6202.3 | 272.0 | 2191.2 | 2463.2 | 272.0 | 2346.3 | 2618.4 | 0.8933 | 6.9388 | 7.8322 |
| 66 | 339.15 | 26.15 | 1.020 | 5947.2 | 5948.2 | 276.2 | 2188.3 | 2464.5 | 276.2 | 2343.9 | 2620.1 | 0.9057 | 6.9111 | 7.8168 |
| 67 | 340.15 | 27.33 | 1.021 | 5705.2 | 5706.2 | 280.4 | 2185.4 | 2465.8 | 280.4 | 2341.4 | 2621.8 | 0.9180 | 6.8835 | 7.8015 |
| 68 | 341.15 | 28.56 | 1.022 | 5474.6 | 5475.6 | 284.6 | 2182.5 | 2467.1 | 284.6 | 2338.9 | 2623.5 | 0.9303 | 6.8561 | 7.7864 |
| 69 | 342.15 | 29.84 | 1.022 | 5254.8 | 5255.8 | 288.8 | 2179.6 | 2468.4 | 288.8 | 2336.4 | 2625.2 | 0.9426 | 6.8288 | 7.7714 |
| 70 | 343.15 | 31.16 | 1.023 | 5045.2 | 5046.3 | 292.9 | 2176.7 | 2469.7 | 293.0 | 2334.0 | 2626.9 | 0.9548 | 6.8017 | 7.7565 |
| 71 | 344.15 | 32.53 | 1.023 | 4845.4 | 4846.4 | 297.1 | 2173.8 | 2470.9 | 297.2 | 2331.5 | 2628.6 | 0.9670 | 6.7747 | 7.7417 |
| 72 | 345.15 | 33.96 | 1.024 | 4654.7 | 4655.7 | 301.3 | 2170.9 | 2472.2 | 301.4 | 2329.0 | 2630.3 | 0.9792 | 6.7478 | 7.7270 |
| 73 | 346.15 | 35.43 | 1.025 | 4472.7 | 4473.7 | 305.5 | 2168.0 | 2473.5 | 305.5 | 2326.5 | 2632.0 | 0.9913 | 6.7211 | 7.7124 |
| 74 | 347.15 | 36.96 | 1.025 | 4299.0 | 4300.0 | 309.7 | 2165.1 | 2474.8 | 309.7 | 2324.0 | 2633.7 | 1.0034 | 6.6945 | 7.6979 |

## Tabla F.1. Vapor saturado, unidades SI (Continúa)

| | | | VOLUMEN ESPECÍFICO $V$ | | | ENERGÍA INTERNA $U$ | | | ENTALPÍA $H$ | | | ENTROPÍA $S$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $t$ | $T$ | $P$ | liq. | | vap. | liq. | | vap. | liq. | | vap. | liq. | | vap. |
| °C | K | kPa | sat. | evap. | sat. | sat. | evap. | sat. | sat. | evap. | sat. | sat. | evap. | sat. |
| 75 | 348.15 | 38.55 | 1.026 | 4133.1 | 4134.1 | 313.9 | 2162.1 | 2476.0 | 313.9 | 2321.5 | 2635.4 | 1.0154 | 6.6681 | 7.6835 |
| 76 | 349.15 | 40.19 | 1.027 | 3974.6 | 3975.7 | 318.1 | 2159.2 | 2477.3 | 318.1 | 2318.9 | 2637.1 | 1.0275 | 6.6418 | 7.6693 |
| 77 | 350.15 | 41.89 | 1.027 | 3823.3 | 3824.3 | 322.3 | 2156.3 | 2478.5 | 322.3 | 2316.4 | 2638.7 | 1.0395 | 6.6156 | 7.6551 |
| 78 | 351.15 | 43.65 | 1.028 | 3678.6 | 3679.6 | 326.5 | 2153.3 | 2479.8 | 326.5 | 2313.9 | 2640.4 | 1.0514 | 6.5896 | 7.6410 |
| 79 | 352.15 | 45.47 | 1.029 | 3540.3 | 3547.3 | 330.7 | 2150.4 | 2481.1 | 330.7 | 2311.4 | 2642.1 | 1.0634 | 6.5637 | 7.6271 |
| 80 | 353.15 | 47.36 | 1.029 | 3408.1 | 3409.1 | 334.9 | 2147.4 | 2482.3 | 334.9 | 2308.8 | 2643.8 | 1.0753 | 6.5380 | 7.6132 |
| 81 | 354.15 | 49.31 | 1.030 | 3281.6 | 3282.6 | 339.1 | 2144.5 | 2483.5 | 339.1 | 2306.3 | 2645.4 | 1.0871 | 6.5123 | 7.5995 |
| 82 | 355.15 | 51.33 | 1.031 | 3160.6 | 3161.6 | 343.3 | 2141.5 | 2484.8 | 343.3 | 2303.8 | 2647.1 | 1.0990 | 6.4868 | 7.5858 |
| 83 | 356.15 | 53.42 | 1.031 | 3044.8 | 3045.8 | 347.5 | 2138.6 | 2486.0 | 347.5 | 2301.2 | 2648.7 | 1.1108 | 6.4615 | 7.5722 |
| 84 | 357.15 | 55.57 | 1.032 | 2933.9 | 2935.0 | 351.7 | 2135.6 | 2487.3 | 351.7 | 2298.6 | 2650.4 | 1.1225 | 6.4362 | 7.5587 |
| 85 | 358.15 | 57.80 | 1.033 | 2827.8 | 2828.8 | 355.9 | 2132.6 | 2488.5 | 355.9 | 2296.1 | 2652.0 | 1.1343 | 6.4111 | 7.5454 |
| 86 | 359.15 | 60.11 | 1.033 | 2726.1 | 2727.2 | 360.1 | 2129.7 | 2489.7 | 360.1 | 2293.5 | 2653.6 | 1.1460 | 6.3861 | 7.5321 |
| 87 | 360.15 | 62.49 | 1.034 | 2628.8 | 2629.8 | 364.3 | 2126.7 | 2490.9 | 364.3 | 2290.9 | 2655.3 | 1.1577 | 6.3612 | 7.5189 |
| 88 | 361.15 | 64.95 | 1.035 | 2535.4 | 2536.5 | 368.5 | 2123.7 | 2492.2 | 368.5 | 2288.4 | 2656.9 | 1.1693 | 6.3365 | 7.5058 |
| 89 | 362.15 | 67.49 | 1.035 | 2446.0 | 2447.0 | 372.7 | 2120.7 | 2493.4 | 372.7 | 2285.8 | 2658.5 | 1.1809 | 6.3119 | 7.4928 |
| 90 | 363.15 | 70.11 | 1.036 | 2360.3 | 2361.3 | 376.9 | 2117.7 | 2494.6 | 376.9 | 2283.2 | 2660.1 | 1.1925 | 6.2873 | 7.4799 |
| 91 | 364.15 | 72.81 | 1.037 | 2278.0 | 2279.1 | 381.1 | 2114.7 | 2495.8 | 381.1 | 2280.6 | 2661.7 | 1.2041 | 6.2629 | 7.4670 |
| 92 | 365.15 | 75.61 | 1.038 | 2199.2 | 2200.2 | 385.3 | 2111.7 | 2497.0 | 385.4 | 2278.0 | 2663.4 | 1.2156 | 6.2387 | 7.4543 |
| 93 | 366.15 | 78.49 | 1.038 | 2123.5 | 2124.5 | 389.5 | 2108.7 | 2498.2 | 389.6 | 2275.4 | 2665.0 | 1.2271 | 6.2145 | 7.4416 |
| 94 | 367.15 | 81.46 | 1.039 | 2050.9 | 2051.9 | 393.7 | 2105.7 | 2499.4 | 393.8 | 2272.8 | 2666.6 | 1.2386 | 6.1905 | 7.4291 |
| 95 | 368.15 | 84.53 | 1.040 | 1981.2 | 1982.2 | 397.9 | 2102.7 | 2500.6 | 398.0 | 2270.2 | 2668.1 | 1.2501 | 6.1665 | 7.4166 |
| 96 | 369.15 | 87.69 | 1.041 | 1914.3 | 1915.3 | 402.1 | 2099.7 | 2501.8 | 402.2 | 2267.5 | 2669.7 | 1.2615 | 6.1427 | 7.4042 |
| 97 | 370.15 | 90.94 | 1.041 | 1850.0 | 1851.0 | 406.3 | 2096.6 | 2503.0 | 406.4 | 2264.9 | 2671.3 | 1.2729 | 6.1190 | 7.3919 |
| 98 | 371.15 | 94.30 | 1.042 | 1788.3 | 1789.3 | 410.5 | 2093.6 | 2504.1 | 410.6 | 2262.2 | 2672.9 | 1.2842 | 6.0954 | 7.3796 |
| 99 | 372.15 | 97.76 | 1.043 | 1729.0 | 1730.0 | 414.7 | 2090.6 | 2505.3 | 414.8 | 2259.6 | 2674.4 | 1.2956 | 6.0719 | 7.3675 |
| 100 | 373.15 | 101.33 | 1.044 | 1672.0 | 1673.0 | 419.0 | 2087.5 | 2506.5 | 419.1 | 2256.9 | 2676.0 | 1.3069 | 6.0485 | 7.3554 |
| 102 | 375.15 | 108.78 | 1.045 | 1564.5 | 1565.5 | 427.4 | 2081.4 | 2508.8 | 427.5 | 2251.6 | 2679.1 | 1.3294 | 6.0021 | 7.3315 |
| 104 | 377.15 | 116.68 | 1.047 | 1465.1 | 1466.2 | 435.8 | 2075.3 | 2511.1 | 435.9 | 2246.3 | 2682.2 | 1.3518 | 5.9560 | 7.3078 |
| 106 | 379.15 | 125.04 | 1.049 | 1373.1 | 1374.2 | 444.3 | 2069.2 | 2513.4 | 444.4 | 2240.9 | 2685.3 | 1.3742 | 5.9104 | 7.2845 |
| 108 | 381.15 | 133.90 | 1.050 | 1287.9 | 1288.9 | 452.7 | 2063.0 | 2515.7 | 452.9 | 2235.4 | 2688.3 | 1.3964 | 5.8651 | 7.2615 |
| 110 | 383.15 | 143.27 | 1.052 | 1208.9 | 1209.9 | 461.2 | 2056.8 | 2518.0 | 461.3 | 2230.0 | 2691.3 | 1.4185 | 5.8203 | 7.2388 |
| 112 | 385.15 | 153.16 | 1.054 | 1135.6 | 1136.6 | 469.6 | 2050.6 | 2520.2 | 469.8 | 2224.5 | 2694.3 | 1.4405 | 5.7758 | 7.2164 |
| 114 | 387.15 | 163.62 | 1.055 | 1067.5 | 1068.5 | 478.1 | 2044.3 | 2522.4 | 478.3 | 2219.0 | 2697.2 | 1.4624 | 5.7318 | 7.1942 |
| 116 | 389.15 | 174.65 | 1.057 | 1004.2 | 1005.2 | 486.6 | 2038.1 | 2524.6 | 486.7 | 2213.4 | 2700.2 | 1.4842 | 5.6881 | 7.1723 |
| 118 | 391.15 | 186.28 | 1.059 | 945.3 | 946.3 | 495.0 | 2031.8 | 2526.8 | 495.2 | 2207.9 | 2703.1 | 1.5060 | 5.6447 | 7.1507 |
| 120 | 393.15 | 198.54 | 1.061 | 890.5 | 891.5 | 503.5 | 2025.4 | 2529.0 | 503.7 | 2202.2 | 2706.0 | 1.5276 | 5.6017 | 7.1293 |
| 122 | 395.15 | 211.45 | 1.062 | 839.4 | 840.5 | 512.0 | 2019.1 | 2531.1 | 512.2 | 2196.6 | 2708.8 | 1.5491 | 5.5590 | 7.1082 |
| 124 | 397.15 | 225.04 | 1.064 | 791.8 | 792.8 | 520.5 | 2012.7 | 2533.2 | 520.7 | 2190.9 | 2711.6 | 1.5706 | 5.5167 | 7.0873 |
| 126 | 399.15 | 239.33 | 1.066 | 747.3 | 748.4 | 529.0 | 2006.3 | 2535.3 | 529.2 | 2185.2 | 2714.4 | 1.5919 | 5.4747 | 7.0666 |
| 128 | 401.15 | 254.35 | 1.068 | 705.8 | 706.9 | 537.5 | 1999.9 | 2537.4 | 537.8 | 2179.4 | 2717.2 | 1.6132 | 5.4330 | 7.0462 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 130 | 403.15 | 270.13 | 1.070 | 667.1 | 668.1 | 546.0 | 1993.4 | 2539.4 | 546.3 | 2173.6 | 2719.9 | 1.6344 | 5.3917 | 7.0261 |
| 132 | 405.15 | 286.70 | 1.072 | 630.8 | 631.9 | 554.5 | 1986.9 | 2541.4 | 554.8 | 2167.8 | 2722.6 | 1.6555 | 5.3507 | 7.0061 |
| 134 | 407.15 | 304.07 | 1.074 | 596.9 | 598.0 | 563.1 | 1980.4 | 2543.4 | 563.4 | 2161.9 | 2725.3 | 1.6765 | 5.3099 | 6.9864 |
| 136 | 409.15 | 322.29 | 1.076 | 565.1 | 566.2 | 571.6 | 1973.8 | 2545.4 | 572.0 | 2155.9 | 2727.9 | 1.6974 | 5.2695 | 6.9669 |
| 138 | 411.15 | 341.38 | 1.078 | 535.3 | 536.4 | 580.2 | 1967.2 | 2547.4 | 580.5 | 2150.0 | 2730.5 | 1.7182 | 5.2293 | 6.9475 |
| 140 | 413.15 | 361.38 | 1.080 | 507.4 | 508.5 | 588.7 | 1960.6 | 2549.3 | 589.1 | 2144.0 | 2733.1 | 1.7390 | 5.1894 | 6.9284 |
| 142 | 415.15 | 382.31 | 1.082 | 481.2 | 482.3 | 597.3 | 1953.9 | 2551.2 | 597.7 | 2137.9 | 2735.6 | 1.7597 | 5.1499 | 6.9095 |
| 144 | 417.15 | 404.20 | 1.084 | 456.6 | 457.7 | 605.9 | 1947.2 | 2553.1 | 606.3 | 2131.8 | 2738.1 | 1.7803 | 5.1105 | 6.8908 |
| 146 | 419.15 | 427.09 | 1.086 | 433.5 | 434.6 | 614.4 | 1940.5 | 2554.9 | 614.9 | 2125.7 | 2740.6 | 1.8008 | 5.0715 | 6.8723 |
| 148 | 421.15 | 451.01 | 1.089 | 411.8 | 412.9 | 623.0 | 1933.7 | 2556.8 | 623.5 | 2119.5 | 2743.0 | 1.8213 | 5.0327 | 6.8539 |
| 150 | 423.15 | 476.00 | 1.091 | 391.4 | 392.4 | 631.6 | 1926.9 | 2558.6 | 632.1 | 2113.2 | 2745.4 | 1.8416 | 4.9941 | 6.8358 |
| 152 | 425.15 | 502.08 | 1.093 | 372.1 | 373.2 | 640.2 | 1920.1 | 2560.3 | 640.8 | 2106.9 | 2747.7 | 1.8619 | 4.9558 | 6.8178 |
| 154 | 427.15 | 529.29 | 1.095 | 354.0 | 355.1 | 648.9 | 1913.2 | 2562.1 | 649.4 | 2100.6 | 2750.0 | 1.8822 | 4.9178 | 6.8000 |
| 156 | 429.15 | 557.67 | 1.098 | 336.9 | 338.0 | 657.5 | 1906.3 | 2563.8 | 658.1 | 2094.2 | 2752.3 | 1.9023 | 4.8800 | 6.7823 |
| 158 | 431.15 | 587.25 | 1.100 | 320.8 | 321.9 | 666.1 | 1899.3 | 2565.5 | 666.8 | 2087.7 | 2754.5 | 1.9224 | 4.8424 | 6.7648 |
| 160 | 433.15 | 618.06 | 1.102 | 305.7 | 306.8 | 674.8 | 1892.3 | 2567.1 | 675.5 | 2081.3 | 2756.7 | 1.9425 | 4.8050 | 6.7475 |
| 162 | 435.15 | 650.16 | 1.105 | 291.3 | 292.4 | 683.5 | 1885.3 | 2568.8 | 684.2 | 2074.7 | 2758.9 | 1.9624 | 4.7679 | 6.7303 |
| 164 | 437.15 | 683.56 | 1.107 | 277.8 | 278.9 | 692.1 | 1878.2 | 2570.4 | 692.9 | 2068.1 | 2761.0 | 1.9823 | 4.7309 | 6.7133 |
| 166 | 439.15 | 718.31 | 1.109 | 265.0 | 266.1 | 700.8 | 1871.1 | 2571.9 | 701.6 | 2061.4 | 2763.1 | 2.0022 | 4.6942 | 6.6964 |
| 168 | 441.15 | 754.45 | 1.112 | 252.9 | 254.0 | 709.5 | 1863.9 | 2573.4 | 710.4 | 2054.7 | 2765.1 | 2.0219 | 4.6577 | 6.6796 |
| 170 | 443.15 | 792.02 | 1.114 | 241.4 | 242.6 | 718.2 | 1856.7 | 2574.9 | 719.1 | 2047.9 | 2767.1 | 2.0416 | 4.6214 | 6.6630 |
| 172 | 445.15 | 831.06 | 1.117 | 230.6 | 231.7 | 727.0 | 1849.5 | 2576.4 | 727.9 | 2041.1 | 2769.0 | 2.0613 | 4.5853 | 6.6465 |
| 174 | 447.15 | 871.60 | 1.120 | 220.3 | 221.5 | 735.7 | 1842.2 | 2577.8 | 736.7 | 2034.2 | 2770.9 | 2.0809 | 4.5493 | 6.6302 |
| 176 | 449.15 | 913.68 | 1.122 | 210.6 | 211.7 | 744.4 | 1834.8 | 2579.3 | 745.5 | 2027.3 | 2772.7 | 2.1004 | 4.5136 | 6.6140 |
| 178 | 451.15 | 957.36 | 1.125 | 201.4 | 202.5 | 753.2 | 1827.4 | 2580.6 | 754.3 | 2020.2 | 2774.5 | 2.1199 | 4.4780 | 6.5979 |
| 180 | 453.15 | 1002.7 | 1.128 | 192.7 | 193.8 | 762.0 | 1820.0 | 2581.9 | 763.1 | 2013.1 | 2776.3 | 2.1393 | 4.4426 | 6.5819 |
| 182 | 455.15 | 1049.6 | 1.130 | 184.4 | 185.5 | 770.8 | 1812.5 | 2583.2 | 772.0 | 2006.0 | 2778.0 | 2.1587 | 4.4074 | 6.5660 |
| 184 | 457.15 | 1098.3 | 1.133 | 176.5 | 177.6 | 779.6 | 1804.9 | 2584.5 | 780.8 | 1998.8 | 2779.6 | 2.1780 | 4.3723 | 6.5503 |
| 186 | 459.15 | 1148.8 | 1.136 | 169.0 | 170.2 | 788.4 | 1797.3 | 2585.7 | 789.7 | 1991.5 | 2781.2 | 2.1972 | 4.3374 | 6.5346 |
| 188 | 461.15 | 1201.0 | 1.139 | 161.9 | 163.1 | 797.2 | 1789.7 | 2586.9 | 798.6 | 1984.2 | 2782.8 | 2.2164 | 4.3026 | 6.5191 |
| 190 | 463.15 | 1255.1 | 1.142 | 155.2 | 156.3 | 806.1 | 1782.0 | 2588.1 | 807.5 | 1976.7 | 2784.3 | 2.2356 | 4.2680 | 6.5036 |
| 192 | 465.15 | 1311.1 | 1.144 | 148.8 | 149.9 | 814.9 | 1774.2 | 2589.2 | 816.5 | 1969.3 | 2785.7 | 2.2547 | 4.2336 | 6.4883 |
| 194 | 467.15 | 1369.0 | 1.147 | 142.6 | 143.8 | 823.8 | 1766.4 | 2590.2 | 825.4 | 1961.7 | 2787.1 | 2.2738 | 4.1993 | 6.4730 |
| 196 | 469.15 | 1428.9 | 1.150 | 136.8 | 138.0 | 832.7 | 1758.6 | 2591.3 | 834.4 | 1954.1 | 2788.4 | 2.2928 | 4.1651 | 6.4578 |
| 198 | 471.15 | 1490.9 | 1.153 | 131.3 | 132.4 | 841.6 | 1750.6 | 2592.3 | 843.4 | 1946.4 | 2789.7 | 2.3117 | 4.1310 | 6.4428 |
| 200 | 473.15 | 1554.9 | 1.156 | 126.0 | 127.2 | 850.6 | 1742.6 | 2593.2 | 852.4 | 1938.6 | 2790.9 | 2.3307 | 4.0971 | 6.4278 |
| 202 | 475.15 | 1621.0 | 1.160 | 121.0 | 122.1 | 859.5 | 1734.6 | 2594.1 | 861.4 | 1930.7 | 2792.1 | 2.3495 | 4.0633 | 6.4128 |
| 204 | 477.15 | 1689.3 | 1.163 | 116.2 | 117.3 | 868.5 | 1726.5 | 2595.0 | 870.5 | 1922.8 | 2793.2 | 2.3684 | 4.0296 | 6.3980 |
| 206 | 479.15 | 1759.8 | 1.166 | 111.6 | 112.8 | 877.5 | 1718.3 | 2595.8 | 879.5 | 1914.7 | 2794.3 | 2.3872 | 3.9961 | 6.3832 |
| 208 | 481.15 | 1832.6 | 1.169 | 107.2 | 108.4 | 886.5 | 1710.1 | 2596.6 | 888.6 | 1906.6 | 2795.3 | 2.4059 | 3.9626 | 6.3686 |
| 210 | 483.15 | 1907.7 | 1.173 | 103.1 | 104.2 | 895.5 | 1701.8 | 2597.3 | 897.7 | 1898.5 | 2796.2 | 2.4247 | 3.9293 | 6.3539 |
| 212 | 485.15 | 1985.2 | 1.176 | 99.09 | 100.26 | 904.5 | 1693.5 | 2598.0 | 906.9 | 1890.2 | 2797.1 | 2.4434 | 3.8960 | 6.3394 |
| 214 | 487.15 | 2065.1 | 1.179 | 95.28 | 96.46 | 913.6 | 1685.1 | 2598.7 | 916.0 | 1881.8 | 2797.9 | 2.4620 | 3.8629 | 6.3249 |
| 216 | 489.15 | 2147.5 | 1.183 | 91.65 | 92.83 | 922.7 | 1676.6 | 2599.3 | 925.2 | 1873.4 | 2798.6 | 2.4806 | 3.8298 | 6.3104 |
| 218 | 491.15 | 2232.4 | 1.186 | 88.17 | 89.36 | 931.8 | 1668.0 | 2599.8 | 934.4 | 1864.9 | 2799.3 | 2.4992 | 3.7968 | 6.2960 |

## Tabla F.1. Vapor saturado, unidades SI (Continúa)

| | | | VOLUMEN ESPECÍFICO *V* | | | ENERGÍA INTERNA *U* | | | ENTALPÍA *H* | | | ENTROPÍA *S* | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *t* | *T* | *P* | liq. | | vap. | liq. | | vap. | liq. | | vap. | liq. | | vap. |
| °C | K | kPa | sat. | evap. | sat. | sat. | evap. | sat. | sat. | evap. | sat. | sat. | evap. | sat. |
| 220 | 493.15 | 2319.8 | 1.190 | 84.85 | 86.04 | 940.9 | 1659.4 | 2600.3 | 943.7 | 1856.2 | 2799.9 | 2.5178 | 3.7639 | 6.2817 |
| 222 | 495.15 | 2409.9 | 1.194 | 81.67 | 82.86 | 950.1 | 1650.7 | 2600.8 | 952.9 | 1847.5 | 2800.5 | 2.5363 | 3.7311 | 6.2674 |
| 224 | 497.15 | 2502.7 | 1.197 | 78.62 | 79.82 | 959.2 | 1642.0 | 2601.2 | 962.2 | 1838.7 | 2800.9 | 2.5548 | 3.6984 | 6.2532 |
| 226 | 499.15 | 2598.2 | 1.201 | 75.71 | 76.91 | 968.4 | 1633.1 | 2601.5 | 971.5 | 1829.8 | 2801.4 | 2.5733 | 3.6657 | 6.2390 |
| 228 | 501.15 | 2696.5 | 1.205 | 72.92 | 74.12 | 977.6 | 1624.2 | 2601.8 | 980.9 | 1820.8 | 2801.7 | 2.5917 | 3.6331 | 6.2249 |
| 230 | 503.15 | 2797.6 | 1.209 | 70.24 | 71.45 | 986.9 | 1615.2 | 2602.1 | 990.3 | 1811.7 | 2802.0 | 2.6102 | 3.6006 | 6.2107 |
| 232 | 505.15 | 2901.6 | 1.213 | 67.68 | 68.89 | 996.2 | 1606.1 | 2602.3 | 999.7 | 1802.5 | 2802.2 | 2.6286 | 3.5681 | 6.1967 |
| 234 | 507.15 | 3008.6 | 1.217 | 65.22 | 66.43 | 1005.4 | 1597.0 | 2602.4 | 1009.1 | 1793.2 | 2802.3 | 2.6470 | 3.5356 | 6.1826 |
| 236 | 509.15 | 3118.6 | 1.221 | 62.86 | 64.08 | 1014.8 | 1587.7 | 2602.5 | 1018.6 | 1783.8 | 2802.3 | 2.6653 | 3.5033 | 6.1686 |
| 238 | 511.15 | 3231.7 | 1.225 | 60.60 | 61.82 | 1024.1 | 1578.4 | 2602.5 | 1028.1 | 1774.2 | 2802.3 | 2.6837 | 3.4709 | 6.1546 |
| 240 | 513.15 | 3347.8 | 1.229 | 58.43 | 59.65 | 1033.5 | 1569.0 | 2602.5 | 1037.6 | 1764.6 | 2802.2 | 2.7020 | 3.4386 | 6.1406 |
| 242 | 515.15 | 3467.2 | 1.233 | 56.34 | 57.57 | 1042.9 | 1559.5 | 2602.4 | 1047.2 | 1754.9 | 2802.0 | 2.7203 | 3.4063 | 6.1266 |
| 244 | 517.15 | 3589.8 | 1.238 | 54.34 | 55.58 | 1052.3 | 1549.9 | 2602.2 | 1056.8 | 1745.0 | 2801.8 | 2.7386 | 3.3740 | 6.1127 |
| 246 | 519.15 | 3715.7 | 1.242 | 52.41 | 53.66 | 1061.8 | 1540.2 | 2602.0 | 1066.4 | 1735.0 | 2801.4 | 2.7569 | 3.3418 | 6.0987 |
| 248 | 521.15 | 3844.9 | 1.247 | 50.56 | 51.81 | 1071.3 | 1530.5 | 2601.8 | 1076.1 | 1724.9 | 2801.0 | 2.7752 | 3.3096 | 6.0848 |
| 250 | 523.15 | 3977.6 | 1.251 | 48.79 | 50.04 | 1080.8 | 1520.6 | 2601.4 | 1085.8 | 1714.7 | 2800.4 | 2.7935 | 3.2773 | 6.0708 |
| 252 | 525.15 | 4113.7 | 1.256 | 47.08 | 48.33 | 1090.4 | 1510.6 | 2601.0 | 1095.5 | 1704.3 | 2799.8 | 2.8118 | 3.2451 | 6.0569 |
| 254 | 527.15 | 4253.4 | 1.261 | 45.43 | 46.69 | 1100.0 | 1500.5 | 2600.5 | 1105.3 | 1693.8 | 2799.1 | 2.8300 | 3.2129 | 6.0429 |
| 256 | 529.15 | 4396.7 | 1.266 | 43.85 | 45.11 | 1109.6 | 1490.4 | 2600.0 | 1115.2 | 1683.2 | 2798.3 | 2.8483 | 3.1807 | 6.0290 |
| 258 | 531.15 | 4543.7 | 1.271 | 42.33 | 43.60 | 1119.3 | 1480.1 | 2599.3 | 1125.0 | 1672.4 | 2797.4 | 2.8666 | 3.1484 | 6.0150 |
| 260 | 533.15 | 4694.3 | 1.276 | 40.86 | 42.13 | 1129.0 | 1469.7 | 2598.6 | 1134.9 | 1661.5 | 2796.4 | 2.8848 | 3.1161 | 6.0010 |
| 262 | 535.15 | 4848.8 | 1.281 | 39.44 | 40.73 | 1138.7 | 1459.2 | 2597.8 | 1144.9 | 1650.4 | 2795.3 | 2.9031 | 3.0838 | 5.9869 |
| 264 | 537.15 | 5007.1 | 1.286 | 38.08 | 39.37 | 1148.5 | 1448.5 | 2597.0 | 1154.9 | 1639.2 | 2794.1 | 2.9214 | 3.0515 | 5.9729 |
| 266 | 539.15 | 5169.3 | 1.291 | 36.77 | 38.06 | 1158.3 | 1437.8 | 2596.1 | 1165.0 | 1627.8 | 2792.8 | 2.9397 | 3.0191 | 5.9588 |
| 268 | 541.15 | 5335.5 | 1.297 | 35.51 | 36.80 | 1168.2 | 1426.9 | 2595.0 | 1175.1 | 1616.3 | 2791.4 | 2.9580 | 2.9866 | 5.9446 |
| 270 | 543.15 | 5505.8 | 1.303 | 34.29 | 35.59 | 1178.1 | 1415.9 | 2593.9 | 1185.2 | 1604.6 | 2789.9 | 2.9763 | 2.9541 | 5.9304 |
| 272 | 545.15 | 5680.2 | 1.308 | 33.11 | 34.42 | 1188.0 | 1404.7 | 2592.7 | 1195.4 | 1592.8 | 2788.2 | 2.9947 | 2.9215 | 5.9162 |
| 274 | 547.15 | 5858.7 | 1.314 | 31.97 | 33.29 | 1198.0 | 1393.4 | 2591.4 | 1205.7 | 1580.8 | 2786.5 | 3.0131 | 2.8889 | 5.9019 |
| 276 | 549.15 | 6041.5 | 1.320 | 30.88 | 32.20 | 1208.0 | 1382.0 | 2590.1 | 1216.0 | 1568.5 | 2784.6 | 3.0314 | 2.8561 | 5.8876 |
| 278 | 551.15 | 6228.7 | 1.326 | 29.82 | 31.14 | 1218.1 | 1370.4 | 2588.6 | 1226.4 | 1556.2 | 2782.6 | 3.0499 | 2.8233 | 5.8731 |
| 280 | 553.15 | 6420.2 | 1.332 | 28.79 | 30.13 | 1228.3 | 1358.7 | 2587.0 | 1236.8 | 1543.6 | 2780.4 | 3.0683 | 2.7903 | 5.8586 |
| 282 | 555.15 | 6616.1 | 1.339 | 27.81 | 29.14 | 1238.5 | 1346.8 | 2585.3 | 1247.3 | 1530.8 | 2778.1 | 3.0868 | 2.7573 | 5.8440 |
| 284 | 557.15 | 6816.6 | 1.345 | 26.85 | 28.20 | 1248.7 | 1334.8 | 2583.5 | 1257.9 | 1517.8 | 2775.7 | 3.1053 | 2.7241 | 5.8294 |
| 286 | 559.15 | 7021.8 | 1.352 | 25.93 | 27.28 | 1259.0 | 1322.6 | 2581.6 | 1268.5 | 1504.6 | 2773.2 | 3.1238 | 2.6908 | 5.8146 |
| 288 | 561.15 | 7231.5 | 1.359 | 25.03 | 26.39 | 1269.4 | 1310.2 | 2579.6 | 1279.2 | 1491.2 | 2770.5 | 3.1424 | 2.6573 | 5.7997 |
| 290 | 563.15 | 7446.1 | 1.366 | 24.17 | 25.54 | 1279.8 | 1297.7 | 2577.5 | 1290.0 | 1477.6 | 2767.6 | 3.1611 | 2.6237 | 5.7848 |
| 292 | 565.15 | 7665.4 | 1.373 | 23.33 | 24.71 | 1290.3 | 1284.9 | 2575.3 | 1300.9 | 1463.8 | 2764.6 | 3.1798 | 2.5899 | 5.7697 |
| 294 | 567.15 | 7889.7 | 1.381 | 22.52 | 23.90 | 1300.9 | 1272.0 | 2572.9 | 1311.8 | 1449.7 | 2761.5 | 3.1985 | 2.5560 | 5.7545 |
| 296 | 569.15 | 8118.9 | 1.388 | 21.74 | 23.13 | 1311.5 | 1258.9 | 2570.4 | 1322.8 | 1435.4 | 2758.2 | 3.2173 | 2.5218 | 5.7392 |
| 298 | 571.15 | 8353.2 | 1.396 | 20.98 | 22.38 | 1322.2 | 1245.6 | 2567.8 | 1333.9 | 1420.8 | 2754.7 | 3.2362 | 2.4875 | 5.7237 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 300 | 573.15 | 8592.7 | 1.404 | 20.24 | 21.65 | 1333.0 | 1232.0 | 2565.0 | 1345.1 | 1406.0 | 2751.0 | 3.2552 | 2.4529 | 5.7081 |
| 302 | 575.15 | 8837.4 | 1.412 | 19.53 | 20.94 | 1343.8 | 1218.3 | 2562.1 | 1356.3 | 1390.9 | 2747.2 | 3.2742 | 2.4182 | 5.6924 |
| 304 | 577.15 | 9087.3 | 1.421 | 18.84 | 20.26 | 1354.8 | 1204.3 | 2559.1 | 1367.7 | 1375.5 | 2743.2 | 3.2933 | 2.3832 | 5.6765 |
| 306 | 579.15 | 9342.7 | 1.430 | 18.17 | 19.60 | 1365.8 | 1190.1 | 2555.9 | 1379.1 | 1359.8 | 2739.0 | 3.3125 | 2.3479 | 5.6604 |
| 308 | 581.15 | 9603.6 | 1.439 | 17.52 | 18.96 | 1376.9 | 1175.6 | 2552.5 | 1390.7 | 1343.9 | 2734.6 | 3.3318 | 2.3124 | 5.6442 |
| 310 | 583.15 | 9870.0 | 1.448 | 16.89 | 18.33 | 1388.1 | 1161.0 | 2549.1 | 1402.4 | 1327.6 | 2730.0 | 3.3512 | 2.2766 | 5.6278 |
| 312 | 585.15 | 10142.1 | 1.458 | 16.27 | 17.73 | 1399.4 | 1146.0 | 2545.4 | 1414.2 | 1311.0 | 2725.2 | 3.3707 | 2.2404 | 5.6111 |
| 314 | 587.15 | 10420.0 | 1.468 | 15.68 | 17.14 | 1410.8 | 1130.8 | 2541.6 | 1426.1 | 1294.1 | 2720.2 | 3.3903 | 2.2040 | 5.5943 |
| 316 | 589.15 | 10703. | 1.478 | 15.09 | 16.57 | 1422.3 | 1115.2 | 2537.5 | 1438.1 | 1276.8 | 2714.9 | 3.4101 | 2.1672 | 5.5772 |
| 318 | 591.15 | 10993.4 | 1.488 | 14.53 | 16.02 | 1433.9 | 1099.4 | 2533.3 | 1450.3 | 1259.1 | 2709.4 | 3.4300 | 2.1300 | 5.5599 |
| 320 | 593.15 | 11289.1 | 1.500 | 13.98 | 15.48 | 1445.7 | 1083.2 | 2528.9 | 1462.6 | 1241.1 | 2703.7 | 3.4500 | 2.0923 | 5.5423 |
| 322 | 595.15 | 11591.0 | 1.511 | 13.44 | 14.96 | 1457.5 | 1066.7 | 2524.3 | 1475.1 | 1222.6 | 2697.6 | 3.4702 | 2.0542 | 5.5244 |
| 324 | 597.15 | 11899.2 | 1.523 | 12.92 | 14.45 | 1469.5 | 1049.9 | 2519.4 | 1487.7 | 1203.6 | 2691.3 | 3.4906 | 2.0156 | 5.5062 |
| 326 | 599.15 | 12213.7 | 1.535 | 12.41 | 13.95 | 1481.7 | 1032.6 | 2514.3 | 1500.4 | 1184.2 | 2684.6 | 3.5111 | 1.9764 | 5.4876 |
| 328 | 601.15 | 12534.8 | 1.548 | 11.91 | 13.46 | 1494.0 | 1014.8 | 2508.8 | 1513.4 | 1164.2 | 2677.6 | 3.5319 | 1.9367 | 5.4685 |
| 330 | 603.15 | 12862.5 | 1.561 | 11.43 | 12.99 | 1506.4 | 996.7 | 2503.1 | 1526.5 | 1143.6 | 2670.2 | 3.5528 | 1.8962 | 5.4490 |
| 332 | 605.15 | 13197.0 | 1.575 | 10.95 | 12.53 | 1519.1 | 978.0 | 2497.0 | 1539.9 | 1122.5 | 2662.3 | 3.5740 | 1.8550 | 5.4290 |
| 334 | 607.15 | 13538.3 | 1.590 | 10.49 | 12.08 | 1531.9 | 958.7 | 2490.6 | 1553.4 | 1100.7 | 2654.1 | 3.5955 | 1.8129 | 5.4084 |
| 336 | 609.15 | 13886.7 | 1.606 | 10.03 | 11.63 | 1544.9 | 938.9 | 2483.7 | 1567.2 | 1078.1 | 2645.3 | 3.6172 | 1.7700 | 5.3872 |
| 338 | 611.15 | 14242.3 | 1.622 | 9.58 | 11.20 | 1558.1 | 918.4 | 2476.4 | 1581.2 | 1054.8 | 2636.0 | 3.6392 | 1.7261 | 5.3653 |
| 340 | 613.15 | 14605.2 | 1.639 | 9.14 | 10.78 | 1571.5 | 897.2 | 2468.7 | 1595.5 | 1030.7 | 2626.2 | 3.6616 | 1.6811 | 5.3427 |
| 342 | 615.15 | 14975.5 | 1.657 | 8.71 | 10.37 | 1585.2 | 875.2 | 2460.5 | 1610.0 | 1005.7 | 2615.7 | 3.6844 | 1.6350 | 5.3194 |
| 344 | 617.15 | 15353.5 | 1.676 | 8.286 | 9.962 | 1599.2 | 852.5 | 2451.7 | 1624.9 | 979.7 | 2604.7 | 3.7075 | 1.5877 | 5.2952 |
| 346 | 619.15 | 15739.3 | 1.696 | 7.870 | 9.566 | 1613.5 | 828.9 | 2442.4 | 1640.2 | 952.8 | 2593.0 | 3.7311 | 1.5391 | 5.2702 |
| 348 | 621.15 | 16133.1 | 1.718 | 7.461 | 9.178 | 1628.1 | 804.5 | 2432.6 | 1655.8 | 924.8 | 2580.7 | 3.7553 | 1.4891 | 5.2444 |
| 350 | 623.15 | 16535.1 | 1.741 | 7.058 | 8.799 | 1643.0 | 779.2 | 2422.2 | 1671.8 | 895.9 | 2567.7 | 3.7801 | 1.4375 | 5.2177 |
| 352 | 625.15 | 16945.5 | 1.766 | 6.654 | 8.420 | 1659.4 | 751.5 | 2410.8 | 1689.3 | 864.2 | 2553.5 | 3.8071 | 1.3822 | 5.1893 |
| 354 | 627.15 | 17364.4 | 1.794 | 6.252 | 8.045 | 1676.3 | 722.4 | 2398.7 | 1707.5 | 830.9 | 2538.4 | 3.8349 | 1.3247 | 5.1596 |
| 356 | 629.15 | 17792.2 | 1.824 | 5.850 | 7.674 | 1693.4 | 692.2 | 2385.6 | 1725.9 | 796.2 | 2522.1 | 3.8629 | 1.2654 | 5.1283 |
| 358 | 631.15 | 18229.0 | 1.858 | 5.448 | 7.306 | 1710.8 | 660.5 | 2371.4 | 1744.7 | 759.9 | 2504.6 | 3.8915 | 1.2037 | 5.0953 |
| 360 | 633.15 | 18675.1 | 1.896 | 5.044 | 6.940 | 1728.8 | 627.1 | 2355.8 | 1764.2 | 721.3 | 2485.4 | 3.9210 | 1.1390 | 5.0600 |
| 361 | 634.15 | 18901.7 | 1.917 | 4.840 | 6.757 | 1738.0 | 609.5 | 2347.5 | 1774.2 | 701.0 | 2475.2 | 3.9362 | 1.1052 | 5.0414 |
| 362 | 635.15 | 19130.7 | 1.939 | 4.634 | 6.573 | 1747.5 | 591.2 | 2338.7 | 1784.6 | 679.8 | 2464.4 | 3.9518 | 1.0702 | 5.0220 |
| 363 | 636.15 | 19362.1 | 1.963 | 4.425 | 6.388 | 1757.3 | 572.1 | 2329.3 | 1795.3 | 657.8 | 2453.0 | 3.9679 | 1.0338 | 5.0017 |
| 364 | 637.15 | 19596.1 | 1.988 | 4.213 | 6.201 | 1767.4 | 552.0 | 2319.4 | 1806.4 | 634.6 | 2440.9 | 3.9846 | 0.9958 | 4.9804 |
| 365 | 638.15 | 19832.6 | 2.016 | 3.996 | 6.012 | 1778.0 | 530.8 | 2308.8 | 1818.0 | 610.0 | 2428.0 | 4.0021 | 0.9558 | 4.9579 |
| 366 | 639.15 | 20071.6 | 2.046 | 3.772 | 5.819 | 1789.1 | 508.2 | 2297.3 | 1830.2 | 583.9 | 2414.1 | 4.0205 | 0.9134 | 4.9339 |
| 367 | 640.15 | 20313.2 | 2.080 | 3.540 | 5.621 | 1801.0 | 483.8 | 2284.8 | 1843.2 | 555.7 | 2399.0 | 4.0401 | 0.8680 | 4.9081 |
| 368 | 641.15 | 20557.5 | 2.118 | 3.298 | 5.416 | 1813.8 | 457.3 | 2271.1 | 1857.3 | 525.1 | 2382.4 | 4.0613 | 0.8189 | 4.8801 |
| 369 | 642.15 | 20804.4 | 2.162 | 3.039 | 5.201 | 1827.8 | 427.9 | 2255.7 | 1872.8 | 491.1 | 2363.9 | 4.0846 | 0.7647 | 4.8492 |
| 370 | 643.15 | 21054.0 | 2.214 | 2.759 | 4.973 | 1843.6 | 394.5 | 2238.1 | 1890.2 | 452.6 | 2342.8 | 4.1108 | 0.7036 | 4.8144 |
| 371 | 644.15 | 21306.4 | 2.278 | 2.446 | 4.723 | 1862.0 | 355.3 | 2217.3 | 1910.5 | 407.4 | 2317.9 | 4.1414 | 0.6324 | 4.7738 |
| 372 | 645.15 | 21561.6 | 2.364 | 2.075 | 4.439 | 1884.6 | 306.6 | 2191.2 | 1935.6 | 351.4 | 2287.0 | 4.1794 | 0.5446 | 4.7240 |
| 373 | 646.15 | 21819.7 | 2.496 | 1.588 | 4.084 | 1916.0 | 238.9 | 2154.9 | 1970.5 | 273.5 | 2244.0 | 4.2325 | 0.4233 | 4.6559 |
| 374 | 647.15 | 22080.5 | 2.843 | 0.623 | 3.466 | 1983.9 | 95.7 | 2079.7 | 2046.7 | 109.5 | 2156.2 | 4.3493 | 0.1692 | 4.5185 |
| 374.15 | 647.30 | 22120.0 | 3.170 | 0.000 | 3.170 | 2037.3 | 0.0 | 2037.3 | 2107.4 | 0.0 | 2107.4 | 4.4429 | 0.0000 | 4.4429 |

## Tabla F.2: Vapor sobrecalentado, unidades SI

| $P$/kPa ($t$ = / °C) | | liq. sat. | vap. sat. | TEMPERATURA: $t$ / °C (TEMPERATURA: $T$ / kelvins) 75 (348.15) | 100 (373.15) | 125 (398.15) | 150 (423.15) | 175 (448.15) | 200 (473.15) | 225 (498.15) | 250 (523.15) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | $V$ | 1.000 | 129200. | 160640. | 172180. | 183720. | 195270. | 206810. | 218350. | 229890. | 241430. |
| 1 | $U$ | 29.334 | 2385.2 | 2480.8 | 2516.4 | 2552.3 | 2588.5 | 2624.9 | 2661.7 | 2698.8 | 2736.3 |
| (6.98) | $H$ | 29.335 | 2514.4 | 2641.5 | 2688.6 | 2736.0 | 2783.7 | 2831.7 | 2880.1 | 2928.7 | 2977.7 |
| | $S$ | 0.1060 | 8.9767 | 9.3828 | 9.5136 | 9.6365 | 9.7527 | 9.8629 | 9.9679 | 10.0681 | 10.1641 |
| | $V$ | 1.010 | 14670. | 16030. | 17190. | 18350. | 19510. | 20660. | 21820. | 22980. | 24130. |
| 10 | $U$ | 191.822 | 2438.0 | 2479.7 | 2515.6 | 2551.6 | 2588.0 | 2624.5 | 2661.4 | 2698.6 | 2736.1 |
| (45.83) | $H$ | 191.832 | 2584.8 | 2640.0 | 2687.5 | 2735.2 | 2783.1 | 2831.2 | 2879.6 | 2928.4 | 2977.4 |
| | $S$ | 0.6493 | 8.1511 | 8.3168 | 8.4486 | 8.5722 | 8.6888 | 8.7994 | 8.9045 | 9.0049 | 9.1010 |
| | $V$ | 1.017 | 7649.8 | 8000.0 | 8584.7 | 9167.1 | 9748.0 | 10320. | 10900. | 11480. | 12060. |
| 20 | $U$ | 251.432 | 2456.9 | 2478.4 | 2514.6 | 2550.9 | 2587.4 | 2624.1 | 2661.0 | 2698.3 | 2735.8 |
| (60.09) | $H$ | 257.453 | 2609.9 | 2638.4 | 2686.3 | 2734.2 | 2782.3 | 2830.6 | 2879.2 | 2928.0 | 2977.1 |
| | $S$ | 0.8321 | 7.9094 | 7.9933 | 8.1261 | 8.2504 | 8.3676 | 8.4785 | 8.5839 | 8.6844 | 8.7806 |
| | $V$ | 1.022 | 5229.3 | 5322.0 | 5714.4 | 6104.6 | 6493.2 | 6880.8 | 7267.5 | 7653.8 | 8039.7 |
| 30 | $U$ | 289.271 | 2468.6 | 2477.1 | 2513.6 | 2550.2 | 2586.8 | 2623.6 | 2660.7 | 2698.0 | 2735.6 |
| (69.12) | $H$ | 289.302 | 2625.4 | 2636.8 | 2685.1 | 2733.3 | 2781.6 | 2830.0 | 2878.7 | 2927.6 | 2976.8 |
| | $S$ | 0.9441 | 7.7695 | 7.8024 | 7.9363 | 8.0614 | 8.1791 | 8.2903 | 8.3960 | 8.4967 | 8.5930 |
| | $V$ | 1.027 | 3993.4 | ..... | 4279.2 | 4573.3 | 4865.8 | 5157.2 | 5447.8 | 5738.0 | 6027.7 |
| 40 | $U$ | 317.609 | 2477.1 | ..... | 2512.6 | 2549.4 | 2586.2 | 26232 | 2660.3 | 2697.7 | 2735.4 |
| (75.89) | $H$ | 317.650 | 2636.9 | ..... | 2683.8 | 2732.3 | 2780.9 | 2829.5 | 2878.2 | 2927.2 | 2976.5 |
| | $S$ | 1.0261 | 7.6709 | ..... | 7.8009 | 7.9268 | 8.0450 | 8.1566 | 8.2624 | 8.3633 | 8.4598 |
| | $V$ | 1.030 | 3240.2 | ..... | 3418.1 | 3654.5 | 3889.3 | 4123.0 | 4356.0 | 4588.5 | 4820.5 |
| 50 | $U$ | 340.513 | 2484.0 | ..... | 2511.7 | 2548.6 | 2585.6 | 2622.7 | 2659.9 | 2697.4 | 2735 |
| (81.35) | $H$ | 340.564 | 2646.0 | ..... | 2682.6 | 2731.4 | 2780.1 | 2828.9 | 2877.7 | 2926.8 | 2976.1 |
| | $S$ | 1.0912 | 7.5947 | ..... | 7.6953 | 7.8219 | 7.9406 | 8.0526 | 8.1587 | 8.2598 | 8.3564 |
| | $V$ | 1.037 | 2216.9 | ..... | 2269.8 | 2429.4 | 2587.3 | 2744.2 | 2900.2 | 3055.8 | 3210.9 |
| 75 | $U$ | 384.374 | 2496.7 | ..... | 2509.2 | 2546.7 | 2584.2 | 2621.6 | 2659.0 | 2696.7 | 2734.5 |
| (91.79) | $H$ | 384.451 | 2663.0 | ..... | 2679.4 | 2728.9 | 2778.2 | 2827.4 | 2876.6 | 2925.8 | 2975.3 |
| | $S$ | 1.2131 | 7.4570 | ..... | 7.5014 | 7.6300 | 7.7500 | 7.8629 | 7.9697 | 8.0712 | 8.1681 |
| | $V$ | 1.043 | 1693.7 | ..... | 1695.5 | 1816.7 | 1936.3 | 2054.7 | 2172.3 | 2289.4 | 2406.1 |
| 100 | $U$ | 417.406 | 2506.1 | ..... | 2506.6 | 2544.8 | 2582.7 | 2620.4 | 2658.1 | 2695.9 | 2733.9 |
| (99.63) | $H$ | 417.511 | 2675.4 | ..... | 2676.2 | 2726.5 | 2776.3 | 2825.9 | 2875.4 | 2924.9 | 2974.5 |
| | $S$ | 1.3027 | 7.3598 | ..... | 7.3618 | 7.4923 | 7.6137 | 7.7275 | 7.8349 | 7.9369 | 8.0342 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *V* | 1.044 | 1673.0 | ..... | 1673.0 | 1792.7 | 1910.7 | 2027.7 | 2143.8 | 2259.3 | 2374.5 |
| 101.325 | *U* | 418.959 | 2506.5 | ..... | 2506.5 | 2544.7 | 2582.6 | 2620.4 | 2658.1 | 2695.9 | 2733.9 |
| (100.00) | *H* | 419.064 | 2676.0 | ..... | 2676.0 | 2726.4 | 2776.2 | 2825.8 | 2875.3 | 2924.8 | 2974.5 |
| | *S* | 1.3069 | 7.3554 | ..... | 7.3554 | 7.4860 | 7.6075 | 7.7213 | 7.8288 | 7.9308 | 8.0280 |
| | *V* | 1.049 | 1374.6 | ..... | ..... | 1449.1 | 1545.6 | 1641.0 | 1735.6 | 1829.6 | 1923.2 |
| 125 | *U* | 444.224 | 2513.4 | ..... | ..... | 2542.9 | 2581.2 | 2619.3 | 2657.2 | 2695.2 | 2733.3 |
| (105.99) | *H* | 444.356 | 2685.2 | ..... | ..... | 2724.0 | 2774.4 | 2824.4 | 2874.2 | 2923.9 | 2973.7 |
| | *S* | 1.3740 | 7.2847 | ..... | ..... | 7.3844 | 7.5072 | 7.6219 | 7.7300 | 7.8324 | 7.9300 |
| | *V* | 1.053 | 1159.0 | ..... | ..... | 1204.0 | 1285.2 | 1365.2 | 1444.4 | 1523.0 | 1601.3 |
| 150 | *U* | 466.968 | 2519.5 | ..... | ..... | 2540.9 | 2579.7 | 2618.1 | 2656.3 | 2694.4 | 2732.7 |
| (111.37) | *H* | 467.126 | 2693.4 | ..... | ..... | 2721.5 | 2772.5 | 2822.9 | 2872.9 | 2922.9 | 2972.9 |
| | *S* | 1.4336 | 7.2234 | ..... | ..... | 7.2953 | 7.4194 | 7.5352 | 7.6439 | 7.7468 | 7.8447 |
| | *V* | 1.057 | 1003.34 | ..... | ..... | 1028.8 | 1099.1 | 1168.2 | 1236.4 | 1304.1 | 1371.3 |
| 175 | *U* | 486.815 | 2524.7 | ..... | ..... | 2538.9 | 2578.2 | 2616.9 | 2655.3 | 2693.7 | 2732.1 |
| (116.06) | *H* | 487.000 | 2700.3 | ..... | ..... | 2719.0 | 2770.5 | 2821.3 | 2871.7 | 2921.9 | 2972.0 |
| | *S* | 1.4849 | 7.1716 | ..... | ..... | 7.2191 | 7.3447 | 7.4614 | 7.5708 | 7.6741 | 7.7724 |
| | *V* | 1.061 | 885.44 | ..... | ..... | 897.47 | 959.54 | 1020.4 | 1080.4 | 1139.8 | 1198.9 |
| 200 | *U* | 504.489 | 2529.2 | ..... | ..... | 2536.9 | 2576.6 | 2615.7 | 2654.4 | 2692.9 | 2731.4 |
| (120.23) | *H* | 504.701 | 2706.3 | ..... | ..... | 2716.4 | 2768.5 | 2819.8 | 2870.5 | 2920.9 | 2971.2 |
| | *S* | 1.5301 | 7.1268 | ..... | ..... | 7.1523 | 7.2794 | 7.3971 | 7.5072 | 7.6110 | 7.7096 |
| | *V* | 1.064 | 792.97 | ..... | ..... | 795.25 | 850.97 | 905.44 | 959.06 | 1012.1 | 1064.7 |
| 225 | *U* | 520.465 | 2533.2 | ..... | ..... | 2534.8 | 2575.1 | 2614.5 | 2653.5 | 2692.2 | 2730.8 |
| (123.99) | *H* | 520.705 | 2711.6 | ..... | ..... | 2713.8 | 2766.5 | 2818.2 | 2869.3 | 2919.9 | 2970.4 |
| | *S* | 1.5705 | 7.0873 | ..... | ..... | 7.0928 | 7.2213 | 7.3400 | 7.4508 | 7.5551 | 7.6540 |
| | *V* | 1.068 | 718.44 | ..... | ..... | ..... | 764.09 | 813.47 | 861.98 | 909.91 | 957.41 |
| 250 | *U* | 535.077 | 2536.8 | ..... | ..... | ..... | 2573.5 | 2613.3 | 2652.5 | 2691.4 | 2730.2 |
| (127.43) | *H* | 535.343 | 2716.4 | ..... | ..... | ..... | 2764.5 | 2816.7 | 2868.0 | 2918.9 | 2969.6 |
| | *S* | 1.6071 | 7.0520 | ..... | ..... | ..... | 7.1689 | 7.2886 | 7.4001 | 7.5050 | 7.6042 |
| | *V* | 1.071 | 657.04 | ..... | ..... | ..... | 693.00 | 738.21 | 782.55 | 826.29 | 869.61 |
| 275 | *U* | 548.564 | 2540.0 | ..... | ..... | ..... | 2571.9 | 2612.1 | 2651.6 | 2690.7 | 2729.6 |
| (130.60) | *H* | 548.858 | 2720.7 | ..... | ..... | ..... | 2762.5 | 2815.1 | 2866.8 | 2917.9 | 2968.7 |
| | *S* | 1.6407 | 7.0201 | ..... | ..... | ..... | 7.1211 | 7.2419 | 7.3541 | 7.4594 | 7.5590 |
| | *V* | 1.073 | 605.56 | ..... | ..... | ..... | 633.74 | 675.49 | 716.35 | 756.60 | 796.44 |
| 300 | *U* | 561.107 | 2543.0 | ..... | ..... | ..... | 2570.3 | 2610.8 | 2650.6 | 2689.9 | 2729.0 |
| (133.54) | *H* | 561.429 | 2724.7 | ..... | ..... | ..... | 2760.4 | 2813.5 | 2865.5 | 2916.9 | 2967.9 |
| | *S* | 1.6716 | 6.9909 | ..... | ..... | ..... | 7.0771 | 7.1990 | 7.3119 | 7.4177 | 7.5176 |

## Tabla F.2. Vapor sobrecalentado, unidades SI (*Continúa*)

| | | | | TEMPERATURA: $t$ °C (TEMPERATURA: $T$ kelvins) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| $P$/kPa | | liq. | vap. | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 |
| ($t^{sat}$/ °C) | | sat. | sat. | (573.15) | (623.15) | (673.15) | (723.15) | (773.15) | (823.15) | (873.15) | (923.15) |
| | $V$ | 1.000 | 129200. | 264500. | 287580. | 310660. | 333730. | 356810. | 379880. | 402960. | 426040. |
| 1 | $U$ | 29.334 | 2385.2 | 2812.3 | 2889.9 | 2969.1 | 3049.9 | 3132.4 | 3216.7 | 3302.6 | 3390.3 |
| ( 6.98) | $H$ | 29.335 | 2514.4 | 3076.8 | 3177.5 | 3279.7 | 3383.6 | 3489.2 | 3596.5 | 3705.6 | 3816.4 |
| | $S$ | 0.1060 | 8.9767 | 10.3450 | 10.5133 | 10.6711 | 10.8200 | 10.9612 | 11.0957 | 11.2243 | 11.3476 |
| | $V$ | 1.010 | 14670. | 26440. | 28750. | 31060. | 33370. | 35670. | 37980. | 40290. | 42600. |
| 10 | $U$ | 191.822 | 2438.0 | 2812.2 | 2889.8 | 2969.0 | 3049.8 | 3132.3 | 3216.6 | 3302.6 | 3390.3 |
| (45.83) | $H$ | 191.832 | 2584.8 | 3076.6 | 3177.3 | 3279.6 | 3383.5 | 3489.1 | 3596.5 | 3705.5 | 3816.3 |
| | $S$ | 0.6493 | 8.1511 | 9.2820 | 9.4504 | 9.6083 | 9.7572 | 9.8984 | 10.0329 | 10.1616 | 10.2849 |
| | $V$ | 1.017 | 7649.8 | 13210. | 14370. | 15520. | 16680. | 17830. | 18990. | 20140. | 21300. |
| 20 | $U$ | 251.432 | 2456.9 | 2812.0 | 2889.6 | 2968.9 | 3049.7 | 3132.3 | 3216.5 | 3302.5 | 3390.2 |
| (60.09) | $H$ | 251.453 | 2609.9 | 3076.4 | 3177.1 | 3279.4 | 3383.4 | 3489.0 | 3596.4 | 3705.4 | 3816.2 |
| | $S$ | 0.8321 | 7.9094 | 8.9618 | 9.1303 | 9.2882 | 9.4372 | 9.5784 | 9.7130 | 9.8416 | 9.9650 |
| | $V$ | 1.022 | 5229.3 | 8810.8 | 9581.2 | 10350. | 11120. | 11890. | 12660. | 13430. | 14190. |
| 30 | $U$ | 289.271 | 2468.6 | 2811.8 | 2889.5 | 2968.7 | 3049.6 | 3132.2 | 3216.5 | 3302.5 | 3390.2 |
| (69.12) | $H$ | 289.302 | 2625.4 | 3076.1 | 3176.9 | 3279.3 | 3383.3 | 3488.9 | 3596.3 | 3705.4 | 3816.2 |
| | $S$ | 0.9441 | 7.7695 | 8.7744 | 8.9430 | 9.1010 | 9.2499 | 9.3912 | 9.5257 | 9.6544 | 9.7778 |
| | $V$ | 1.027 | 3993.4 | 6606.5 | 7184.6 | 7762.5 | 8340.1 | 8917.6 | 9494.9 | 10070. | 10640. |
| 40 | $U$ | 317.609 | 2477.1 | 2811.6 | 2889.4 | 2968.6 | 3049.5 | 3132.1 | 3216.4 | 3302.4 | 3390.1 |
| (75.89) | $H$ | 317.650 | 2636.9 | 3075.9 | 3176.8 | 3279.1 | 3383.1 | 3488.8 | 3596.2 | 3705.3 | 3816.1 |
| | $S$ | 1.0261 | 7.6709 | 8.6413 | 8.8100 | 8.9680 | 9.1170 | 9.2583 | 9.3929 | 9.5216 | 9.6450 |
| | $V$ | 1.030 | 3240.2 | 5283.9 | 5746.7 | 6209.1 | 6671.4 | 7133.5 | 7595.5 | 8057.4 | 8519.2 |
| 50 | $U$ | 340.513 | 2484.0 | 2811.5 | 2889.2 | 2968.5 | 3049.4 | 3132.0 | 3216.3 | 3302.3 | 3390.1 |
| (81.35) | $H$ | 340.564 | 2646.0 | 3075.7 | 3176.6 | 3279.0 | 3383.0 | 3488.7 | 3596.1 | 3705.2 | 3816.0 |
| | $S$ | 1.0912 | 7.5947 | 8.5380 | 8.7068 | 8.8649 | 9.0139 | 9.1552 | 9.2898 | 9.4185 | 9.5419 |
| | $V$ | 1.037 | 2216.9 | 3520.5 | 3829.4 | 4138.0 | 4446.4 | 4754.7 | 5062.8 | 5370.9 | 5678.9 |
| 75 | $U$ | 384.374 | 2496.7 | 2811.0 | 2888.9 | 2968.2 | 3049.2 | 3131.8 | 3216.1 | 3302.2 | 3389.9 |
| (91.79) | $H$ | 384.451 | 2663.0 | 3075.1 | 3176.1 | 3278.6 | 3382.7 | 3488.4 | 3595.8 | 3705.0 | 3815.9 |
| | $S$ | 1.2131 | 7.4570 | 8.3502 | 8.5191 | 8.6773 | 8.8265 | 8.9678 | 9.1025 | 9.2312 | 9.3546 |
| | $V$ | 1.043 | 1693.7 | 2638.7 | 2870.8 | 3102.5 | 3334.0 | 3565.3 | 3796.5 | 4027.7 | 4258.8 |
| 100 | $U$ | 417.406 | 2506.1 | 2810.6 | 2888.6 | 2968.0 | 3049.0 | 3131.6 | 3216.0 | 3302.0 | 3389.8 |
| (99.63) | $H$ | 417.511 | 2675.4 | 3074.5 | 3175.6 | 3278.2 | 3382.4 | 3488.1 | 3595.6 | 3704.8 | 3815.7 |
| | $S$ | 1.3027 | 7.3598 | 8.2166 | 8.3858 | 8.5442 | 8.6934 | 8.8348 | 8.9695 | 9.0982 | 9.2217 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | V | 1.044 | 1673.0 | 2604.2 | 2833.2 | 3061.9 | 3290.3 | 3518.7 | 3746.9 | 3975.0 | 4203.1 |
| 101.325 | U | 418.959 | 2506.5 | 2810.6 | 2888.5 | 2968.0 | 3048.9 | 3131.6 | 3215.9 | 3302.0 | 3389.8 |
| (100.00) | H | 419.064 | 2676.0 | 3074.4 | 3175.6 | 3278.2 | 3382.3 | 3488.1 | 3595.6 | 3704.8 | 3815.7 |
| | S | 1.3069 | 7.3554 | 8.2105 | 8.3797 | 8.5381 | 8.6873 | 8.8287 | 8.9634 | 9.0922 | 9.2156 |
| | V | 1.049 | 1374.6 | 2109.7 | 2295.6 | 2481.2 | 2666.5 | 2851.7 | 3036.8 | 3221.8 | 3406.7 |
| 125 | U | 444.224 | 2513.4 | 2810.2 | 2888.2 | 2967.7 | 3048.7 | 3131.4 | 3215.8 | 3301.9 | 3389.7 |
| (105.99) | H | 444.356 | 2685.2 | 3073.9 | 3175.2 | 3277.8 | 3382.0 | 3487.9 | 3595.4 | 3704.6 | 3815.5 |
| | S | 1.3740 | 7.2847 | 8.1129 | 8.2823 | 8.4408 | 8.5901 | 8.7316 | 8.8663 | 8.9951 | 9.1186 |
| | V | 1.053 | 1159.0 | 1757.0 | 1912.2 | 2066.9 | 2221.5 | 2375.9 | 2530.2 | 2684.5 | 2838.6 |
| 150 | U | 466.968 | 2519.5 | 2809.7 | 2887.9 | 2967.4 | 3048.5 | 3131.2 | 3215.6 | 3301.7 | 3389.5 |
| (111.37) | H | 467.126 | 2693.4 | 3073.3 | 3174.7 | 3277.5 | 3381.7 | 3487.6 | 3595.1 | 3704.4 | 3815.3 |
| | S | 1.4336 | 7.2234 | 8.0280 | 8.1976 | 8.3562 | 8.5056 | 8.6472 | 8.7819 | 8.9108 | 9.0343 |
| | V | 1.057 | 1003.34 | 1505.1 | 1638.3 | 1771.1 | 1903.7 | 2036.1 | 2168.4 | 2300.7 | 2432.9 |
| 175 | U | 486.815 | 2524.7 | 2809.3 | 2887.5 | 2967.1 | 3048.3 | 3131.0 | 3215.4 | 3301.6 | 3389.4 |
| (116.06) | H | 487.000 | 2700.3 | 3072.7 | 3174.2 | 3277.1 | 3381.4 | 3487.3 | 3594.9 | 3704.2 | 3815.1 |
| | S | 1.4849 | 7.1716 | 7.9561 | 8.1259 | 8.2847 | 8.4341 | 8.5758 | 8.7106 | 8.8394 | 8.9630 |
| | V | 1.061 | 885.44 | 1316.2 | 1432.8 | 1549.2 | 1665.3 | 1781.2 | 1897.1 | 2012.9 | 2128.6 |
| 200 | U | 504.489 | 2529.2 | 2808.8 | 2887.2 | 2966.9 | 3048.0 | 3130.8 | 3215.3 | 3301.4 | 3389.2 |
| (120.23) | H | 504.701 | 2706.3 | 3072.1 | 3173.8 | 3276.7 | 3381.1 | 3487.0 | 3594.7 | 3704.0 | 3815.0 |
| | S | 1.5301 | 7.1268 | 7.8937 | 8.0638 | 8.2226 | 8.3722 | 8.5139 | 8.6487 | 8.7776 | 8.9012 |
| | V | 1.064 | 792.97 | 1169.2 | 1273.1 | 1376.6 | 1479.9 | 1583.0 | 1686.0 | 1789.0 | 1891.9 |
| 225 | U | 520.465 | 2533.2 | 2808.4 | 2886.9 | 2966.6 | 3047.8 | 3130.6 | 3215.1 | 3301.2 | 3389.1 |
| (123.99) | H | 520.705 | 2711.6 | 3071.5 | 3173.3 | 3276.3 | 3380.8 | 3486.8 | 3594.4 | 3703.8 | 3814.8 |
| | S | 1.5705 | 7.0873 | 7.8385 | 8.0088 | 8.1679 | 8.3175 | 8.4593 | 8.5942 | 8.7231 | 8.8467 |
| | V | 1.068 | 718.44 | 1051.6 | 1145.2 | 1238.5 | 1331.5 | 1424.4 | 1517.2 | 1609.9 | 1702.5 |
| 250 | U | 535.077 | 2536.8 | 2808.0 | 2886.5 | 2966.3 | 3047.6 | 3130.4 | 3214.9 | 3301.1 | 3389.0 |
| (127.43) | H | 535.343 | 2716.4 | 3070.9 | 3172.8 | 3275.9 | 3380.4 | 3486.5 | 3594.2 | 3703.6 | 3814.6 |
| | S | 1.6071 | 7.0520 | 7.7891 | 7.9597 | 8.1188 | 8.2686 | 8.4104 | 8.5453 | 8.6743 | 8.7980 |
| | V | 1.071 | 657.04 | 955.45 | 1040.7 | 1125.5 | 1210.2 | 1294.7 | 1379.0 | 1463.3 | 1547.6 |
| 275 | U | 548.564 | 2540.0 | 2807.5 | 2886.2 | 2966.0 | 3047.3 | 3130.2 | 3214.7 | 3300.9 | 3388.8 |
| (130.60) | H | 548.858 | 2720.7 | 3070.3 | 3172.4 | 3275.5 | 3380.1 | 3486.2 | 3594.0 | 3703.4 | 3814.4 |
| | S | 1.6407 | 7.0201 | 7.7444 | 7.9151 | 8.0744 | 8.2243 | 8.3661 | 8.5011 | 8.6301 | 8.7538 |
| | V | 1.073 | 605.56 | 875.29 | 953.52 | 1031.4 | 1109.0 | 1186.5 | 1263.9 | 1341.2 | 1418.5 |
| 300 | U | 561.107 | 2543.0 | 2807.1 | 2885.8 | 2965.8 | 3047.1 | 3130.0 | 3214.5 | 3300.8 | 3388.7 |
| (133.54) | H | 561.429 | 2724.7 | 3069.7 | 3171.9 | 3275.2 | 3379.8 | 3486.0 | 3593.7 | 3703.2 | 3814.2 |
| | S | 1.6716 | 6.9909 | 7.7034 | 7.8744 | 8.0338 | 8.1838 | 8.3257 | 8.4608 | 8.5898 | 8.7135 |

## Tabla F.2. Vapor sobrecalentado, unidades SI (*Continúa*)

| | | | | TEMPERATURA : $t$ °C (TEMPERATURA: $T$ kelvins) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| $P$/kPa | | liq. | vap. | 150 | 175 | 200 | 220 | 240 | 260 | 280 | 300 |
| ($t$ = / °C) | | sat. | sat. | (423.15) | (448.15) | (473.15) | (493.15) | (513.15) | (533.15) | (553.15) | (573.15) |
| | $V$ | 1.076 | 561.75 | 583.58 | 622.41 | 660.33 | 690.22 | 719.81 | 749.18 | 778.39 | 807.47 |
| 325 | $U$ | 572.847 | 2545.7 | 2568.7 | 2609.6 | 2649.6 | 2681.2 | 2712.7 | 2744.0 | 2775.3 | 2806.6 |
| (136.29) | $H$ | 573.197 | 2728.3 | 2758.4 | 2811.9 | 2864.2 | 2905.6 | 2946.6 | 2987.5 | 3028.2 | 3069.0 |
| | $S$ | 1.7004 | 6.9640 | 7.0363 | 7.1592 | 7.2729 | 7.3585 | 7.4400 | 7.5181 | 7.5933 | 7.6657 |
| | $V$ | 1.079 | 524.00 | 540.58 | 576.90 | 612.31 | 640.18 | 667.75 | 695.09 | 722.27 | 749.33 |
| 350 | $U$ | 583.892 | 2548.2 | 2567.1 | 2608.3 | 2648.6 | 2680.4 | 2712.0 | 2743.4 | 2774.8 | 2806.2 |
| (138.87) | $H$ | 584.270 | 2731.6 | 2756.3 | 2810.3 | 2863.0 | 2904.5 | 2945.7 | 2986.7 | 3027.6 | 3068.4 |
| | $S$ | 1.7273 | 6.9392 | 6.9982 | 7.1222 | 7.2366 | 7.3226 | 7.4045 | 7.4828 | 7.5581 | 7.6307 |
| | $V$ | 1.081 | 491.13 | 503.29 | 537.46 | 570.69 | 596.81 | 622.62 | 648.22 | 673.64 | 698.94 |
| 375 | $U$ | 594.332 | 2550.6 | 2565.4 | 2607.1 | 2647.7 | 2679.6 | 2711.3 | 2742.8 | 2774.3 | 2805.7 |
| (141.31) | $H$ | 594.737 | 2734.7 | 2754.1 | 2808.6 | 2861.7 | 2903.4 | 2944.8 | 2985.9 | 3026.9 | 3067.8 |
| | $S$ | 1.7526 | 6.9160 | 6.9624 | 7.0875 | 7.2027 | 7.2891 | 7.3713 | 7.4499 | 7.5254 | 7.5981 |
| | $V$ | 1.084 | 462.22 | 470.66 | 502.93 | 534.26 | 558.85 | 583.14 | 607.20 | 631.09 | 654.85 |
| 400 | $U$ | 604.237 | 2552.7 | 2563.7 | 2605.8 | 2646.7 | 2678.8 | 2710.6 | 2742.2 | 2773.7 | 2805.3 |
| (143.62) | $H$ | 604.670 | 2737.6 | 2752.0 | 2807.0 | 2860.4 | 2902.3 | 2943.9 | 2985.1 | 3026.2 | 3067.2 |
| | $S$ | 1.7764 | 6.8943 | 6.9285 | 7.0548 | 7.1708 | 7.2576 | 7.3402 | 7.4190 | 7.4947 | 7.5675 |
| | $V$ | 1.086 | 436.61 | 441.85 | 472.47 | 502.12 | 525.36 | 548.30 | 571.01 | 593.54 | 615.95 |
| 425 | $U$ | 613.667 | 2554.8 | 2562.0 | 2604.5 | 2645.7 | 2678.0 | 2709.9 | 2741.6 | 2773.2 | 2804.8 |
| (145.82) | $H$ | 614.128 | 2740.3 | 2749.8 | 2805.3 | 2859.1 | 2901.2 | 2942.9 | 2984.3 | 3025.5 | 3066.6 |
| | $S$ | 1.7990 | 6.8739 | 6.8965 | 7.0239 | 7.1407 | 7.2280 | 7.3108 | 7.3899 | 7.4657 | 7.5388 |
| | $V$ | 1.088 | 413.75 | 416.24 | 445.38 | 473.55 | 495.59 | 517.33 | 538.83 | 560.17 | 581.37 |
| 450 | $U$ | 622.672 | 2556.7 | 2560.3 | 2603.2 | 2644.7 | 2677.1 | 2709.2 | 2741.0 | 2772.7 | 2804.4 |
| (147.92) | $H$ | 623.162 | 2742.9 | 2747.7 | 2803.7 | 2857.8 | 2900.2 | 2942.0 | 2983.5 | 3024.8 | 3066.0 |
| | $S$ | 1.8204 | 6.8547 | 6.8660 | 6.9946 | 7.1121 | 7.1999 | 7.2831 | 7.3624 | 7.4384 | 7.5116 |
| | $V$ | 1.091 | 393.22 | 393.31 | 421.14 | 447.97 | 468.95 | 489.62 | 510.05 | 530.30 | 550.43 |
| 475 | $U$ | 631.294 | 2558.5 | 2558.6 | 2601.9 | 2643.7 | 2676.3 | 2708.5 | 2740.4 | 2772.2 | 2803.9 |
| (149.92) | $H$ | 631.812 | 2745.3 | 2745.5 | 2802.0 | 2856.5 | 2899.1 | 2941.1 | 2982.7 | 3024.1 | 3065.4 |
| | $S$ | 1.8408 | 6.8365 | 6.8369 | 6.9667 | 7.0850 | 7.1732 | 7.2567 | 7.3363 | 7.4125 | 7.4858 |
| | $V$ | 1.093 | 374.68 | ..... | 399.31 | 424.96 | 444.97 | 464.67 | 484.14 | 503.43 | 522.58 |
| 500 | $U$ | 639.569 | 2560.2 | ..... | 2600.6 | 2642.7 | 2675.5 | 2707.8 | 2739.8 | 2771.7 | 2803.5 |
| (151.84) | $H$ | 640.116 | 2747.5 | ..... | 2800.3 | 2855.1 | 2898.0 | 2940.1 | 2981.9 | 3023.4 | 3064.8 |
| | $S$ | 1.8604 | 6.8192 | ..... | 6.9400 | 7.0592 | 7.1478 | 7.2317 | 7.3115 | 7.3879 | 7.4614 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *V* | 1.095 | 357.84 | ..... | 379.56 | 404.13 | 423.28 | 442.11 | 460.70 | 479.11 | 497.38 |
| 525 | *U* | 647.528 | 2561.8 | ..... | 2599.3 | 2641.6 | 2674.6 | 2707.1 | 2739.2 | 2771.2 | 2803.0 |
| (153.69) | *H* | 648.103 | 2749.7 | ..... | 2798.6 | 2853.8 | 2896.8 | 2939.2 | 2981.1 | 3022.7 | 3064.1 |
| | *S* | 1.8790 | 6.8027 | ..... | 6.9145 | 7.0345 | 7.1236 | 7.2078 | 7.2879 | 7.3645 | 7.4381 |
| | *V* | 1.097 | 342.48 | ..... | 361.60 | 385.19 | 403.55 | 421.59 | 439.38 | 457.00 | 474.48 |
| 550 | *U* | 655.199 | 2563.3 | ..... | 2598.0 | 2640.6 | 2673.8 | 2706.4 | 2738.6 | 2770.6 | 2802.6 |
| (155.47) | *H* | 655.802 | 2751.7 | ..... | 2796.8 | 2852.5 | 2895.7 | 2938.3 | 2980.3 | 3022.0 | 3063.5 |
| | *S* | 1.8970 | 6.7870 | ..... | 6.8900 | 7.0108 | 7.1004 | 7.1849 | 7.2653 | 7.3421 | 7.4158 |
| | *V* | 1.099 | 328.41 | ..... | 345.20 | 367.90 | 385.54 | 402.85 | 419.92 | 436.81 | 453.56 |
| 575 | *U* | 662.603 | 2564.8 | ..... | 2596.6 | 2639.6 | 2672.9 | 2705.7 | 2738.0 | 2770.1 | 2802.1 |
| (157.18) | *H* | 663.235 | 2753.6 | ..... | 2795.1 | 2851.1 | 2894.6 | 2937.3 | 2979.5 | 3021.3 | 3062.9 |
| | *S* | 1.9142 | 6.7720 | ..... | 6.8664 | 6.9880 | 7.0781 | 7.1630 | 7.2436 | 7.3206 | 7.3945 |
| | *V* | 1.101 | 315.47 | ..... | 330.16 | 352.04 | 369.03 | 385.68 | 402.08 | 418.31 | 434.39 |
| 600 | *U* | 669.762 | 2566.2 | ..... | 2595.3 | 2638.5 | 2672.1 | 2705.0 | 2737.4 | 2769.6 | 2801.6 |
| (158.84) | *H* | 670.423 | 2755.5 | ..... | 2793.3 | 2849.7 | 2893.5 | 2936.4 | 2978.7 | 3020.6 | 3062.3 |
| | *S* | 1.9308 | 6.7575 | ..... | 6.8437 | 6.9662 | 7.0567 | 7.1419 | 7.2228 | 7.3000 | 7.3740 |
| | *V* | 1.103 | 303.54 | ..... | 316.31 | 337.45 | 353.83 | 369.87 | 385.67 | 401.28 | 416.75 |
| 625 | *U* | 676.695 | 2567.5 | ..... | 2593.9 | 2637.5 | 2671.2 | 2704.2 | 2736.8 | 2769.1 | 2801.2 |
| (160.44) | *H* | 677.384 | 2757.2 | ..... | 2791.6 | 2848.4 | 2892.3 | 2935.4 | 2977.8 | 3019.9 | 3061.7 |
| | *S* | 1.9469 | 6.7437 | ..... | 6.8217 | 6.9451 | 7.0361 | 7.1217 | 7.2028 | 7.2802 | 7.3544 |
| | *V* | 1.105 | 292.49 | ..... | 303.53 | 323.98 | 339.80 | 355.29 | 370.52 | 385.56 | 400.47 |
| 650 | *U* | 683.417 | 2568.7 | ..... | 2592.5 | 2636.4 | 2670.3 | 2703.5 | 2736.2 | 2768.5 | 2800.7 |
| (161.99) | *H* | 684.135 | 2758.9 | ..... | 2789.8 | 2847.0 | 2891.2 | 2934.4 | 2977.0 | 3019.2 | 3061.0 |
| | *S* | 1.9623 | 6.7304 | ..... | 6.8004 | 6.9247 | 7.0162 | 7.1021 | 7.1835 | 7.2611 | 7.3355 |
| | *V* | 1.106 | 282.23 | ..... | 291.69 | 311.51 | 326.81 | 341.78 | 356.49 | 371.01 | 385.39 |
| 675 | *U* | 689.943 | 2570.0 | ..... | 2591.1 | 2635.4 | 2669.5 | 2702.8 | 2735.6 | 2768.0 | 2800.3 |
| (163.49) | *H* | 690.689 | 2760.5 | ..... | 2788.0 | 2845.6 | 2890.1 | 2933.5 | 2976.2 | 3018.5 | 3060.4 |
| | *S* | 1.9773 | 6.7176 | ..... | 6.7798 | 6.9050 | 6.9970 | 7.0833 | 7.1650 | 7.2428 | 7.3173 |
| | *V* | 1.108 | 272.68 | ..... | 280.69 | 299.92 | 314.75 | 329.23 | 343.46 | 357.50 | 371.39 |
| 700 | *U* | 696.285 | 2571.1 | ..... | 2589.7 | 2634.3 | 2668.6 | 2702.1 | 2735.0 | 2767.5 | 2799.8 |
| (164.96) | *H* | 697.061 | 2762.0 | ..... | 2786.2 | 2844.2 | 2888.9 | 2932.5 | 2975.4 | 3017.7 | 3059.8 |
| | *S* | 1.9918 | 6.7052 | ..... | 6.7598 | 6.8859 | 6.9784 | 7.0651 | 7.1470 | 7.2250 | 7.2997 |
| | *V* | 1.110 | 263.77 | ..... | 270.45 | 289.13 | 303.51 | 317.55 | 331.33 | 344.92 | 358.36 |
| 725 | *U* | 702.457 | 2572.2 | ..... | 2588.3 | 2633.2 | 2667.7 | 2701.3 | 2734.3 | 2767.0 | 2799.3 |
| (166.38) | *H* | 703.261 | 2763.4 | ..... | 2784.4 | 2842.8 | 2887.7 | 2931.5 | 2974.6 | 3017.0 | 3059.1 |
| | *S* | 2.0059 | 6.6932 | ..... | 6.7404 | 6.8673 | 6.9604 | 7.0474 | 7.1296 | 7.2078 | 7.2827 |

## Tabla F.2. Vapor sobrecalentado, unidades SI (*Continúa*)

| | | | | TEMPERATURA: $t$ °C (TEMPERATURA: $T$ kelvins) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| $P$/kPa | | liq. | vap. | 325 | 350 | 400 | 450 | 500 | 550 | 600 | 650 |
| ($t^{sat}$/°C) | | sat. | sat. | (598.15) | (623.15) | (673.15) | (723.15) | (773.15) | (823.15) | (873.15) | (923.15) |
| | *V* | 1.076 | 561.75 | 843.68 | 879.78 | 951.73 | 1023.5 | 1095.0 | 1166.5 | 1237.9 | 1309.2 |
| 325 | *U* | 572.847 | 2545.7 | 2845.9 | 2885.5 | 2965.5 | 3046.9 | 3129.8 | 3214.4 | 3300.6 | 3388.6 |
| (136.29) | *H* | 573.197 | 2728.3 | 3120.1 | 3171.4 | 3274.8 | 3379.5 | 3485.7 | 3593.5 | 3702.9 | 3814.1 |
| | *S* | 1.7004 | 6.9640 | 7.7530 | 7.8369 | 7.9965 | 8.1465 | 8.2885 | 8.4236 | 8.5527 | 8.6764 |
| | *V* | 1.079 | 524.00 | 783.01 | 816.57 | 883.45 | 950.11 | 1016.6 | 1083.0 | 1149.3 | 1215.6 |
| 350 | *U* | 583.892 | 2548.2 | 2845.6 | 2885.1 | 2965.2 | 3046.6 | 3129.6 | 3214.2 | 3300.5 | 3388.4 |
| (138.87) | *H* | 584.270 | 2731.6 | 3119.6 | 3170.9 | 3274.4 | 3379.2 | 3485.4 | 3593.3 | 3702.7 | 3813.9 |
| | *S* | 1.7273 | 6.9392 | 7.7181 | 7.8022 | 7.9619 | 8.1120 | 8.2540 | 8.3892 | 8.5183 | 8.6421 |
| | *V* | 1.081 | 491.13 | 730.42 | 761.79 | 824.28 | 886.54 | 948.66 | 1010.7 | 1072.6 | 1134.5 |
| 375 | *U* | 594.332 | 2550.6 | 2845.2 | 2884.8 | 2964.9 | 3046.4 | 3129.4 | 3214.0 | 3300.3 | 3388.3 |
| (141.31) | *H* | 594.737 | 2734.7 | 3119.1 | 3170.5 | 3274.0 | 3378.8 | 3485.1 | 3593.0 | 3702.5 | 3813.7 |
| | *S* | 1.7526 | 6.9160 | 7.6856 | 7.7698 | 7.9296 | 8.0798 | 8.2219 | 8.3571 | 8.4863 | 8.6101 |
| | *V* | 1.084 | 462.22 | 684.41 | 713.85 | 772.50 | 830.92 | 889.19 | 947.35 | 1005.4 | 1063.4 |
| 400 | *U* | 604.237 | 2552.7 | 2844.8 | 2884.5 | 2964.6 | 3046.2 | 3129.2 | 3213.8 | 3300.2 | 3388.2 |
| (143.62) | *H* | 604.670 | 2737.6 | 3118.5 | 3170.0 | 3273.6 | 3378.5 | 3484.9 | 3592.8 | 3702.3 | 3813.5 |
| | *S* | 1.7764 | 6.8943 | 7.6552 | 7.7395 | 7.8994 | 8.0497 | 8.1919 | 8.3271 | 8.4563 | 8.5802 |
| | *V* | 1.086 | 436.61 | 643.81 | 671.56 | 726.81 | 781.84 | 836.72 | 891.49 | 946.17 | 1000.8 |
| 425 | *U* | 613.667 | 2554.8 | 2844.4 | 2884.1 | 2964.4 | 3045.9 | 3129.0 | 3213.7 | 3300.0 | 3388.0 |
| (145.82) | *H* | 614.128 | 2740.3 | 3118.0 | 3169.5 | 3273.3 | 3378.2 | 3484.6 | 3592.5 | 3702.1 | 3813.4 |
| | *S* | 1.7990 | 6.8739 | 7.6265 | 7.7109 | 7.8710 | 8.0214 | 8.1636 | 8.2989 | 8.4282 | 8.5520 |
| | *V* | 1.088 | 413.75 | 607.73 | 633.97 | 686.20 | 738.21 | 790.07 | 841.83 | 893.50 | 945.10 |
| 450 | *U* | 622.672 | 2556.7 | 2844.0 | 2883.8 | 2964.1 | 3045.7 | 3128.8 | 3213.5 | 3299.8 | 3387.9 |
| (147.92) | *H* | 623.162 | 2742.9 | 3117.5 | 3169.1 | 3272.9 | 3377.9 | 3484.3 | 3592.3 | 3701.9 | 3813.2 |
| | *S* | 1.8204 | 6.8547 | 7.5995 | 7.6840 | 7.8442 | 7.9947 | 8.1370 | 8.2723 | 8.4016 | 8.5255 |
| | *V* | 1.091 | 393.22 | 575.44 | 600.33 | 649.87 | 699.18 | 748.34 | 797.40 | 846.37 | 895.27 |
| 475 | *U* | 631.294 | 2558.5 | 2843.6 | 2883.4 | 2963.8 | 3045.4 | 3128.6 | 3213.3 | 3299.7 | 3387.7 |
| (149.92) | *H* | 631.812 | 2745.3 | 3116.9 | 3168.6 | 3272.5 | 3377.6 | 3484.0 | 3592.1 | 3701.7 | 3813.0 |
| | *S* | 1.8408 | 6.8365 | 7.5739 | 7.6585 | 7.8189 | 7.9694 | 8.1118 | 8.2472 | 8.3765 | 8.5004 |
| | *V* | 1.093 | 374.68 | 546.38 | 570.05 | 617.16 | 664.05 | 710.78 | 757.41 | 803.95 | 850.42 |
| 500 | *U* | 639.569 | 2560.2 | 2843.2 | 2883.1 | 2963.5 | 3045.2 | 3128.4 | 3213.1 | 3299.5 | 3387.6 |
| (151.84) | *H* | 640.116 | 2747.5 | 3116.4 | 3168.1 | 3272.1 | 3377.2 | 3483.8 | 3591.8 | 3701.5 | 3812.8 |
| | *S* | 1.8604 | 6.8192 | 7.5496 | 7.6343 | 7.7948 | 7.9454 | 8.0879 | 8.2233 | 8.3526 | 8.4766 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | V | 1.095 | 357.84 | 520.08 | 542.66 | 587.58 | 632.26 | 676.80 | 721.23 | 765.57 | 809.85 |
| 525 | U | 647.528 | 2561.8 | 2842.8 | 2882.7 | 2963.2 | 3045.0 | 3128.2 | 3213.0 | 3299.4 | 3387.5 |
| (153.69) | H | 648.103 | 2749.7 | 3115.9 | 3167.6 | 3271.7 | 3376.9 | 3483.5 | 3591.6 | 3701.3 | 3812.6 |
| | S | 1.8790 | 6.8027 | 7.5264 | 7.6112 | 7.7719 | 7.9226 | 8.0651 | 8.2006 | 8.3299 | 8.4539 |
| | V | 1.097 | 342.48 | 496.18 | 517.76 | 560.68 | 603.37 | 645.91 | 688.34 | 730.68 | 772.96 |
| 550 | U | 655.199 | 2563.3 | 2842.4 | 2882.4 | 2963.0 | 3044.7 | 3128.0 | 3212.8 | 3299.2 | 3387.3 |
| (155.47) | H | 655.802 | 2751.7 | 3115.3 | 3167.2 | 3271.3 | 3376.6 | 3483.2 | 3591.4 | 3701.1 | 3812.5 |
| | S | 1.8970 | 6.7870 | 7.5043 | 7.5892 | 7.7500 | 7.9008 | 8.0433 | 8.1789 | 8.3083 | 8.4323 |
| | V | 1.099 | 328.41 | 474.36 | 495.03 | 536.12 | 576.98 | 617.70 | 658.30 | 698.83 | 739.28 |
| 575 | U | 662.603 | 2564.8 | 2842.0 | 2882.1 | 2962.7 | 3044.5 | 3127.8 | 3212.6 | 3299.1 | 3387.2 |
| (157.18) | H | 663.235 | 2753.6 | 3114.8 | 3166.7 | 3271.0 | 3376.3 | 3482.9 | 3591.1 | 3700.9 | 3812.3 |
| | S | 1.9142 | 6.7720 | 7.4831 | 7.5681 | 7.7290 | 7.8799 | 8.0226 | 8.1581 | 8.2876 | 8.4116 |
| | V | 1.101 | 315.47 | 454.35 | 474.19 | 513.61 | 552.80 | 591.84 | 630.78 | 669.63 | 708.41 |
| 600 | U | 669.762 | 2566.2 | 2841.6 | 2881.7 | 2962.4 | 3044.3 | 3127.6 | 3212.4 | 3298.9 | 3387.1 |
| (158.84) | H | 670.423 | 2755.5 | 3714.3 | 3166.2 | 3270.6 | 3376.0 | 3482.7 | 3590.9 | 3700.7 | 3812.1 |
| | S | 1.9308 | 6.7575 | 7.4628 | 7.5479 | 7.7090 | 7.8600 | 8.0027 | 8.1383 | 8.2678 | 8.3919 |
| | V | 1.103 | 303.54 | 435.94 | 455.01 | 492.89 | 530.55 | 568.05 | 605.45 | 642.76 | 680.01 |
| 625 | U | 676.695 | 2567.5 | 2841.2 | 2881.4 | 2962.1 | 3044.0 | 3127.4 | 3212.2 | 3298.8 | 3386.9 |
| (160.44) | H | 677.384 | 2757.2 | 3113.7 | 3165.7 | 3270.2 | 3375.6 | 3482.4 | 3590.7 | 3700.5 | 3811.9 |
| | S | 1.9469 | 6.7437 | 7.4433 | 7.5285 | 7.6897 | 7.8408 | 7.9836 | 8.1192 | 8.2488 | 8.3729 |
| | V | 1.105 | 292.49 | 418.95 | 437.31 | 473.78 | 510.01 | 546.10 | 582.07 | 617.96 | 653.79 |
| 650 | U | 683.417 | 2568.7 | 2840.9 | 2881.0 | 2961.8 | 3043.8 | 3127.2 | 3212.1 | 3298.6 | 3386.8 |
| (161.99) | H | 684.135 | 2758.9 | 3113.2 | 3165.3 | 3269.8 | 3375.3 | 3482.1 | 3590.4 | 3700.3 | 3811.8 |
| | S | 1.9623 | 6.7304 | 7.4245 | 7.5099 | 7.6712 | 7.8224 | 7.9652 | 8.1009 | 8.2305 | 8.3546 |
| | V | 1.106 | 282.23 | 403.22 | 420.92 | 456.07 | 491.00 | 525.77 | 560.43 | 595.00 | 629.51 |
| 675 | U | 689.943 | 2570.0 | 2840.5 | 2880.7 | 2961.6 | 3043.6 | 3127.0 | 3211.9 | 3298.5 | 3386.7 |
| (163.49) | H | 690.689 | 2760.5 | 3112.6 | 3164.8 | 3269.4 | 3375.0 | 3481.8 | 3590.2 | 3700.1 | 3811.6 |
| | S | 1.9773 | 6.7176 | 7.4064 | 7.4919 | 7.6534 | 7.8046 | 7.9475 | 8.0833 | 8.2129 | 8.3371 |
| | V | 1.108 | 272.68 | 388.61 | 405.71 | 439.64 | 473.34 | 506.89 | 540.33 | 573.68 | 606.97 |
| 700 | U | 696.285 | 2571.1 | 2840.1 | 2880.3 | 2961.3 | 3043.3 | 3126.8 | 3211.7 | 3298.3 | 3386.5 |
| (164.96) | H | 697.061 | 2762.0 | 3112.1 | 3164.3 | 3269.0 | 3374.7 | 3481.6 | 3589.9 | 3699.9 | 3811.4 |
| | S | 1.9918 | 6.7052 | 7.3890 | 7.4745 | 7.6362 | 7.7875 | 7.9305 | 8.0663 | 8.1959 | 8.3201 |
| | V | 1.110 | 263.77 | 375.01 | 391.54 | 424.33 | 456.90 | 489.31 | 521.61 | 553.83 | 585.99 |
| 725 | U | 702.457 | 2572.2 | 2839.7 | 2880.0 | 2961.0 | 3043.1 | 3126.6 | 3211.5 | 3298.1 | 3386.4 |
| (166.38) | H | 703.261 | 2763.4 | 3111.5 | 3163.8 | 3268.7 | 3374.3 | 3481.3 | 3589.7 | 3699.7 | 3811.2 |
| | S | 2.0059 | 6.6932 | 7.3721 | 7.4578 | 7.6196 | 7.7710 | 7.9140 | 8.0499 | 8.1796 | 8.3038 |

## Tabla F.2. Vapor sobrecalentado, unidades SI (*Continúa*)

| | | | | TEMPERATURA: $t$ °C (TEMPERATURA: $T$ kelvins) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| $P$/kPa ($t^{sat}$/°C) | | liq. sat. | vap. sat. | 175 (448.15) | 200 (473.15) | 220 (493.15) | 240 (513.15) | 260 (533.15) | 280 (553.15) | 300 (573.15) | 325 (598.15) |
| 750 (167.76) | $V$ | 1.112 | 255.43 | 260.88 | 279.05 | 293.03 | 306.65 | 320.01 | 333.17 | 346.19 | 362.32 |
| | $U$ | 708.467 | 2573.3 | 2586.9 | 2632.1 | 2666.8 | 2700.6 | 2733.7 | 2766.4 | 2798.9 | 2839.3 |
| | $H$ | 709.301 | 2764.8 | 2782.5 | 2841.4 | 2886.6 | 2930.6 | 2973.7 | 3016.3 | 3058.5 | 3111.0 |
| | $S$ | 2.0195 | 6.6817 | 6.7215 | 6.8494 | 6.9429 | 7.0303 | 7.1128 | 7.1912 | 7.2662 | 7.3558 |
| 775 (169.10) | $V$ | 1.113 | 247.61 | 251.93 | 269.63 | 283.22 | 296.45 | 309.41 | 322.19 | 334.81 | 350.44 |
| | $U$ | 714.326 | 2574.3 | 2585.4 | 2631.0 | 2665.9 | 2699.8 | 2733.1 | 2765.9 | 2798.4 | 2838.9 |
| | $H$ | 715.189 | 2766.2 | 2780.7 | 2840.0 | 2885.4 | 2929.6 | 2972.9 | 3015.6 | 3057.9 | 3110.5 |
| | $S$ | 2.0328 | 6.6705 | 6.7031 | 6.8319 | 6.9259 | 7.0137 | 7.0965 | 7.1751 | 7.2502 | 7.3400 |
| 800 (170.41) | $V$ | 1.115 | 240.26 | 243.53 | 260.79 | 274.02 | 286.88 | 299.48 | 311.89 | 324.14 | 339.31 |
| | $U$ | 720.043 | 2575.3 | 2584.0 | 2629.9 | 2665.0 | 2699.1 | 2732.5 | 2765.4 | 2797.9 | 2838.5 |
| | $H$ | 720.935 | 2767.5 | 2778.8 | 2838.6 | 2884.2 | 2928.6 | 2972.1 | 3014.9 | 3057.3 | 3109.9 |
| | $S$ | 2.0457 | 6.6596 | 6.6851 | 6.8148 | 6.9094 | 6.9976 | 7.0807 | 7.1595 | 7.2348 | 7.3247 |
| 825 (171.69) | $V$ | 1.117 | 233.34 | 235.64 | 252.48 | 265.37 | 277.90 | 290.15 | 302.21 | 314.12 | 328.85 |
| | $U$ | 725.625 | 2576.2 | 2582.5 | 2628.8 | 2664.1 | 2698.4 | 2731.8 | 2764.8 | 2797.5 | 2838.1 |
| | $H$ | 726.547 | 2768.7 | 2776.9 | 2837.1 | 2883.1 | 2927.6 | 2971.2 | 3014.1 | 3056.6 | 3109.4 |
| | $S$ | 2.0583 | 6.6491 | 6.6675 | 6.7982 | 6.8933 | 6.9819 | 7.0653 | 7.1443 | 7.2197 | 7.3098 |
| 850 (172.94) | $V$ | 1.118 | 226.81 | 228.21 | 244.66 | 257.24 | 269.44 | 281.37 | 293.10 | 304.68 | 319.00 |
| | $U$ | 731.080 | 2577.1 | 2581.1 | 2627.7 | 2663.2 | 2697.6 | 2731.2 | 2764.3 | 2797.0 | 2837.7 |
| | $H$ | 732.031 | 2769.9 | 2775.1 | 2835.7 | 2881.9 | 2926.6 | 2970.4 | 3013.4 | 3056.0 | 3108.8 |
| | $S$ | 2.0705 | 6.6388 | 6.6504 | 6.7820 | 6.8777 | 6.9666 | 7.0503 | 7.1295 | 7.2051 | 7.2954 |
| 875 (174.16) | $V$ | 1.120 | 220.65 | 221.20 | 237.29 | 249.56 | 261.46 | 273.09 | 284.51 | 295.79 | 309.72 |
| | $U$ | 736.415 | 2578.0 | 2579.6 | 2626.6 | 2662.3 | 2696.8 | 2730.6 | 2763.7 | 2796.5 | 2837.3 |
| | $H$ | 737.394 | 2771.0 | 2773.1 | 2834.2 | 2880.7 | 2925.6 | 2969.5 | 3012.7 | 3055.3 | 3108.3 |
| | $S$ | 2.0825 | 6.6289 | 6.6336 | 6.7662 | 6.8624 | 6.9518 | 7.0357 | 7.1152 | 7.1909 | 7.2813 |
| 900 (175.36) | $V$ | 1.121 | 214.81 | ..... | 230.32 | 242.31 | 253.93 | 265.27 | 276.40 | 287.39 | 300.96 |
| | $U$ | 741.635 | 2578.8 | ..... | 2625.5 | 2661.4 | 2696.1 | 2729.9 | 2763.2 | 2796.1 | 2836.9 |
| | $H$ | 742.644 | 2772.1 | ..... | 2832.7 | 2879.5 | 2924.6 | 2968.7 | 3012.0 | 3054.7 | 3107.7 |
| | $S$ | 2.0941 | 6.6192 | ..... | 6.7508 | 6.8475 | 6.9373 | 7.0215 | 7.1012 | 7.1771 | 7.2676 |
| 925 (176.53) | $V$ | 1.123 | 209.28 | ..... | 223.73 | 235.46 | 246.80 | 257.87 | 268.73 | 279.44 | 292.66 |
| | $U$ | 746.746 | 2579.6 | ..... | 2624.3 | 2660.5 | 2695.3 | 2729.3 | 2762.6 | 2795.6 | 2836.5 |
| | $H$ | 747.784 | 2773.2 | ..... | 2831.3 | 2878.3 | 2923.6 | 2967.8 | 3011.2 | 3054.1 | 3107.2 |
| | $S$ | 2.1055 | 6.6097 | ..... | 6.7357 | 6.8329 | 6.9231 | 7.0076 | 7.0875 | 7.1636 | 7.2543 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *V* | 1.124 | 204.03 | ..... | 217.48 | 228.96 | 240.05 | 250.86 | 261.46 | 271.91 | 284.81 |
| 950 | *U* | 751.754 | 2580.4 | ..... | 2623.2 | 2659.5 | 2694.6 | 2728.7 | 2762.1 | 2795.1 | 2836.0 |
| (177.67) | *H* | 752.822 | 2774.2 | ..... | 2829.8 | 2877.0 | 2922.6 | 2967.0 | 3010.5 | 3053.4 | 3106.6 |
| | *S* | 2.1166 | 6.6005 | ..... | 6.7209 | 6.8187 | 6.9093 | 6.9941 | 7.0742 | 7.1505 | 7.2413 |
| | *V* | 1.126 | 199.04 | ..... | 211.55 | 222.79 | 233.64 | 244.20 | 254.56 | 264.76 | 277.35 |
| 975 | *U* | 756.663 | 2581.1 | ..... | 2622.0 | 2658.6 | 2693.8 | 2728.0 | 2761.5 | 2794.6 | 2835.6 |
| (178.79) | *H* | 757.761 | 2775.2 | ..... | 2828.3 | 2875.8 | 2921.6 | 2966.1 | 3009.7 | 3052.8 | 3106.1 |
| | *S* | 2.1275 | 6.5916 | ..... | 6.7064 | 6.8048 | 6.8958 | 6.9809 | 7.0612 | 7.1377 | 7.2286 |
| | *V* | 1.127 | 194.29 | ..... | 205.92 | 216.93 | 227.55 | 237.89 | 248.01 | 257.98 | 270.27 |
| 1000 | *U* | 761.478 | 2581.9 | ..... | 2620.9 | 2657.7 | 2693.0 | 2727.4 | 2761.0 | 2794.2 | 2835.2 |
| (179.88) | *H* | 762.605 | 2776.2 | ..... | 2826.8 | 2874.6 | 2920.6 | 2965.2 | 3009.0 | 3052.1 | 3105.5 |
| | *S* | 2.1382 | 6.5828 | ..... | 6.6922 | 6.7911 | 6.8825 | 6.9680 | 7.0485 | 7.1251 | 7.2163 |
| | *V* | 1.130 | 185.45 | ..... | 195.45 | 206.04 | 216.24 | 226.15 | 235.84 | 245.37 | 257.12 |
| 1050 | *U* | 770.843 | 2583.3 | ..... | 2618.5 | 2655.8 | 2691.5 | 2726.1 | 2759.9 | 2793.2 | 2834.4 |
| (182.02) | *H* | 772.029 | 2778.0 | ..... | 2823.8 | 2872.1 | 2918.5 | 2963.5 | 3007.5 | 3050.8 | 3104.4 |
| | *S* | 2.1588 | 6.5659 | ..... | 6.6645 | 6.7647 | 6.8569 | 6.9430 | 7.0240 | 7.1009 | 7.1924 |
| | *V* | 1.133 | 177.38 | ..... | 185.92 | 196.14 | 205.96 | 215.47 | 224.77 | 233.91 | 245.16 |
| 1100 | *U* | 779.878 | 2584.5 | ..... | 2616.2 | 2653.9 | 2689.9 | 2724.7 | 2758.8 | 2792.2 | 2833.6 |
| (184.07) | *H* | 781.124 | 2779.7 | ..... | 2820.7 | 2869.6 | 2916.4 | 2961.8 | 3006.0 | 3049.6 | 3103.3 |
| | *S* | 2.1786 | 6.5497 | ..... | 6.6379 | 6.7392 | 6.8323 | 6.9190 | 7.0005 | 7.0778 | 7.1695 |
| | *V* | 1.136 | 169.99 | ..... | 177.22 | 187.10 | 196.56 | 205.73 | 214.67 | 223.44 | 234.25 |
| 1150 | *U* | 788.611 | 2585.8 | ..... | 2613.8 | 2651.9 | 2688.3 | 2723.4 | 2757.7 | 2791.3 | 2832.8 |
| (186.05) | *H* | 789.917 | 2781.3 | ..... | 2817.6 | 2867.1 | 2914.4 | 2960.0 | 3004.5 | 3048.2 | 3102.2 |
| | *S* | 2.1977 | 6.5342 | ..... | 6.6122 | 6.7147 | 6.8086 | 6.8959 | 6.9779 | 7.0556 | 7.1476 |
| | *V* | 1.139 | 163.20 | ..... | 169.23 | 178.80 | 187.95 | 196.79 | 205.40 | 213.85 | 224.24 |
| 1200 | *U* | 797.064 | 2586.9 | ..... | 2611.3 | 2650.0 | 2686.7 | 2722.1 | 2756.5 | 2790.3 | 2832.0 |
| (187.96) | *H* | 798.430 | 2782.7 | ..... | 2814.4 | 2864.5 | 2912.2 | 2958.2 | 3003.0 | 3046.9 | 3101.0 |
| | *S* | 2.2161 | 6.5194 | ..... | 6.5872 | 6.6909 | 6.7858 | 6.8738 | 6.9562 | 7.0342 | 7.1266 |
| | *V* | 1.141 | 156.93 | ..... | 161.88 | 171.17 | 180.02 | 188.56 | 196.88 | 205.02 | 215.03 |
| 1250 | *U* | 805.259 | 2588.0 | ..... | 2608.9 | 2648.0 | 2685.1 | 2720.8 | 2755.4 | 2789.3 | 2831.1 |
| (189.81) | *H* | 806.685 | 2784.1 | ..... | 2811.2 | 2861.9 | 2910.1 | 2956.5 | 3001.5 | 3045.6 | 3099.9 |
| | *S* | 2.2338 | 6.5050 | ..... | 6.5630 | 6.6680 | 6.7637 | 6.8523 | 6.9353 | 7.0136 | 7.1064 |
| | *V* | 1.144 | 151.13 | ..... | 155.09 | 164.11 | 172.70 | 180.97 | 189.01 | 196.87 | 206.53 |
| 1300 | *U* | 813.213 | 2589.0 | ..... | 2606.4 | 2646.0 | 2683.5 | 2719.4 | 2754.3 | 2788.4 | 2830.3 |
| (191.61) | *H* | 814.700 | 2785.4 | ..... | 2808.0 | 2859.3 | 2908.0 | 2954.7 | 3000.0 | 3044.3 | 3098.8 |
| | *S* | 2.2510 | 6.4913 | ..... | 6.5394 | 6.6457 | 6.7424 | 6.8316 | 6.9151 | 6.9938 | 7.0869 |

## Tabla F.2. Vapor sobrecalentado, unidades SI (*Continúa*)

| | | | | TEMPERATURA: $t$ °C (TEMPERATURA: $T$ kelvins) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| $P$/kPa | | liq. | vap. | 350 | 375 | 400 | 450 | 500 | 550 | 600 | 650 |
| ($t^{sat}$/°C) | | sat. | sat. | (623.15) | (648.15) | (673.15) | (723.15) | (773.15) | (833.15) | (873.15) | (923.15) |
| | *V* | 1.112 | 255.43 | 378.31 | 394.22 | 410.05 | 441.55 | 472.90 | 504.15 | 535.30 | 566.40 |
| 750 | *U* | 708.467 | 2573.3 | 2879.6 | 2920.1 | 2960.7 | 3042.9 | 3126.3 | 3211.4 | 3298.0 | 3386.2 |
| (167.76) | *H* | 709.301 | 2764.8 | 3163.4 | 3215.7 | 3268.3 | 3374.0 | 3481.0 | 3589.5 | 3699.5 | 3811.0 |
| | *S* | 2.0195 | 6.6817 | 7.4416 | 7.5240 | 7.6035 | 7.7550 | 7.8981 | 8.0340 | 8.1637 | 8.2880 |
| | *V* | 1.113 | 247.61 | 365.94 | 381.35 | 396.69 | 427.20 | 457.56 | 487.81 | 517.97 | 548.07 |
| 775 | *U* | 714.326 | 2574.3 | 2879.3 | 2919.8 | 2960.4 | 3042.6 | 3126.1 | 3211.2 | 3297.8 | 3386.1 |
| (169.10) | *H* | 715.189 | 2766.2 | 3162.9 | 3215.3 | 3267.9 | 3373.7 | 3480.8 | 3589.2 | 3699.3 | 3810.9 |
| | *S* | 2.0328 | 6.6705 | 7.4259 | 7.5084 | 7.5880 | 7.7396 | 7.8827 | 8.0187 | 8.1484 | 8.2727 |
| | *V* | 1.115 | 240.26 | 354.34 | 369.29 | 384.16 | 413.74 | 443.17 | 472.49 | 501.72 | 530.89 |
| 800 | *U* | 720.043 | 2575.3 | 2878.9 | 2919.5 | 2960.2 | 3042.4 | 3125.9 | 3211.0 | 3297.7 | 3386.0 |
| (170.41) | *H* | 720.935 | 2767.5 | 3162.4 | 3214.9 | 3267.5 | 3373.4 | 3480.5 | 3589.0 | 3699.1 | 3810.7 |
| | *S* | 2.0457 | 6.6596 | 7.4107 | 7.4932 | 7.5729 | 7.7246 | 7.8678 | 8.0038 | 8.1336 | 8.2579 |
| | *V* | 1.117 | 233.34 | 343.45 | 357.96 | 372.39 | 401.10 | 429.65 | 458.10 | 486.46 | 514.76 |
| 825 | *U* | 725.625 | 2576.2 | 2878.6 | 2919.1 | 2959.9 | 3042.2 | 3125.7 | 3210.8 | 3297.5 | 3385.8 |
| (171.69) | *H* | 726.547 | 2768.7 | 3161.9 | 3214.5 | 3267.1 | 3373.1 | 3480.2 | 3588.8 | 3698.8 | 3810.5 |
| | *S* | 2.0583 | 6.6491 | 7.3959 | 7.4786 | 7.5583 | 7.7101 | 7.8533 | 7.9894 | 8.1192 | 8.2436 |
| | *V* | 1.118 | 226.81 | 333.20 | 347.29 | 361.31 | 389.20 | 416.93 | 444.56 | 472.09 | 499.57 |
| 850 | *U* | 731.080 | 2577.1 | 2878.2 | 2918.8 | 2959.6 | 3041.9 | 3125.5 | 3210.7 | 3297.4 | 3385.7 |
| (172.94) | *H* | 732.031 | 2769.9 | 3161.4 | 3214.0 | 3266.7 | 3372.7 | 3479.9 | 3588.5 | 3698.6 | 3810.3 |
| | *S* | 2.0705 | 6.6388 | 7.3815 | 7.4643 | 7.5441 | 7.6960 | 7.8393 | 7.9754 | 8.1053 | 8.2296 |
| | *V* | 1.120 | 220.65 | 323.53 | 337.24 | 350.87 | 377.98 | 404.94 | 431.79 | 458.55 | 485.25 |
| 875 | *U* | 736.415 | 2578.0 | 2877.9 | 2918.5 | 2959.3 | 3041.7 | 3125.3 | 3210.5 | 3297.2 | 3385.6 |
| (174.76) | *H* | 737.394 | 2771.0 | 3161.0 | 3213.6 | 3266.3 | 3372.4 | 3479.7 | 3588.3 | 3698.4 | 3810.2 |
| | *S* | 2.0825 | 6.6289 | 7.3676 | 74.504 | 7.5303 | 7.6823 | 7.8257 | 7.9618 | 8.0917 | 8.2161 |
| | *V* | 1.121 | 214.81 | 314.40 | 327.74 | 341.01 | 367.39 | 393.61 | 419.73 | 445.76 | 471.72 |
| 900 | *U* | 741.635 | 2578.8 | 2877.5 | 2918.2 | 2959.0 | 3041.4 | 3125.1 | 3210.3 | 3297.1 | 3385.4 |
| (175.36) | *H* | 742.644 | 2772.1 | 3160.5 | 3213.2 | 3266.0 | 3372.1 | 3479.4 | 3588.1 | 3698.2 | 3810.0 |
| | *S* | 2.0941 | 6.6192 | 7.3540 | 7.4370 | 7.5169 | 7.6689 | 7.8124 | 7.9486 | 8.0785 | 8.2030 |
| | *V* | 1.123 | 209.28 | 305.76 | 318.75 | 331.68 | 357.36 | 382.90 | 408.32 | 433.66 | 458.93 |
| 925 | *U* | 746.746 | 2579.6 | 2877.2 | 2917.9 | 2958.8 | 30412 | 3124.9 | 3210.1 | 3296.9 | 3385.3 |
| (176.53) | *H* | 747.784 | 2773.2 | 3160.0 | 3212.7 | 3265.6 | 3371.8 | 3479.1 | 3587.8 | 3698.0 | 3809.8 |
| | *S* | 2.1055 | 6.6097 | 7.3408 | 7.4238 | 7.5038 | 7.6560 | 7.7995 | 7.9357 | 8.0657 | 8.1902 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | *V* | 1.124 | 204.03 | 297.57 | 310.24 | 322.84 | 347.87 | 372.74 | 397.51 | 422.19 | 446.81 |
| 950 | *U* | 751.754 | 2580.4 | 2876.8 | 2917.6 | 2958.5 | 3041.0 | 3124.7 | 3209.9 | 3296.7 | 3385.1 |
| (177.67) | *H* | 752.822 | 2774.2 | 3159.5 | 3212.3 | 3265.2 | 3371.5 | 3478.8 | 3587.6 | 3697.8 | 3809.6 |
| | *S* | 2.1166 | 6.6005 | 7.3279 | 7.4110 | 7.4911 | 7.6433 | 7.7869 | 7.9232 | 8.0532 | 8.1777 |
| | *V* | 1.126 | 199.04 | 289.81 | 302.17 | 314.45 | 338.86 | 363.11 | 387.26 | 411.32 | 435.31 |
| 975 | *U* | 756.663 | 2581.1 | 2876.5 | 2917.3 | 2958.2 | 3040.7 | 3124.5 | 3209.8 | 3296.6 | 3385.0 |
| (178.79) | *H* | 757.761 | 2775.2 | 3159.0 | 3211.9 | 3264.8 | 3371.1 | 3478.6 | 3587.3 | 3697.6 | 3809.4 |
| | *S* | 2.1275 | 6.5916 | 7.3154 | 7.3986 | 7.4787 | 7.6310 | 7.7747 | 7.9110 | 8.0410 | 8.1656 |
| | *V* | 1.127 | 194.29 | 282.43 | 294.50 | 306.49 | 330.30 | 353.96 | 377.52 | 400.98 | 424.38 |
| 1000 | *U* | 761.478 | 2581.9 | 2876.1 | 2917.0 | 2957.9 | 3040.5 | 3124.3 | 3209.6 | 3296.4 | 3384.9 |
| (179.88) | *H* | 762.605 | 2776.2 | 3158.5 | 3211.5 | 3264.4 | 3370.8 | 3478.3 | 3587.1 | 3697.4 | 3809.3 |
| | *S* | 2.1382 | 6.5828 | 7.3031 | 7.3864 | 7.4665 | 7.6190 | 7.7627 | 7.8991 | 8.0292 | 8.1537 |
| | *V* | 1.130 | 185.45 | 268.74 | 280.25 | 291.69 | 314.41 | 336.97 | 359.43 | 381.79 | 404.10 |
| 1050 | *U* | 770.843 | 2583.3 | 2875.4 | 2916.3 | 2957.4 | 3040.0 | 3123.9 | 3209.2 | 3296.1 | 3384.6 |
| (182.02) | *H* | 772.029 | 2778.0 | 3157.6 | 3210.6 | 3263.6 | 3370.2 | 3477.7 | 3586.6 | 3697.0 | 3808.9 |
| | *S* | 2.1588 | 6.5659 | 7.2795 | 7.3629 | 7.4432 | 7.5958 | 7.7397 | 7.8762 | 8.0063 | 8.1309 |
| | *V* | 1.133 | 177.38 | 256.28 | 267.30 | 278.24 | 299.96 | 321.53 | 342.98 | 364.35 | 385.65 |
| 1100 | *U* | 779.878 | 2584.5 | 2874.7 | 2915.7 | 2956.8 | 3039.6 | 3123.5 | 3208.9 | 3295.8 | 3384.3 |
| (184.07) | *H* | 781.124 | 2779.7 | 3156.6 | 3209.7 | 3262.9 | 3369.5 | 3477.2 | 3586.2 | 3696.6 | 3808.5 |
| | *S* | 2.1786 | 6.5497 | 7.2569 | 7.3405 | 7.4209 | 7.5737 | 7.7177 | 7.8543 | 7.9845 | 8.1092 |
| | *V* | 1.136 | 169.99 | 244.91 | 255.47 | 265.96 | 286.77 | 307.42 | 327.97 | 348.42 | 368.81 |
| 1150 | *U* | 788.611 | 2585.8 | 2874.0 | 2915.1 | 2956.2 | 3039.1 | 3123.1 | 3208.5 | 3295.5 | 3384.1 |
| (186.05) | *H* | 789.917 | 2781.3 | 3155.6 | 3208.9 | 3262.1 | 3368.9 | 3476.6 | 3585.7 | 3696.2 | 3808.2 |
| | *S* | 2.1977 | 6.5342 | 7.2352 | 7.3190 | 7.3995 | 7.5525 | 7.6966 | 7.8333 | 7.9636 | 8.0883 |
| | *V* | 1.139 | 163.20 | 234.49 | 244.63 | 254.70 | 274.68 | 294.50 | 314.20 | 333.82 | 353.38 |
| 1200 | *U* | 797.064 | 2586.9 | 2873.3 | 2914.4 | 2955.7 | 3038.6 | 3122.7 | 3208.2 | 3295.2 | 3383.8 |
| (187.96) | *H* | 798.430 | 2782.7 | 3154.6 | 3208.0 | 3261.3 | 3368.2 | 3476.1 | 3585.2 | 3695.8 | 3807.8 |
| | *S* | 2.2161 | 6.5194 | 7.2144 | 7.2983 | 7.3790 | 7.5323 | 7.6765 | 7.8132 | 7.9436 | 8.0684 |
| | *V* | 1.141 | 156.93 | 224.90 | 234.66 | 244.35 | 263.55 | 282.60 | 301.54 | 320.39 | 339.18 |
| 1250 | *U* | 805.259 | 2588.0 | 2872.5 | 2913.8 | 2955.1 | 3038.1 | 3122.3 | 3207.8 | 3294.9 | 3383.5 |
| (189.81) | *H* | 806.685 | 2784.1 | 3153.7 | 3207.1 | 3260.5 | 3367.6 | 3475.5 | 3584.7 | 3695.4 | 3807.5 |
| | *S* | 2.2338 | 6.5050 | 7.1944 | 7.2785 | 7.3593 | 7.5128 | 7.6571 | 7.7940 | 7.9244 | 8.0493 |
| | *V* | 1.144 | 151.13 | 216.05 | 225.46 | 234.79 | 253.28 | 271.62 | 289.85 | 307.99 | 326.07 |
| 1300 | *U* | 813.213 | 2589.0 | 2871.8 | 2913.2 | 2954.5 | 3037.7 | 3121.9 | 3207.5 | 3294.6 | 3383.2 |
| (191.61) | *H* | 814.700 | 2785.4 | 3152.7 | 3206.3 | 3259.7 | 3366.9 | 3475.0 | 3584.3 | 3695.0 | 3807.1 |
| | *S* | 2.2510 | 6.4913 | 7.1751 | 7.2594 | 7.3404 | 7.4940 | 7.6385 | 7.7754 | 7.9060 | 8.0309 |

## Tabla F.2. Vapor sobrecalentado, unidades SI (*Continúa*)

| *P*/kPa ($t^{sat}$/°C) | | líq. sat. | vap. sat. | TEMPERATURA: *t* °C (TEMPERATURA: *T* kelvins) 200 (473.15) | 225 (498.15) | 250 (523.15) | 275 (548.15) | 300 (573.15) | 325 (598.15) | 350 (623.15) | 375 (648.15) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1350 (193.35) | *V* | 1.146 | 145.74 | 148.79 | 159.70 | 169.96 | 179.79 | 189.33 | 198.66 | 207.85 | 216.93 |
| | *U* | 820.944 | 2589.9 | 2603.9 | 2653.6 | 2700.1 | 2744.4 | 2787.4 | 2829.5 | 2871.1 | 2912.5 |
| | *H* | 822.491 | 2786.6 | 2804.7 | 2869.2 | 2929.5 | 2987.1 | 3043.0 | 3097.7 | 3151.7 | 3205.4 |
| | *S* | 2.2676 | 6.4780 | 6.5165 | 6.6493 | 6.7675 | 6.8750 | 6.9746 | 7.0681 | 7.1566 | 7.2410 |
| 1400 (195.04) | *V* | 1.149 | 140.72 | 142.94 | 153.57 | 163.55 | 173.08 | 182.32 | 191.35 | 200.24 | 209.02 |
| | *U* | 828.465 | 2590.8 | 2601.3 | 2651.7 | 2698.6 | 2743.2 | 2786.4 | 2828.6 | 2870.4 | 2911.9 |
| | *H* | 830.074 | 2787.8 | 2801.4 | 2866.7 | 2927.6 | 2985.5 | 3041.6 | 3096.5 | 3150.7 | 3204.5 |
| | *S* | 2.2837 | 6.4651 | 6.4941 | 6.6285 | 6.7477 | 6.8560 | 6.9561 | 7.0499 | 7.1386 | 7.2233 |
| 1450 (196.69) | *V* | 1.151 | 136.04 | 137.48 | 147.86 | 157.57 | 166.83 | 175.79 | 184.54 | 193.15 | 201.65 |
| | *U* | 835.791 | 2591.6 | 2598.7 | 2649.7 | 2697.1 | 2742.0 | 2785.4 | 2827.8 | 2869.7 | 2911.3 |
| | *H* | 837.460 | 2788.9 | 2798.1 | 2864.1 | 2925.5 | 2983.9 | 3040.3 | 3095.4 | 3149.7 | 3203.6 |
| | *S* | 2.2993 | 6.4526 | 6.4722 | 6.6082 | 6.7286 | 6.8376 | 6.9381 | 7.0322 | 7.1212 | 7.2061 |
| 1500 (198.29) | *V* | 1.154 | 131.66 | 132.38 | 142.53 | 151.99 | 161.00 | 169.70 | 178.19 | 186.53 | 194.77 |
| | *U* | 842.933 | 2592.4 | 2596.1 | 2647.7 | 2695.5 | 2740.8 | 2784.4 | 2826.9 | 2868.9 | 2910.6 |
| | *H* | 844.663 | 2789.9 | 2794.7 | 2861.5 | 2923.5 | 2982.3 | 3038.9 | 3094.2 | 3148.7 | 3202.8 |
| | *S* | 2.3145 | 6.4406 | 6.4508 | 6.5885 | 6.7099 | 6.8196 | 6.9207 | 7.0152 | 7.1044 | 7.1894 |
| 1550 (199.85) | *V* | 1.156 | 127.55 | 127.61 | 137.54 | 146.77 | 155.54 | 164.00 | 172.25 | 180.34 | 188.33 |
| | *U* | 849.901 | 2593.2 | 2593.5 | 2645.8 | 2694.0 | 2739.5 | 2783.4 | 2826.1 | 2868.2 | 2910.0 |
| | *H* | 851.694 | 2790.8 | 2791.3 | 2858.9 | 2921.5 | 2980.6 | 3037.6 | 3093.1 | 3147.7 | 3201.9 |
| | *S* | 2.3292 | 6.4289 | 6.4298 | 6.5692 | 6.6917 | 6.8022 | 6.9038 | 6.9986 | 7.0881 | 7.1733 |
| 1600 (201.37) | *V* | 1.159 | 123.69 | ..... | 132.85 | 141.87 | 150.42 | 158.66 | 166.68 | 174.54 | 182.30 |
| | *U* | 856.707 | 2593.8 | ..... | 2643.7 | 2692.4 | 2738.3 | 2782.4 | 2825.2 | 2867.5 | 2909.3 |
| | *H* | 858.561 | 2791.7 | ..... | 2856.3 | 2919.4 | 2979.0 | 3036.2 | 3091.9 | 3146.7 | 3201.0 |
| | *S* | 2.3436 | 6.4175 | ..... | 6.5503 | 6.6740 | 6.7852 | 6.8873 | 6.9825 | 7.0723 | 7.1577 |
| 1650 (202.86) | *V* | 1.161 | 120.05 | ..... | 128.45 | 137.27 | 145.61 | 153.64 | 161.44 | 169.09 | 176.63 |
| | *U* | 863.359 | 2594.5 | ..... | 2641.7 | 2690.9 | 2737.1 | 2781.3 | 2824.4 | 2866.7 | 2908.7 |
| | *H* | 865.275 | 2792.6 | ..... | 2853.6 | 2917.4 | 2977.3 | 3034.8 | 3090.8 | 3145.7 | 3200.1 |
| | *S* | 2.3576 | 6.4065 | ..... | 6.5319 | 6.6567 | 6.7687 | 6.8713 | 6.9669 | 7.0569 | 7.1425 |
| 1700 (204.31) | *V* | 1.163 | 116.62 | ..... | 124.31 | 132.94 | 141.09 | 148.91 | 156.51 | 163.96 | 171.30 |
| | *U* | 869.866 | 2595.1 | ..... | 2639.6 | 2689.3 | 2735.8 | 2780.3 | 2823.5 | 2866.0 | 2908.0 |
| | *H* | 871.843 | 2793.4 | ..... | 2851.0 | 2915.3 | 2975.6 | 3033.5 | 3089.6 | 3144.7 | 3199.2 |
| | *S* | 2.3713 | 6.3957 | ..... | 6.5138 | 6.6398 | 6.7526 | 6.8557 | 6.9516 | 7.0419 | 7.1277 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | V | 1.166 | 113.38 | ..... | 120.39 | 128.85 | 136.82 | 144.45 | 151.87 | 159.12 | 166.27 |
| 1750 | U | 876.234 | 2595.7 | ..... | 2637.6 | 2687.7 | 2734.5 | 2779.3 | 2822.7 | 2865.3 | 2907.4 |
| (205.72) | H | 878.274 | 2794.1 | ..... | 2848.2 | 2913.2 | 2974.0 | 3032.1 | 3088.4 | 3143.7 | 3198.4 |
| | S | 2.3846 | 6.3853 | ..... | 6.4961 | 6.6233 | 6.7368 | 6.8405 | 6.9368 | 7.0273 | 7.1133 |
| | V | 1.168 | 110.32 | ..... | 116.69 | 124.99 | 132.78 | 140.24 | 147.48 | 154.55 | 161.51 |
| 1800 | U | 882.472 | 2596.3 | ..... | 2635.5 | 2686.1 | 2733.3 | 2778.2 | 2821.8 | 2864.5 | 2906.7 |
| (207.11) | H | 884.574 | 2794.8 | ..... | 2845.5 | 2911.0 | 2972.3 | 3030.7 | 3087.3 | 3142.7 | 3197.5 |
| | S | 2.3976 | 6.3751 | ..... | 6.4787 | 6.6071 | 6.7214 | 6.8257 | 6.9223 | 7.0131 | 7.0993 |
| | V | 1.170 | 107.41 | ..... | 113.19 | 121.33 | 128.96 | 136.26 | 143.33 | 150.23 | 157.02 |
| 1850 | U | 888.585 | 2596.8 | ..... | 2633.3 | 2684.4 | 2732.0 | 2777.2 | 2820.9 | 2863.8 | 2906.1 |
| (208.47) | H | 890.750 | 2795.5 | ..... | 2842.8 | 2908.9 | 2970.6 | 3029.3 | 3086.1 | 3141.7 | 3196.6 |
| | S | 2.4103 | 6.3651 | ..... | 6.4616 | 6.5912 | 6.7064 | 6.8112 | 6.9082 | 6.9993 | 7.0856 |
| | V | 1.172 | 104.65 | ..... | 109.87 | 117.87 | 125.35 | 132.49 | 139.39 | 146.14 | 152.76 |
| 1900 | U | 894.580 | 2597.3 | ..... | 2631.2 | 2682.8 | 2730.7 | 2776.2 | 2820.1 | 2863.0 | 2905.4 |
| (209.80) | H | 896.807 | 2796.1 | ..... | 2840.0 | 2906.7 | 2968.8 | 3027.9 | 3084.9 | 3140.7 | 3195.7 |
| | S | 2.4228 | 6.3554 | ..... | 6.4448 | 6.5757 | 6.6917 | 6.7970 | 6.8944 | 6.9857 | 7.0723 |
| | V | 1.174 | 102.031 | ..... | 106.72 | 114.58 | 121.91 | 128.90 | 135.66 | 142.25 | 148.72 |
| 1950 | U | 900.461 | 2597.7 | ..... | 2629.0 | 2681.1 | 2729.4 | 2775.1 | 2819.2 | 2862.3 | 2904.8 |
| (211.10) | H | 902.752 | 2796.7 | ..... | 2837.1 | 2904.6 | 2967.1 | 3026.5 | 3083.7 | 3139.7 | 3194.8 |
| | S | 2.4349 | 6.3459 | ..... | 6.4283 | 6.5604 | 6.6772 | 6.7831 | 6.8809 | 6.9725 | 7.0593 |
| | V | 1.177 | 99.536 | ..... | 103.72 | 111.45 | 118.65 | 125.50 | 132.11 | 138.56 | 144.89 |
| 2000 | U | 906.236 | 2598.2 | ..... | 2626.9 | 2679.5 | 2728.1 | 2774.0 | 2818.3 | 2861.5 | 2904.1 |
| (212.37) | H | 908.589 | 2797.2 | ..... | 2834.3 | 2902.4 | 2965.4 | 3025.0 | 3082.5 | 3138.6 | 3193.9 |
| | S | 2.4469 | 6.3366 | ..... | 6.4120 | 6.5454 | 6.6631 | 6.7696 | 6.8677 | 6.9596 | 7.0466 |
| | V | 1.181 | 94.890 | ..... | 98.147 | 105.64 | 112.59 | 119.18 | 125.53 | 131.70 | 137.76 |
| 2100 | U | 917.479 | 2598.9 | ..... | 2622.4 | 2676.1 | 2725.4 | 2771.9 | 2816.5 | 2860.0 | 2902.8 |
| (214.85) | H | 919.959 | 2798.2 | ..... | 2828.5 | 2897.9 | 2961.9 | 3022.2 | 3080.1 | 3136.6 | 3192.1 |
| | S | 2.4700 | 6.3187 | ..... | 6.3802 | 6.5162 | 6.6356 | 6.7432 | 6.8422 | 6.9347 | 7.0220 |
| | V | 1.185 | 90.652 | ..... | 93.067 | 100.35 | 107.07 | 113.43 | 119.53 | 125.47 | 131.28 |
| 2200 | U | 928.346 | 2599.6 | ..... | 2617.9 | 2672.7 | 2722.7 | 2769.7 | 2814.7 | 2858.5 | 2901.5 |
| (217.24) | H | 930.953 | 2799.1 | ..... | 2822.7 | 2893.4 | 2958.3 | 3019.3 | 3077.7 | 3134.5 | 3190.3 |
| | S | 2.4922 | 6.3015 | ..... | 6.3492 | 6.4879 | 6.6091 | 6.7179 | 6.8177 | 6.9107 | 6.9985 |
| | V | 1.189 | 86.769 | ..... | 88.420 | 95.513 | 102.03 | 108.18 | 114.06 | 119.77 | 125.36 |
| 2300 | U | 938.866 | 2600.2 | ..... | 2613.3 | 2669.2 | 2720.0 | 2767.6 | 2812.9 | 2857.0 | 2900.2 |
| (219.55) | H | 941.601 | 2799.8 | ..... | 2816.7 | 2888.9 | 2954.7 | 3016.4 | 3075.3 | 3132.4 | 3188.5 |
| | S | 2.5136 | 6.2849 | ..... | 6.3190 | 6.4605 | 6.5835 | 6.6935 | 6.7941 | 6.8877 | 6.9759 |

## Tabla F.2. Vapor sobrecalentado, unidades SI (*Continúa*)

| | | | | TEMPERATURA: $t$ °C (TEMPERATURA: $T$ kelvins) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| $P$/kPa | | liq. | vap. | 400 | 425 | 450 | 475 | 500 | 550 | 600 | 650 |
| ($t^{sat}$/°C) | | sat. | sat. | (673.15) | (698.15) | (723.15) | (748.15) | (773.15) | (823.15) | (873.15) | (923.15) |
| | *V* | 1.146 | 145.74 | 225.94 | 234.88 | 243.78 | 252.63 | 261.46 | 279.03 | 296.51 | 313.93 |
| 1350 | *U* | 820.944 | 2589.9 | 2953.9 | 2995.5 | 3037.2 | 3079.2 | 3121.5 | 3207.1 | 3294.3 | 3383.0 |
| (193.35) | *H* | 822.491 | 2786.6 | 3259.0 | 3312.6 | 3366.3 | 3420.2 | 3474.4 | 3583.8 | 3694.5 | 3806.8 |
| | *S* | 2.2676 | 6.4780 | 7.3221 | 7.4003 | 7.4759 | 7.5493 | 7.6205 | 7.7576 | 7.8882 | 8.0132 |
| | *V* | 1.149 | 140.72 | 217.72 | 226.35 | 234.95 | 243.50 | 252.02 | 268.98 | 285.85 | 302.66 |
| 1400 | *U* | 828.465 | 2590.8 | 2953.4 | 2994.9 | 3036.7 | 3078.7 | 3121.1 | 3206.8 | 3293.9 | 3382.7 |
| (195.04) | *H* | 830.074 | 2787.8 | 3258.2 | 3311.8 | 3365.6 | 3419.6 | 3473.9 | 3583.3 | 3694.1 | 3806.4 |
| | *S* | 2.2837 | 6.4651 | 7.3045 | 7.3828 | 7.4585 | 7.5319 | 7.6032 | 7.7404 | 7.8710 | 7.9961 |
| | *V* | 1.151 | 136.04 | 210.06 | 218.42 | 226.72 | 234.99 | 243.23 | 259.62 | 275.93 | 292.16 |
| 1450 | *U* | 835.791 | 2591.6 | 2952.8 | 2994.4 | 3036.2 | 3078.3 | 3120.7 | 3206.4 | 3293.6 | 3382.4 |
| (196.69) | *H* | 837.460 | 2788.9 | 3257.4 | 3311.1 | 3365.0 | 3419.0 | 3473.3 | 3582.9 | 3693.7 | 3806.1 |
| | *S* | 2.2993 | 6.4526 | 7.2874 | 7.3658 | 7.4416 | 7.5151 | 7.5865 | 7.7237 | 7.8545 | 7.9796 |
| | *V* | 1.154 | 131.66 | 202.92 | 211.01 | 219.05 | 227.06 | 235.03 | 250.89 | 266.66 | 282.37 |
| 1500 | *U* | 842.933 | 2592.4 | 2952.2 | 2993.9 | 3035.8 | 3077.9 | 3120.3 | 3206.0 | 3293.3 | 3382.1 |
| (198.29) | *H* | 844.663 | 2789.9 | 3256.6 | 3310.4 | 3364.3 | 3418.4 | 3472.8 | 3582.4 | 3693.3 | 3805.7 |
| | *S* | 2.3145 | 6.4406 | 7.2709 | 7.3494 | 7.4253 | 7.4989 | 7.5703 | 7.7077 | 7.8385 | 7.9636 |
| | *V* | 1.156 | 127.55 | 196.24 | 204.08 | 211.87 | 219.63 | 227.35 | 242.72 | 258.00 | 273.21 |
| 1550 | *U* | 849.901 | 2593.2 | 2951.7 | 2993.4 | 3035.3 | 3077.4 | 3119.8 | 3205.7 | 3293.0 | 3381.9 |
| (199.85) | *H* | 851.694 | 2790.8 | 3255.8 | 3309.7 | 3363.7 | 3417.8 | 3472.2 | 3581.9 | 3692.9 | 3805.3 |
| | *S* | 2.3292 | 6.4289 | 7.2550 | 7.3336 | 7.4095 | 7.4832 | 7.5547 | 7.6921 | 7.8230 | 7.9482 |
| | *V* | 1.159 | 123.69 | 189.97 | 197.58 | 205.15 | 212.67 | 220.16 | 235.06 | 249.87 | 264.62 |
| 1600 | *U* | 856.707 | 2593.8 | 2951.1 | 2992.9 | 3034.8 | 3077.0 | 3119.4 | 3205.3 | 3292.7 | 3381.6 |
| (201.37) | *H* | 858.561 | 2791.7 | 3255.0 | 3309.0 | 3363.0 | 3417.2 | 3471.7 | 3581.4 | 3692.5 | 3805.0 |
| | *S* | 2.3436 | 6.4175 | 7.2394 | 7.3182 | 7.3942 | 7.4679 | 7.5395 | 7.6770 | 7.8080 | 7.9333 |
| | *V* | 1.161 | 120.05 | 184.09 | 191.48 | 198.82 | 206.13 | 213.40 | 227.86 | 242.24 | 256.55 |
| 1650 | *U* | 863.359 | 2594.5 | 2950.5 | 2992.3 | 3034.3 | 3076.5 | 3119.0 | 3205.0 | 3292.4 | 3381.3 |
| (202.86) | *H* | 865.275 | 2792.6 | 3254.2 | 3308.3 | 3362.4 | 3416.7 | 3471.1 | 3581.0 | 3692.1 | 3804.6 |
| | S | 2.3576 | 6.4065 | 7.2244 | 7.3032 | 7.3794 | 7.4531 | 7.5248 | 7.6624 | 7.7934 | 7.9188 |
| | *V* | 1.163 | 116.62 | 178.55 | 185.74 | 192.87 | 199.97 | 207.04 | 221.09 | 235.06 | 248.96 |
| 1700 | *U* | 869.866 | 2595.1 | 2949.9 | 2991.8 | 3033.9 | 3076.1 | 3118.6 | 3204.6 | 3292.1 | 3381.0 |
| (204.31) | *H* | 871.843 | 2793.4 | 3253.5 | 3307.6 | 3361.7 | 3416.1 | 3470.6 | 3580.5 | 3691.7 | 3804.3 |
| | *S* | 2.3713 | 6.3957 | 7.2098 | 7.2887 | 7.3649 | 7.4388 | 7.5105 | 7.6482 | 7.7793 | 7.9047 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | V | 1.166 | 113.38 | 173.32 | 180.32 | 187.26 | 194.17 | 201.04 | 214.71 | 228.28 | 241.80 |
| 1750 | U | 876.234 | 2595.7 | 2949.3 | 2991.3 | 3033.4 | 3075.7 | 3118.2 | 3204.3 | 3291.8 | 3380.8 |
| (205.72) | H | 878.274 | 2794.1 | 3252.7 | 3306.9 | 3361.1 | 3415.5 | 3470.0 | 3580.0 | 3691.3 | 3803.9 |
| | S | 2.3846 | 6.3853 | 7.1955 | 7.2746 | 7.3509 | 7.4248 | 7.4965 | 7.6344 | 7.7656 | 7.8910 |
| | V | 1.168 | 110.32 | 168.39 | 175.20 | 181.97 | 188.69 | 195.38 | 208.68 | 221.89 | 235.03 |
| 1800 | U | 882.472 | 2596.3 | 2948.8 | 2990.8 | 3032.9 | 3075.2 | 3117.8 | 3203.9 | 3291.5 | 3380.5 |
| (207.11) | H | 884.574 | 2794.8 | 3251.9 | 3306.1 | 3360.4 | 3414.9 | 3469.5 | 3579.5 | 3690.9 | 3803.6 |
| | S | 2.3976 | 6.3751 | 7.1816 | 7.2608 | 7.3372 | 7.4112 | 7.4830 | 7.6209 | 7.7522 | 7.8777 |
| | V | 1.170 | 107.41 | 163.73 | 170.37 | 176.96 | 183.50 | 190.02 | 202.97 | 215.84 | 228.64 |
| 1850 | U | 888.585 | 2596.8 | 2948.2 | 2990.3 | 3032.4 | 3074.8 | 3117.4 | 3203.6 | 3291.1 | 3380.2 |
| (208.47) | H | 890.750 | 2795.5 | 3251.1 | 3305.4 | 3359.8 | 3414.3 | 3468.9 | 3579.1 | 3690.4 | 3803.2 |
| | S | 2.4103 | 6.3651 | 7.1681 | 7.2474 | 7.3239 | 7.3980 | 7.4698 | 7.6079 | 7.7392 | 7.8648 |
| | V | 1.772 | 104.65 | 159.30 | 165.78 | 172.21 | 178.59 | 184.94 | 197.57 | 210.11 | 222.58 |
| 1900 | U | 894.580 | 2597.3 | 2947.6 | 2989.7 | 3031.9 | 3074.3 | 3117.0 | 3203.2 | 3290.8 | 3380.0 |
| (209.80) | H | 896.807 | 2796.1 | 3250.3 | 3304.7 | 3359.1 | 3413.7 | 3468.4 | 3578.6 | 3690.0 | 3802.8 |
| | S | 2.4228 | 6.3554 | 7.1550 | 7.2344 | 7.3109 | 7.3851 | 7.4570 | 7.5951 | 7.7265 | 7.8522 |
| | V | 1.174 | 102.031 | 155.11 | 161.43 | 167.70 | 173.93 | 180.13 | 192.44 | 204.67 | 216.83 |
| 1950 | U | 900.461 | 2597.7 | 2947.0 | 2989.2 | 3031.5 | 3073.9 | 3116.6 | 3202.9 | 3290.5 | 3379.7 |
| (211.10) | H | 902.752 | 2796.7 | 3249.5 | 3304.0 | 3358.5 | 3413.1 | 3467.8 | 3578.1 | 3689.6 | 3802.5 |
| | S | 2.4349 | 6.3459 | 7.1421 | 7.2216 | 7.2983 | 7.3725 | 7.4445 | 7.5827 | 7.7142 | 7.8399 |
| | V | 1.177 | 99.536 | 151.13 | 157.30 | 163.42 | 169.51 | 175.55 | 187.57 | 199.50 | 211.36 |
| 2000 | U | 906.236 | 2598.2 | 2946.4 | 2988.7 | 3031.0 | 3073.5 | 3116.2 | 3202.5 | 3290.2 | 3379.4 |
| (212.37) | H | 908.589 | 2797.2 | 3248.7 | 3303.3 | 3357.8 | 3412.5 | 3467.3 | 3577.6 | 3689.2 | 3802.1 |
| | S | 2.4469 | 6.3366 | 7.1296 | 7.2092 | 7.2859 | 7.3602 | 7.4323 | 7.5706 | 7.7022 | 7.8279 |
| | V | 1.181 | 94.890 | 143.73 | 149.63 | 155.48 | 161.28 | 167.06 | 178.53 | 189.91 | 201.22 |
| 2100 | U | 917.479 | 2598.9 | 2945.3 | 2987.6 | 3030.0 | 3072.6 | 3115.3 | 3201.8 | 3289.6 | 3378.9 |
| (214.85) | H | 919.959 | 2798.2 | 3247.1 | 3301.8 | 3356.5 | 3411.3 | 3466.2 | 3576.7 | 3688.4 | 3801.4 |
| | S | 2.4700 | 6.3187 | 7.1053 | 7.1851 | 7.2621 | 7.3365 | 7.4087 | 7.5472 | 7.6789 | 7.8048 |
| | V | 1.185 | 90.652 | 137.00 | 142.65 | 148.25 | 153.81 | 159.34 | 170.30 | 181.19 | 192.00 |
| 2200 | U | 928.346 | 2599.6 | 2944.1 | 2986.6 | 3029.1 | 3071.7 | 3114.5 | 3201.1 | 3289.0 | 3378.3 |
| (217.24) | H | 930.953 | 2799.1 | 3245.5 | 3300.4 | 3355.2 | 3410.1 | 3465.1 | 3575.7 | 3687.6 | 3800.7 |
| | S | 2.4922 | 6.3015 | 7.0821 | 7.1621 | 7.2393 | 7.3139 | 7.3862 | 7.5249 | 7.6568 | 7.7827 |
| | V | 1.189 | 86.769 | 130.85 | 136.28 | 141.65 | 146.99 | 152.28 | 162.80 | 173.22 | 183.58 |
| 2300 | U | 938.866 | 2600.2 | 2942.9 | 2985.5 | 3028.1 | 3070.8 | 3113.7 | 3200.4 | 3288.3 | 3377.8 |
| (219.55) | H | 941.601 | 2799.8 | 3243.9 | 3299.0 | 3353.9 | 3408.9 | 3464.0 | 3574.8 | 3686.7 | 3800.0 |
| | S | 2.5136 | 6.2849 | 7.0598 | 7.1401 | 7.2174 | 7.2922 | 7.3646 | 7.5035 | 7.6355 | 7.7616 |

## Tabla F.2. Vapor sobrecalentado, unidades SI (*Continúa*)

| | | | | TEMPERATURA: $t$ °C (TEMPERATURA: $T$ kelvins) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| $P$/kPa | | liq. | vap. | 225 | 250 | 275 | 300 | 325 | 350 | 375 | 400 |
| ($t^{sat}$/°C) | | sat. | sat. | (498.15) | (523.15) | (548.15) | (573.15) | (598.15) | (623.15) | (648.15) | (673.15) |
| | *V* | 1.193 | 83.199 | 84.149 | 91.075 | 97.411 | 103.36 | 109.05 | 114.55 | 119.93 | 125.22 |
| 2400 | *U* | 949.066 | 2600.7 | 2608.6 | 2665.6 | 2717.3 | 2765.4 | 2811.1 | 2855.4 | 2898.8 | 2941.7 |
| (221.78) | *H* | 951.929 | 2800.4 | 2810.6 | 2884.2 | 2951.1 | 3013.4 | 3072.8 | 3130.4 | 3186.7 | 3242.3 |
| | *S* | 2.5343 | 6.2690 | 6.2894 | 6.4338 | 6.5586 | 6.6699 | 6.7714 | 6.8656 | 6.9542 | 7.0384 |
| | *V* | 1.197 | 79.905 | 80.210 | 86.985 | 93.154 | 98.925 | 104.43 | 109.75 | 114.94 | 120.04 |
| 2500 | *U* | 958.969 | 2601.2 | 2603.8 | 2662.0 | 2714.5 | 2763.1 | 2809.3 | 2853.9 | 2897.5 | 2940.6 |
| (223.94) | *H* | 961.962 | 2800.9 | 2804.3 | 2879.5 | 2947.4 | 3010.4 | 3070.4 | 3128.2 | 3184.8 | 3240.7 |
| | *S* | 2.5543 | 6.2536 | 6.2604 | 6.4077 | 6.5345 | 6.6470 | 6.7494 | 6.8442 | 6.9333 | 7.0178 |
| | *V* | 1.201 | 76.856 | ..... | 83.205 | 89.220 | 94.830 | 100.17 | 105.32 | 110.33 | 115.26 |
| 2600 | *U* | 968.597 | 2601.5 | ..... | 2658.4 | 2711.7 | 2760.9 | 2807.4 | 2852.3 | 2896.1 | 2939.4 |
| (226.04) | *H* | 971.720 | 2801.4 | ..... | 2874.7 | 2943.6 | 3007.4 | 3067.9 | 3126.1 | 3183.0 | 3239.0 |
| | *S* | 2.5736 | 6.2387 | ..... | 6.3823 | 6.5110 | 6.6249 | 6.7281 | 6.8236 | 6.9131 | 6.9979 |
| | *V* | 1.205 | 74.025 | ..... | 79.698 | 85.575 | 91.036 | 96.218 | 101.21 | 106.07 | 110.83 |
| 2700 | *U* | 977.968 | 2601.8 | ..... | 2654.7 | 2708.8 | 2758.6 | 2805.6 | 2850.7 | 2894.8 | 2938.2 |
| (228.07) | *H* | 981.222 | 2801.7 | ..... | 2869.9 | 2939.8 | 3004.4 | 3065.4 | 3124.0 | 3181.2 | 3237.4 |
| | *S* | 2.5924 | 6.2244 | ..... | 6.3575 | 6.4882 | 6.6034 | 6.7075 | 6.8036 | 6.8935 | 6.9787 |
| | *V* | 1.209 | 71.389 | ..... | 76.437 | 82.187 | 87.510 | 92.550 | 97.395 | 102.10 | 106.71 |
| 2800 | *U* | 987.100 | 2602.1 | ..... | 2650.9 | 2705.9 | 2756.3 | 2803.7 | 2849.2 | 2893.4 | 2937.0 |
| (230.05) | *H* | 990.485 | 2802.0 | ..... | 2864.9 | 2936.0 | 3001.3 | 3062.8 | 3121.9 | 3179.3 | 3235.8 |
| | *S* | 2.61036 | 6.2104 | ..... | 6.3331 | 6.4659 | 6.5824 | 6.6875 | 6.7842 | 6.8746 | 6.9601 |
| | *V* | 1.213 | 68.928 | ..... | 73.395 | 79.029 | 84.226 | 89.133 | 93.843 | 98.414 | 102.88 |
| 2900 | *U* | 996.008 | 2602.3 | ..... | 2647.1 | 2702.9 | 2754.0 | 2801.8 | 2847.6 | 2892.0 | 2935.8 |
| (231.97) | *H* | 999.524 | 2802.2 | ..... | 2859.9 | 2932.1 | 2998.2 | 3060.3 | 3119.7 | 3177.4 | 3234.1 |
| | *S* | 2.6283 | 6.1969 | ..... | 6.3092 | 6.4441 | 6.5621 | 6.6681 | 6.7654 | 6.8563 | 6.9421 |
| | *V* | 1.216 | 66.626 | ..... | 70.551 | 76.078 | 81.159 | 85.943 | 90.526 | 94.969 | 99.310 |
| 3000 | *U* | 1004.7 | 2602.4 | ..... | 2643.2 | 2700.0 | 2751.6 | 2799.9 | 2846.0 | 2890.7 | 2934.6 |
| (233.84) | *H* | 1008.4 | 2802.3 | ..... | 2854.8 | 2928.2 | 2995.1 | 3057.7 | 3117.5 | 3175.6 | 3232.5 |
| | *S* | 2.6455 | 6.1837 | ..... | 6.2857 | 6.4228 | 6.5422 | 6.6491 | 6.7471 | 6.8385 | 6.9246 |
| | *V* | 1.220 | 64.467 | ..... | 67.885 | 73.315 | 78.287 | 82.958 | 87.423 | 91.745 | 95.965 |
| 3100 | *U* | 1013.2 | 2602.5 | ..... | 2639.2 | 2697.0 | 2749.2 | 2797.9 | 2844.3 | 2889.3 | 2933.4 |
| (235.67) | *H* | 1017.0 | 2802.3 | ..... | 2849.6 | 2924.2 | 2991.9 | 3055.1 | 3115.4 | 3173.7 | 3230.8 |
| | *S* | 2.6623 | 6.1709 | ..... | 6.2626 | 6.4019 | 6.5227 | 6.6307 | 6.7294 | 6.8212 | 6.9077 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | V | 1.224 | 62.439 | ..... | 65.380 | 70.721 | 75.593 | 80.158 | 84.513 | 88.723 | 92.829 |
| 3200 | U | 1021.5 | 2602.5 | ..... | 2635.2 | 2693.9 | 2746.8 | 2796.0 | 2842.7 | 2887.9 | 2932.1 |
| (237.45) | H | 1025.4 | 2802.3 | ..... | 2844.4 | 2920.2 | 2988.7 | 3052.5 | 3113.2 | 3171.8 | 3229.2 |
| | S | 2.6786 | 6.1585 | ..... | 6.2398 | 6.3815 | 6.5037 | 6.6127 | 6.7120 | 6.8043 | 6.8912 |
| | V | 1.227 | 60.529 | ..... | 63.021 | 68.282 | 73.061 | 77.526 | 81.778 | 85.883 | 89.883 |
| 3300 | U | 1029.7 | 2602.5 | ..... | 2631.1 | 2690.8 | 2744.4 | 2794.0 | 2841.1 | 2886.5 | 2930.9 |
| (239.18) | H | 1033.7 | 2802.3 | ..... | 2839.0 | 2916.1 | 2985.5 | 3049.9 | 3110.9 | 3169.9 | 3227.5 |
| | S | 2.6945 | 6.1463 | ..... | 6.2173 | 6.3614 | 6.4851 | 6.5951 | 6.6952 | 6.7879 | 6.8752 |
| | V | 1.231 | 58.728 | ..... | 60.796 | 65.982 | 70.675 | 75.048 | 79.204 | 83.210 | 87.110 |
| 3400 | U | 1037.6 | 2602.5 | ..... | 2626.9 | 2687.7 | 2741.9 | 2792.0 | 2839.4 | 2885.1 | 2929.7 |
| (240.88) | H | 1041.8 | 2802.1 | ..... | 2833.6 | 2912.0 | 2982.2 | 3047.2 | 3108.7 | 3168.0 | 3225.9 |
| | S | 2.7101 | 6.1344 | ..... | 6.1951 | 6.3416 | 6.4669 | 6.5779 | 6.6787 | 6.7719 | 6.8595 |
| | V | 1.235 | 57.025 | ..... | 58.693 | 63.812 | 68.424 | 72.710 | 76.776 | 80.689 | 84.494 |
| 3500 | U | 1045.4 | 2602.4 | ..... | 2622.7 | 2684.5 | 2739.5 | 2790.0 | 2837.8 | 2883.7 | 2928.4 |
| (242.54) | H | 1049.8 | 2802.0 | ..... | 2828.1 | 2907.8 | 2979.0 | 3044.5 | 3106.5 | 3166.1 | 3224.2 |
| | S | 2.7253 | 6.1228 | ..... | 6.1732 | 6.3221 | 6.4491 | 6.5611 | 6.6626 | 6.7563 | 6.8443 |
| | V | 1.238 | 55.415 | ..... | 56.702 | 61.759 | 66.297 | 70.501 | 74.482 | 78.308 | 82.024 |
| 3600 | U | 1053.1 | 2602.2 | ..... | 2618.4 | 2681.3 | 2737.0 | 2788.0 | 2836.1 | 2882.3 | 2927.2 |
| (244.16) | H | 1057.6 | 2801.7 | ..... | 2822.5 | 2903.6 | 2975.6 | 3041.8 | 3104.2 | 3164.2 | 3222.5 |
| | S | 2.7401 | 6.1115 | ..... | 6.1514 | 6.3030 | 6.4315 | 6.5446 | 6.6468 | 6.7411 | 6.8294 |
| | V | 1.242 | 53.888 | ..... | 54.812 | 59.814 | 64.282 | 68.410 | 72.311 | 76.055 | 79.687 |
| 3700 | U | 1060.6 | 2602.1 | ..... | 2614.0 | 2678.0 | 2734.4 | 2786.0 | 2834.4 | 2880.8 | 2926.0 |
| (245.75) | H | 1065.2 | 2801.4 | ..... | 2816.8 | 2899.3 | 2972.3 | 3039.1 | 3102.0 | 3162.2 | 3220.8 |
| | S | 2.7547 | 6.1004 | ..... | 6.1299 | 6.2841 | 6.4143 | 6.5284 | 6.6314 | 6.7262 | 6.8149 |
| | V | 1.245 | 52.438 | ..... | 53.017 | 57.968 | 62.372 | 66.429 | 70.254 | 73.920 | 77.473 |
| 3800 | U | 1068.0 | 2601.9 | ..... | 2609.5 | 2674.7 | 2731.9 | 2783.9 | 2832.7 | 2879.4 | 2924.7 |
| (247.31) | H | 1072.7 | 2801.1 | ..... | 2811.0 | 2895.0 | 2968.9 | 3036.4 | 3099.7 | 3160.3 | 3219.1 |
| | S | 2.7689 | 6.0896 | ..... | 6.1085 | 6.2654 | 6.3973 | 6.5126 | 6.6163 | 6.7117 | 6.8007 |
| | V | 1.249 | 51.061 | ..... | 51.308 | 56.215 | 60.558 | 64.547 | 68.302 | 71.894 | 75.372 |
| 3900 | U | 1075.3 | 2601.6 | ..... | 2605.0 | 2671.4 | 2729.3 | 2781.9 | 2831.0 | 2877.9 | 2923.5 |
| (248.84) | H | 1080.1 | 2800.8 | ..... | 2805.1 | 2890.6 | 2965.5 | 3033.6 | 3097.4 | 3158.3 | 3217.4 |
| | S | 2.7828 | 6.0789 | ..... | 6.0872 | 6.2470 | 6.3806 | 6.4970 | 6.6015 | 6.6974 | 6.7868 |
| | V | 1.252 | 49.749 | ..... | ..... | 54.546 | 58.833 | 62.759 | 66.446 | 69.969 | 73.376 |
| 4000 | U | 1082.4 | 2601.3 | ..... | ..... | 2668.0 | 2726.7 | 2779.8 | 2829.3 | 2876.5 | 2922.2 |
| (250.33) | H | 1087.4 | 2800.3 | ..... | ..... | 2886.1 | 2962.0 | 3030.8 | 3095.1 | 3156.4 | 3215.7 |
| | S | 2.7965 | 6.0685 | ..... | ..... | 6.2288 | 6.3642 | 6.4817 | 6.5870 | 6.6834 | 6.7733 |

## Tabla F.2. Vapor sobrecalentado, unidades SI (*Continúa*)

| | | | | TEMPERATURA: $t$ °C (TEMPERATURA: $T$ kelvins) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| $P$/kPa | | liq. | vap. | 425 | 450 | 475 | 500 | 525 | 550 | 600 | 650 |
| ($t^{sat}$/ °C) | | sat. | sat. | (698.15) | (723.15) | (748.15) | (773.15) | (798.15) | (823.15) | (873.15) | (923.15) |
| | *V* | 1.193 | 83.199 | 130.44 | 135.61 | 140.73 | 145.82 | 150.88 | 155.91 | 165.92 | 175.86 |
| 2400 | *U* | 949.066 | 2600.7 | 2984.5 | 3027.1 | 3069.9 | 3112.9 | 3156.1 | 3199.6 | 3287.7 | 3377.2 |
| (221.78) | *H* | 951.929 | 2800.4 | 3297.5 | 3352.6 | 3407.7 | 3462.9 | 3518.2 | 3573.8 | 3685.9 | 3799.3 |
| | *S* | 2.5343 | 6.2690 | 7.1189 | 7.1964 | 7.2713 | 7.3439 | 7.4144 | 7.4830 | 7.6152 | 7.7414 |
| | *V* | 1.197 | 79.905 | 125.07 | 130.04 | 134.97 | 139.87 | 144.74 | 149.58 | 159.21 | 168.76 |
| 2500 | *U* | 958.969 | 2601.2 | 2983.4 | 3026.2 | 3069.0 | 3112.1 | 3155.4 | 3198.9 | 3287.1 | 3376.7 |
| (223.94) | *H* | 961.962 | 2800.9 | 3296.1 | 3351.3 | 3406.5 | 3461.7 | 3517.2 | 3572.9 | 3685.1 | 3798.6 |
| | *S* | 2.5543 | 6.2536 | 7.0986 | 7.1763 | 7.2513 | 7.3240 | 7.3946 | 7.4633 | 7.5956 | 7.7220 |
| | *V* | 1.201 | 76.856 | 120.11 | 124.91 | 129.66 | 134.38 | 139.07 | 143.74 | 153.01 | 162.21 |
| 2600 | *U* | 968.597 | 2601.5 | 2982.3 | 3025.2 | 3068.1 | 3111.2 | 3154.6 | 3198.2 | 3286.5 | 3376.1 |
| (226.04) | *H* | 971.720 | 2801.4 | 3294.6 | 3349.9 | 3405.3 | 3460.6 | 3516.2 | 3571.9 | 3684.3 | 3797.9 |
| | *S* | 2.5736 | 6.2387 | 7.0789 | 7.1568 | 7.2320 | 7.3048 | 7.3755 | 7.4443 | 7.5768 | 7.7033 |
| | *V* | 1.205 | 74.025 | 115.52 | 120.15 | 124.74 | 129.30 | 133.82 | 138.33 | 147.27 | 156.14 |
| 2700 | *U* | 977.968 | 2601.8 | 2981.2 | 3024.2 | 3067.2 | 3110.4 | 3153.8 | 3197.5 | 3285.8 | 3375.6 |
| (228.07) | *H* | 981.222 | 2801.7 | 3293.1 | 3348.6 | 3404.0 | 3459.5 | 3515.2 | 3571.0 | 3683.5 | 3797.1 |
| | *S* | 2.5924 | 6.2244 | 7.0600 | 7.1381 | 7.2134 | 7.2863 | 7.3571 | 7.4260 | 7.5587 | 7.6853 |
| | *V* | 1.209 | 71.389 | 111.25 | 115.74 | 120.17 | 124.58 | 128.95 | 133.30 | 141.94 | 150.50 |
| 2800 | *U* | 987.100 | 2602.1 | 2980.2 | 3023.2 | 3066.3 | 3109.6 | 3153.1 | 3196.8 | 3285.2 | 3375.0 |
| (230.05) | *H* | 990.485 | 2802.0 | 3291.7 | 3347.3 | 3402.8 | 3458.4 | 3514.1 | 3570.0 | 3682.6 | 3796.4 |
| | *S* | 2.6106 | 6.2104 | 7.0416 | 7.1199 | 7.1954 | 7.2685 | 7.3394 | 7.4084 | 7.5412 | 7.6679 |
| | *V* | 1.213 | 68.928 | 107.28 | 111.62 | 115.92 | 120.18 | 124.42 | 128.62 | 136.97 | 145.26 |
| 2900 | *U* | 996.008 | 2602.3 | 2979.1 | 3022.3 | 3065.5 | 3108.8 | 3152.3 | 3196.1 | 3284.6 | 3374.5 |
| (231.97) | *H* | 999.524 | 2802.2 | 3290.2 | 3346.0 | 3401.6 | 3457.3 | 3513.1 | 3569.1 | 3681.8 | 3795.7 |
| | *S* | 2.6283 | 6.1969 | 7.0239 | 7.1024 | 7.1780 | 7.2512 | 7.3222 | 7.3913 | 7.5243 | 7.6511 |
| | *V* | 1.216 | 66.626 | 103.58 | 107.79 | 111.95 | 116.08 | 120.18 | 124.26 | 132.34 | 140.36 |
| 3000 | *U* | 1004.7 | 2602.4 | 2978.0 | 3021.3 | 3064.6 | 3107.9 | 3151.5 | 3195.4 | 3284.0 | 3373.9 |
| (233.84) | *H* | 1008.4 | 2802.3 | 3288.7 | 3344.6 | 3400.4 | 3456.2 | 3512.1 | 3568.1 | 3681.0 | 3795.0 |
| | *S* | 2.6455 | 6.1837 | 7.0067 | 7.0854 | 7.1612 | 7.2345 | 7.3056 | 7.3748 | 7.5079 | 7.6349 |
| | *V* | 1.220 | 64.467 | 100.11 | 104.20 | 108.24 | 112.24 | 116.22 | 120.17 | 128.01 | 135.78 |
| 3100 | *U* | 1013.2 | 2602.5 | 2976.9 | 3020.3 | 3063.7 | 3107.1 | 3150.8 | 3194.7 | 3283.3 | 3373.4 |
| (235.67) | *H* | 1017.0 | 2802.3 | 3287.3 | 3343.3 | 3399.2 | 3455.1 | 3511.0 | 3567.2 | 3680.2 | 3794.3 |
| | *S* | 2.6623 | 6.1709 | 6.9900 | 7.0689 | 7.1448 | 7.2183 | 7.2895 | 7.3588 | 7.4920 | 7.6191 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | *V* | 1.224 | 62.439 | 96.859 | 100.83 | 104.76 | 108.65 | 112.51 | 116.34 | 123.95 | 131.48 |
| 3200 | *U* | 1021.5 | 2602.5 | 2975.9 | 3019.3 | 3062.8 | 3106.3 | 3150.0 | 3193.9 | 3282.7 | 3372.8 |
| (237.45) | *H* | 1025.4 | 2802.3 | 3285.8 | 3342.0 | 3398.0 | 3454.0 | 3510.0 | 3566.2 | 3679.3 | 3793.6 |
| | *S* | 2.6786 | 6.1585 | 6.9738 | 7.0528 | 7.1290 | 7.2026 | 7.2739 | 7.3433 | 7.4767 | 7.6039 |
| | *V* | 1.227 | 60.529 | 93.805 | 97.668 | 101.49 | 105.27 | 109.02 | 112.74 | 120.13 | 127.45 |
| 3300 | *U* | 1029.7 | 2602.5 | 2974.8 | 3018.3 | 3061.9 | 3105.5 | 3149.2 | 3193.2 | 3282.1 | 3372.3 |
| (239.18) | *H* | 1033.7 | 2802.3 | 3284.3 | 3340.6 | 3396.8 | 3452.8 | 3509.0 | 3565.3 | 3678.5 | 3792.9 |
| | *S* | 2.6945 | 6.1463 | 6.9580 | 7.0373 | 7.1136 | 7.1873 | 7.2588 | 7.3282 | 7.4618 | 7.5891 |
| | *V* | 1.231 | 58.728 | 90.930 | 94.692 | 98.408 | 102.09 | 105.74 | 109.36 | 116.54 | 123.65 |
| 3400 | *U* | 1037.6 | 2602.5 | 2973.7 | 3017.4 | 3061.0 | 3104.6 | 3148.4 | 3192.5 | 3281.5 | 3371.7 |
| (240.88) | *H* | 1041.8 | 2802.1 | 3282.8 | 3339.3 | 3395.5 | 3451.7 | 3507.9 | 3564.3 | 3677.7 | 3792.1 |
| | *S* | 2.7101 | 6.1344 | 6.9426 | 7.0221 | 7.0986 | 7.1724 | 7.2440 | 7.3136 | 7.4473 | 7.5747 |
| | *V* | 1.235 | 57.025 | 88.220 | 91.886 | 95.505 | 99.088 | 102.64 | 106.17 | 113.15 | 120.07 |
| 3500 | *U* | 1045.4 | 2602.4 | 2972.6 | 3016.4 | 3060.1 | 3103.8 | 3147.7 | 3191.8 | 3280.8 | 3371.2 |
| (242.54) | *H* | 1049.8 | 2802.0 | 3281.3 | 3338.0 | 3394.3 | 3450.6 | 3506.9 | 3563.4 | 3676.9 | 3791.4 |
| | *S* | 2.7253 | 6.1228 | 6.9277 | 7.0074 | 7.0840 | 7.1580 | 7.2297 | 7.2993 | 7.4332 | 7.5607 |
| | *V* | 1.238 | 55.415 | 85.660 | 89.236 | 92.764 | 96.255 | 99.716 | 103.15 | 109.96 | 116.69 |
| 3600 | *U* | 1053.1 | 2602.2 | 2971.5 | 3015.4 | 3059.2 | 3103.0 | 3146.9 | 3191.1 | 3280.2 | 3370.6 |
| (244.16) | *H* | 1057.6 | 2801.7 | 3279.8 | 3336.6 | 3393.1 | 3449.5 | 3505.9 | 3562.4 | 3676.1 | 3790.7 |
| | *S* | 2.7401 | 6.1115 | 6.9131 | 6.9930 | 7.0698 | 7.1439 | 7.2157 | 7.2854 | 7.4195 | 7.5471 |
| | *V* | 1.242 | 53.888 | 83.238 | 86.728 | 90.171 | 93.576 | 96.950 | 100.30 | 106.93 | 113.49 |
| 3700 | *U* | 1060.6 | 2602.1 | 2970.4 | 3014.4 | 3058.2 | 3102.1 | 3146.1 | 3190.4 | 3279.6 | 3370.1 |
| (245.75) | *H* | 1065.2 | 2801.4 | 3278.4 | 3335.3 | 3391.9 | 3448.4 | 3504.9 | 3561.5 | 3675.2 | 3790.0 |
| | *S* | 2.7547 | 6.1004 | 6.8989 | 6.9790 | 7.0559 | 7.1302 | 7.2021 | 7.2719 | 7.4061 | 7.5339 |
| | *V* | 1.245 | 52.438 | 80.944 | 84.353 | 87.714 | 91.038 | 94.330 | 97.596 | 104.06 | 110.46 |
| 3800 | *U* | 1068.0 | 2601.9 | 2969.3 | 3013.4 | 3057.3 | 3101.3 | 3145.4 | 3189.6 | 3279.0 | 3369.5 |
| (247.31) | *H* | 1072.7 | 2801.1 | 3276.8 | 3333.9 | 3390.7 | 3447.2 | 3503.8 | 3560.5 | 3674.4 | 3789.3 |
| | *S* | 2.7689 | 6.0896 | 6.8849 | 6.9653 | 7.0424 | 7.1168 | 7.1888 | 7.2587 | 7.3931 | 7.5210 |
| | *V* | 1.249 | 51.061 | 78.767 | 82.099 | 85.383 | 88.629 | 91.844 | 95.033 | 101.35 | 107.59 |
| 3900 | *U* | 1075.3 | 2601.6 | 2968.2 | 3012.4 | 3056.4 | 3100.5 | 3144.6 | 3188.9 | 3278.3 | 3369.0 |
| (248.84) | *H* | 1080.1 | 2800.8 | 3275.3 | 3332.6 | 3389.4 | 3446.1 | 3502.8 | 3559.5 | 3673.6 | 3788.6 |
| | *S* | 2.7828 | 6.0789 | 6.8713 | 6.9519 | 7.0292 | 7.1037 | 7.1759 | 7.2459 | 7.3804 | 7.5084 |
| | *V* | 1.252 | 49.749 | 76.698 | 79.958 | 83.169 | 86.341 | 89.483 | 92.598 | 98.763 | 104.86 |
| 4000 | *U* | 1082.4 | 2601.3 | 2967.0 | 3011.4 | 3055.5 | 3099.6 | 3143.8 | 3188.2 | 3277.7 | 3368.4 |
| (250.33) | *H* | 1087.4 | 2800.3 | 3273.8 | 3331.2 | 3388.2 | 3445.0 | 3501.7 | 3558.6 | 3672.8 | 3787.9 |
| | *S* | 2.7965 | 6.0685 | 6.8581 | 6.9388 | 7.0163 | 7.0909 | 7.1632 | 7.2333 | 7.3680 | 7.4961 |

## Tabla F.2. Vapor sobrecalentado, unidades SI (*Continúa*)

| | | | | TEMPERATURA: $t$ °C (TEMPERATURA: $T$ kelvins) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| $P$kPa ($t^{sat}$/°C) | | liq. sat. | vap. sat. | 260 (533.15) | 275 (548.15) | 300 (573.15) | 325 (598.15) | 350 (623.15) | 375 (648.15) | 400 (673.15) | 425 (698.15) |
| 4100 (251.80) | $V$ | 1.256 | 48.500 | 50.150 | 52.955 | 57.191 | 61.057 | 64.680 | 68.137 | 71.476 | 74.730 |
| | $U$ | 1089.4 | 2601.0 | 2624.6 | 2664.5 | 2724.0 | 2777.7 | 2827.6 | 2875.0 | 2920.9 | 2965.9 |
| | $H$ | 1094.6 | 2799.9 | 2830.3 | 2881.6 | 2958.5 | 3028.0 | 3092.8 | 3154.4 | 3214.0 | 3272.3 |
| | $S$ | 2.8099 | 6.0583 | 6.1157 | 6.2107 | 6.3480 | 6.4667 | 6.5727 | 6.6697 | 6.7600 | 6.8450 |
| 4200 (253.24) | $V$ | 1.259 | 47.307 | 48.654 | 51.438 | 55.625 | 59.435 | 62.998 | 66.392 | 69.667 | 72.856 |
| | $U$ | 1096.3 | 2600.7 | 2620.4 | 2661.0 | 2721.4 | 2775.6 | 2825.8 | 2873.6 | 2919.7 | 2964.8 |
| | $H$ | 1101.6 | 2799.4 | 2824.8 | 2877.1 | 2955.0 | 3025.2 | 3090.4 | 3152.4 | 3212.3 | 3270.8 |
| | $S$ | 2.8231 | 6.0482 | 6.0962 | 6.1929 | 6.3320 | 6.4519 | 6.5587 | 6.6563 | 6.7469 | 6.8323 |
| 4300 (254.66) | $V$ | 1.262 | 46.168 | 47.223 | 49.988 | 54.130 | 57.887 | 61.393 | 64.728 | 67.942 | 71.069 |
| | $U$ | 1103.1 | 2600.3 | 2616.2 | 2657.5 | 2718.7 | 2773.4 | 2824.1 | 2872.1 | 2918.4 | 2963.7 |
| | $H$ | 1108.5 | 2798.9 | 2819.2 | 2872.4 | 2951.4 | 3022.3 | 3088.1 | 3150.4 | 3210.5 | 3269.3 |
| | $S$ | 2.8360 | 6.0383 | 6.0768 | 6.1752 | 6.3162 | 6.4373 | 6.5450 | 6.6431 | 6.7341 | 6.8198 |
| 4400 (256.05) | $V$ | 1.266 | 45.079 | 45.853 | 48.601 | 52.702 | 56.409 | 59.861 | 63.139 | 66.295 | 69.363 |
| | $U$ | 1109.8 | 2599.9 | 2611.8 | 2653.9 | 2716.0 | 2771.3 | 2822.3 | 2870.6 | 2917.1 | 2962.5 |
| | $H$ | 1115.4 | 2798.3 | 2813.6 | 2867.8 | 2947.8 | 3019.5 | 3085.7 | 3148.4 | 3208.8 | 3267.7 |
| | $S$ | 2.8487 | 6.0286 | 6.0575 | 6.1577 | 6.3006 | 6.4230 | 6.5315 | 6.6301 | 6.7216 | 6.8076 |
| 4500 (257.41) | $V$ | 1.269 | 44.037 | 44.540 | 47.273 | 51.336 | 54.996 | 58.396 | 61.620 | 64.721 | 67.732 |
| | $U$ | 1116.4 | 2599.5 | 2607.4 | 2650.3 | 2713.2 | 2769.1 | 2820.5 | 2869.1 | 2915.8 | 2961.4 |
| | $H$ | 1122.1 | 2797.7 | 2807.9 | 2863.0 | 2944.2 | 3016.6 | 3083.3 | 3146.4 | 3207.1 | 3266.2 |
| | $S$ | 2.8612 | 6.0191 | 6.0382 | 6.1403 | 6.2852 | 6.4088 | 6.5182 | 6.6174 | 6.7093 | 6.7955 |
| 4600 (258.75) | $V$ | 1.272 | 43.038 | 43.278 | 46.000 | 50.027 | 53.643 | 56.994 | 60.167 | 63.215 | 66.172 |
| | $U$ | 1122.9 | 2599.1 | 2602.9 | 2646.6 | 2710.4 | 2766.9 | 2818.7 | 2867.6 | 2914.5 | 2960.3 |
| | $H$ | 1128.8 | 2797.0 | 2802.0 | 2858.2 | 2940.5 | 3013.7 | 3080.9 | 3144.4 | 3205.3 | 3264.7 |
| | $S$ | 2.8735 | 6.0097 | 6.0190 | 6.1230 | 6.2700 | 6.3949 | 6.5050 | 6.6049 | 6.6972 | 6.7838 |
| 4700 (260.07) | $V$ | 1.276 | 42.081 | ..... | 44.778 | 48.772 | 52.346 | 55.651 | 58.775 | 61.773 | 64.679 |
| | $U$ | 1129.3 | 2598.6 | ..... | 2642.9 | 2707.6 | 2764.7 | 2816.9 | 2866.1 | 2913.2 | 2959.1 |
| | $H$ | 1135.3 | 2796.4 | ..... | 2853.3 | 2936.8 | 3010.7 | 3078.5 | 3142.3 | 3203.6 | 3263.1 |
| | $S$ | 2.8855 | 6.0004 | ..... | 6.1058 | 6.2549 | 6.3811 | 6.4921 | 6.5926 | 6.6853 | 6.7722 |
| 4800 (261.37) | $V$ | 1.279 | 41.161 | ..... | 43.604 | 47.569 | 51.103 | 54.364 | 57.441 | 60.390 | 63.247 |
| | $U$ | 1135.6 | 2598.1 | ..... | 2639.1 | 2704.8 | 2762.5 | 2815.1 | 2864.6 | 2911.9 | 2958.0 |
| | $H$ | 1141.8 | 2795.7 | ..... | 2848.4 | 2933.1 | 3007.8 | 3076.1 | 3140.3 | 3201.8 | 3261.6 |
| | $S$ | 2.8974 | 5.9913 | ..... | 6.0887 | 6.2399 | 6.3675 | 6.4794 | 6.5805 | 6.6736 | 6.7608 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *V* | 1.282 | 40.278 | ..... | 42.475 | 46.412 | 49.909 | 53.128 | 56.161 | 59.064 | 61.874 | |
| 4900 | *U* | 1141.9 | 2597.6 | ..... | 2635.2 | 2701.9 | 2760.2 | 2813.3 | 2863.0 | 2910.6 | 2956.9 | |
| (262.65) | *H* | 1148.2 | 2794.9 | ..... | 2843.3 | 2929.3 | 3004.8 | 3073.6 | 3138.2 | 3200.0 | 3260.0 | |
| | *S* | 2.9091 | 5.9823 | ..... | 6.0717 | 6.2252 | 6.3541 | 6.4669 | 6.5685 | 6.6621 | 6.7496 | |
| | *V* | 1.286 | 39.429 | ..... | 41.388 | 45.301 | 48.762 | 51.941 | 54.932 | 57.791 | 60.555 | |
| 5000 | *U* | 1148.0 | 2597.0 | ..... | 2631.3 | 2699.0 | 2758.0 | 2811.5 | 2861.5 | 2909.3 | 2955.7 | |
| (263.91) | *H* | 1154.5 | 2794.2 | ..... | 2838.2 | 2925.5 | 3001.8 | 3071.2 | 3136.2 | 3198.3 | 3258.5 | |
| | *S* | 2.9206 | 5.9735 | ..... | 6.0547 | 6.2105 | 6.3408 | 6.4545 | 6.5568 | 6.6508 | 6.7386 | |
| | *V* | 1.289 | 38.611 | ..... | 40.340 | 44.231 | 47.660 | 50.801 | 53.750 | 56.567 | 59.288 | |
| 5100 | *U* | 1154.1 | 2596.5 | ..... | 2627.3 | 2696.1 | 2755.7 | 2809.6 | 2860.0 | 2908.0 | 2954.5 | |
| (265.15) | *H* | 1160.7 | 2793.4 | ..... | 2833.1 | 2921.7 | 2998.7 | 3068.7 | 3134.1 | 3196.5 | 3256.9 | |
| | *S* | 2.9319 | 5.9648 | ..... | 6.0378 | 6.1960 | 6.3277 | 6.4423 | 6.5452 | 6.6396 | 6.7278 | |
| | *V* | 1.292 | 37.824 | ..... | 39.330 | 43.201 | 46.599 | 49.703 | 52.614 | 55.390 | 58.070 | |
| 5200 | *U* | 1160.1 | 2595.9 | ..... | 2623.3 | 2693.1 | 2753.4 | 2807.8 | 2858.4 | 2906.7 | 2953.4 | |
| (266.37) | *H* | 1166.8 | 2792.6 | ..... | 2827.8 | 2917.8 | 2995.7 | 3066.2 | 3132.0 | 3194.7 | 3255.4 | |
| | *S* | 2.9431 | 5.9561 | ..... | 6.0210 | 6.1815 | 6.3147 | 6.4302 | 6.5338 | 6.6287 | 6.7172 | |
| | *V* | 1.296 | 37.066 | ..... | 38.354 | 42.209 | 45.577 | 48.647 | 51.520 | 54.257 | 56.897 | |
| 5300 | *U* | 1166.1 | 2595.3 | ..... | 2619.2 | 2690.1 | 2751.0 | 2805.9 | 2856.9 | 2905.3 | 2952.2 | |
| (267.58) | *H* | 1172.9 | 2791.7 | ..... | 2822.5 | 2913.8 | 2992.6 | 3063.7 | 3129.9 | 3192.9 | 3253.8 | |
| | *S* | 2.9541 | 5.9476 | ..... | 6.0041 | 6.1672 | 6.3018 | 6.4183 | 6.5225 | 6.6179 | 6.7067 | |
| | *V* | 1.299 | 36.334 | ..... | 37.411 | 41.251 | 44.591 | 47.628 | 50.466 | 53.166 | 55.768 | |
| 5400 | *U* | 1171.9 | 2594.6 | ..... | 2615.0 | 2687.1 | 2748.7 | 2804.0 | 2855.3 | 2904.0 | 2951.1 | |
| (268.76) | *H* | 1178.9 | 2790.8 | ..... | 2817.0 | 2909.8 | 2989.5 | 3061.2 | 3127.8 | 3191.1 | 3252.2 | |
| | *S* | 2.9650 | 5.9392 | ..... | 5.9873 | 6.1530 | 6.2891 | 6.4066 | 6.5114 | 6.6072 | 6.6963 | |
| | *V* | 1.302 | 35.628 | ..... | 36.499 | 40.327 | 43.641 | 46.647 | 49.450 | 52.115 | 54.679 | |
| 5500 | *U* | 1177.7 | 2594.0 | ..... | 2610.8 | 2684.0 | 2746.3 | 2802.1 | 2853.7 | 2902.7 | 2949.9 | |
| (269.93) | *H* | 1184.9 | 2789.9 | ..... | 2811.5 | 2905.8 | 2986.4 | 3058.7 | 3125.7 | 3189.3 | 3250.6 | |
| | *S* | 2.9757 | 5.9309 | ..... | 5.9705 | 6.1388 | 6.2765 | 6.3949 | 6.5004 | 6.5967 | 6.6862 | |
| | *V* | 1.306 | 34.946 | ..... | 35.617 | 39.434 | 42.724 | 45.700 | 48.470 | 51.100 | 53.630 | |
| 5600 | *U* | 1183.5 | 2593.3 | ..... | 2606.5 | 2680.9 | 2744.0 | 2800.2 | 2852.1 | 2901.3 | 2948.7 | |
| (271.09) | *H* | 1190.8 | 2789.0 | ..... | 2805.9 | 2901.7 | 2983.2 | 3056.1 | 3123.6 | 3187.5 | 3249.0 | |
| | *S* | 2.9863 | 5.9227 | ..... | 5.9537 | 6.1248 | 6.2640 | 6.3834 | 6.4896 | 6.5863 | 6.6761 | |
| | *V* | 1.309 | 34.288 | ..... | 34.761 | 38.571 | 41.838 | 44.785 | 47.525 | 50.121 | 52.617 | |
| 5700 | *U* | 1189.1 | 2592.6 | ..... | 2602.1 | 2677.8 | 2741.6 | 2798.3 | 2850.5 | 2899.9 | 2947.5 | |
| (272.22) | *H* | 1196.6 | 2788.0 | ..... | 2800.2 | 2897.6 | 2980.0 | 3053.5 | 3121.4 | 3185.6 | 3247.5 | |
| | *S* | 2.9968 | 5.9146 | ..... | 5.9369 | 6.1108 | 6.2516 | 6.3720 | 6.4789 | 6.5761 | 6.6663 | |

## Tabla F.2. Vapor sobrecalentado, unidades SI (Continúa)

| | | | | TEMPERATURA: $t$ °C (TEMPERATURA: $T$ kelvins) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| $P$/kPa | | liq. | vap. | 450 | 475 | 500 | 525 | 550 | 575 | 600 | 650 |
| ($t^{sat}$/°C) | | sat. | sat. | (723.15) | (748.15) | (773.15) | (798.15) | (823.15) | (848.15) | (873.15) | (923.15) |
| | *V* | 1.256 | 48.500 | 77.921 | 81.062 | 84.165 | 87.236 | 90.281 | 93.303 | 96.306 | 102.26 |
| 4100 | *U* | 1089.4 | 2601.0 | 3010.4 | 3054.6 | 3098.8 | 3143.0 | 3187.5 | 3232.1 | 3277.1 | 3367.9 |
| (251.80) | *H* | 1094.6 | 2799.9 | 3329.9 | 3387.0 | 3443.9 | 3500.7 | 3557.6 | 3614.7 | 3671.9 | 3787.1 |
| | *S* | 2.8099 | 6.0583 | 6.9260 | 7.0037 | 7.0785 | 7.1508 | 7.2210 | 7.2893 | 7.3558 | 7.4842 |
| | *V* | 1.259 | 47.307 | 75.981 | 79.056 | 82.092 | 85.097 | 88.075 | 91.030 | 93.966 | 99.787 |
| 4200 | *U* | 1096.3 | 2600.7 | 3009.4 | 3053.7 | 3097.9 | 3142.3 | 3186.8 | 3231.5 | 3276.5 | 3367.3 |
| (253.24) | *H* | 1101.6 | 2799.4 | 3328.5 | 3385.7 | 3442.7 | 3499.7 | 3556.7 | 3613.8 | 3671.1 | 3786.4 |
| | *S* | 2.8231 | 6.0482 | 6.9135 | 6.9913 | 7.0662 | 7.1387 | 7.2090 | 7.2774 | 7.3440 | 7.4724 |
| | *V* | 1.262 | 46.168 | 74.131 | 77.143 | 80.116 | 83.057 | 85.971 | 88.863 | 91.735 | 97.428 |
| 4300 | *U* | 1103.1 | 2600.3 | 3008.4 | 3052.8 | 3097.1 | 3141.5 | 3186.0 | 3230.8 | 3275.8 | 3366.8 |
| (254.66) | *H* | 1108.5 | 2798.9 | 3327.1 | 3384.5 | 3441.6 | 3498.6 | 3555.7 | 3612.9 | 3670.3 | 3785.7 |
| | *S* | 2.8360 | 6.0383 | 6.9012 | 6.9792 | 7.0543 | 7.1269 | 7.1973 | 7.2658 | 7.3324 | 7.4610 |
| | *V* | 1.266 | 45.079 | 72.365 | 75.317 | 78.229 | 81.110 | 83.963 | 86.794 | 89.605 | 95.177 |
| 4400 | *U* | 1109.8 | 2599.9 | 3007.4 | 3051.9 | 3096.3 | 3140.7 | 3185.3 | 3230.1 | 3275.2 | 3366.2 |
| (256.05) | *H* | 1115.4 | 2798.3 | 3325.8 | 3383.3 | 3440.5 | 3497.6 | 3554.7 | 3612.0 | 3669.5 | 3785.0 |
| | *S* | 2.8487 | 6.0286 | 6.8892 | 6.9674 | 7.0426 | 7.1153 | 7.1858 | 7.2544 | 7.3211 | 7.4498 |
| | *V* | 1.269 | 44.037 | 70.677 | 73.572 | 76.427 | 79.249 | 82.044 | 84.817 | 87.570 | 93.025 |
| 4500 | *U* | 1116.4 | 2599.5 | 3006.3 | 3050.9 | 3095.4 | 3139.9 | 3184.6 | 3229.5 | 3274.6 | 3365.7 |
| (257.41) | *H* | 1122.1 | 2797.7 | 3324.4 | 3382.0 | 3439.3 | 3496.6 | 3553.8 | 3611.1 | 3668.6 | 3784.3 |
| | *S* | 2.8612 | 6.0191 | 6.8774 | 6.9558 | 7.0311 | 7.1040 | 7.1746 | 7.2432 | 7.3100 | 7.4388 |
| | *V* | 1.272 | 43.038 | 69.063 | 71.903 | 74.702 | 77.469 | 80.209 | 82.926 | 85.623 | 90.967 |
| 4600 | *U* | 1122.9 | 2599.1 | 3005.3 | 3050.0 | 3094.6 | 3139.2 | 3183.9 | 3228.8 | 3273.9 | 3365.1 |
| (258.75) | *H* | 1128.8 | 2797.0 | 3323.0 | 3380.8 | 3438.2 | 3495.5 | 3552.8 | 3610.2 | 3667.8 | 3783.6 |
| | *S* | 2.8735 | 6.0097 | 6.8659 | 6.9444 | 7.0199 | 7.0928 | 7.1636 | 7.2323 | 7.2991 | 7.4281 |
| | *V* | 7.276 | 42.081 | 67.517 | 70.304 | 73.051 | 75.765 | 78.452 | 81.116 | 83.760 | 88.997 |
| 4700 | *U* | 1129.3 | 2598.6 | 3004.3 | 3049.1 | 3093.7 | 3138.4 | 3183.1 | 3228.1 | 3273.3 | 3364.6 |
| (260.07) | *H* | 1135.3 | 2796.4 | 3321.6 | 3379.5 | 3437.1 | 3494.5 | 3551.9 | 3609.3 | 3667.0 | 3782.9 |
| | *S* | 2.8855 | 6.0004 | 6.8545 | 6.9332 | 7.0089 | 7.0819 | 7.1527 | 7.2215 | 7.2885 | 7.4176 |
| | *V* | 1.279 | 41.161 | 66.036 | 68.773 | 71.469 | 74.132 | 76.768 | 79.381 | 81.973 | 87.109 |
| 4800 | *U* | 1135.6 | 2598.1 | 3003.3 | 3048.2 | 3092.9 | 3137.6 | 3182.4 | 3227.4 | 3272.7 | 3364.0 |
| (261.37) | *H* | 1141.8 | 2795.7 | 3320.3 | 3378.3 | 3435.9 | 3493.4 | 3550.9 | 3608.5 | 3666.2 | 3782.1 |
| | *S* | 2.8974 | 5.9913 | 6.8434 | 6.9223 | 6.9981 | 7.0712 | 7.1422 | 7.2110 | 7.2781 | 7.4072 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | V | 1.282 | 40.278 | 64.615 | 67.303 | 69.951 | 72.565 | 75.152 | 77.716 | 80.260 | 85.298 |
| 4900 | U | 1141.9 | 2597.6 | 3002.3 | 3047.2 | 3092.0 | 3136.8 | 3181.7 | 3226.8 | 3272.0 | 3363.5 |
| (262.65) | H | 1148.2 | 2794.9 | 3318.9 | 3377.0 | 3434.8 | 3492.4 | 3549.9 | 3607.6 | 3665.3 | 3781.4 |
| | S | 2.9091 | 5.9823 | 6.8324 | 6.9115 | 6.9874 | 7.0607 | 7.1318 | 7.2007 | 7.2678 | 7.3971 |
| | V | 1.286 | 39.429 | 63.250 | 65.893 | 68.494 | 71.061 | 73.602 | 76.119 | 78.616 | 83.559 |
| 5000 | U | 1148.0 | 2597.0 | 3001.2 | 3046.3 | 3091.2 | 3136.0 | 3181.0 | 3226.1 | 3271.4 | 3362.9 |
| (263.91) | H | 1154.5 | 2794.2 | 3317.5 | 3375.8 | 3433.7 | 3491.3 | 3549.0 | 3606.7 | 3664.5 | 3780.7 |
| | S | 2.9206 | 5.9735 | 6.8217 | 6.9009 | 6.9770 | 7.0504 | 7.1215 | 7.1906 | 7.2578 | 7.3872 |
| | V | 1.289 | 38.611 | 61.940 | 64.537 | 67.094 | 69.616 | 72.112 | 74.584 | 77.035 | 81.888 |
| 5100 | U | 1154.1 | 2596.5 | 3000.2 | 3045.4 | 3090.3 | 3135.3 | 3180.2 | 3225.4 | 3270.8 | 3362.4 |
| (265.15) | H | 1160.7 | 2793.4 | 3316.1 | 3374.5 | 3432.5 | 3490.3 | 3548.0 | 3605.8 | 3663.7 | 3780.0 |
| | S | 2.9319 | 5.9648 | 6.8111 | 6.8905 | 6.9668 | 7.0403 | 7.1115 | 7.1807 | 7.2479 | 7.3775 |
| | V | 1.292 | 37.824 | 60.679 | 63.234 | 65.747 | 68.227 | 70.679 | 73.108 | 75.516 | 80.282 |
| 5200 | U | 1160.1 | 2595.9 | 2999.2 | 3044.5 | 3089.5 | 3134.5 | 3179.5 | 3224.7 | 3270.2 | 3361.8 |
| (266.37) | H | 1166.8 | 2792.6 | 3314.7 | 3373.3 | 3431.4 | 3489.3 | 3547.1 | 3604.9 | 3662.8 | 3779.3 |
| | S | 2.9431 | 5.9561 | 6.8007 | 6.8803 | 6.9567 | 7.0304 | 7.1017 | 7.1709 | 7.2382 | 7.3679 |
| | V | 1.296 | 37.066 | 59.466 | 67.980 | 64.452 | 66.890 | 69.300 | 71.687 | 74.054 | 78.736 |
| 5300 | U | 1166.1 | 2595.3 | 2998.2 | 3043.5 | 3088.6 | 3133.7 | 3178.8 | 3224.1 | 3269.5 | 3361.3 |
| (267.58) | H | 1172.9 | 2791.7 | 3313.3 | 3372.0 | 3430.2 | 3488.2 | 3546.1 | 3604.0 | 3662.0 | 3778.6 |
| | S | 2.9541 | 5.9476 | 6.7905 | 6.8703 | 6.9468 | 7.0206 | 7.0920 | 7.1613 | 7.2287 | 7.3585 |
| | V | 1.299 | 36.334 | 58.297 | 60.772 | 63.204 | 65.603 | 67.973 | 70.320 | 72.646 | 77.248 |
| 5400 | U | 1171.9 | 2594.6 | 2997.1 | 3042.6 | 3087.8 | 3132.9 | 3178.1 | 3223.4 | 3268.9 | 3360.7 |
| (268.76) | H | 1178.9 | 2790.8 | 3311.9 | 3370.8 | 3429.1 | 3487.2 | 3545.1 | 3603.1 | 3661.2 | 3777.8 |
| | S | 2.9650 | 5.9392 | 6.7804 | 6.8604 | 6.9371 | 7.0110 | 7.0825 | 7.1519 | 7.2194 | 7.3493 |
| | V | 1.302 | 35.628 | 57.171 | 59.608 | 62.002 | 64.362 | 66.694 | 69.002 | 71.289 | 75.814 |
| 5500 | U | 1177.7 | 2594.0 | 2996.1 | 3041.7 | 3086.9 | 3132.1 | 3177.3 | 3222.7 | 3268.3 | 3360.2 |
| (269.93) | H | 1184.9 | 2789.9 | 3310.5 | 3369.5 | 3427.9 | 3486.1 | 3544.2 | 3602.2 | 3660.4 | 3777.1 |
| | S | 2.9757 | 5.9309 | 6.7705 | 6.8507 | 6.9275 | 7.0015 | 7.0731 | 7.1426 | 7.2102 | 7.3402 |
| | V | 1.306 | 34.946 | 56.085 | 58.486 | 60.843 | 63.165 | 65.460 | 67.731 | 69.981 | 74.431 |
| 5600 | U | 1183.5 | 2593.3 | 2995.0 | 3040.7 | 3086.1 | 3131.3 | 3176.6 | 3222.0 | 3267.6 | 3359.6 |
| (271.09) | H | 1190.8 | 2789.0 | 3309.1 | 3368.2 | 3426.8 | 3485.1 | 3543.2 | 3601.3 | 3659.5 | 3776.4 |
| | S | 2.9863 | 5.9227 | 6.7607 | 6.8411 | 6.9181 | 6.9922 | 7.0639 | 7.1335 | 7.2011 | 7.3313 |
| | V | 1.309 | 34.288 | 55.038 | 57.403 | 59.724 | 62.011 | 64.270 | 66.504 | 68.719 | 73.096 |
| 5700 | U | 1189.1 | 2592.6 | 2994.0 | 3039.8 | 3085.2 | 3130.5 | 3175.9 | 3221.3 | 3267.0 | 3359.1 |
| (272.22) | H | 1196.6 | 2788.0 | 3307.7 | 3367.0 | 3425.6 | 3484.0 | 3542.2 | 3600.4 | 3658.7 | 3775.7 |
| | S | 2.9968 | 5.9146 | 6.7511 | 6.8316 | 6.9088 | 6.9831 | 7.0549 | 7.1245 | 7.1923 | 7.3226 |

## Tabla F.2. Vapor sobrecalentado, unidades SI (*Continúa*)

| | | | | TEMPERATURA: $t$ °C (TEMPERATURA: $T$ kelvins) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| $P$/kPa ($t^{sat}$/°C) | | líq. sat. | vap. sat. | 280 (553.15) | 290 (563.15) | 300 (573.15) | 325 (598.15) | 350 (623.15) | 375 (648.15) | 400 (673.15) | 425 (698.15) |
| 5800 (273.35) | $V$ | 1.312 | 33.651 | 34.756 | 36.301 | 37.736 | 40.982 | 43.902 | 46.611 | 49.176 | 51.638 |
| | $U$ | 1194.7 | 2591.9 | 2614.4 | 2645.7 | 2674.6 | 2739.1 | 2796.3 | 2848.9 | 2898.6 | 2946.4 |
| | $H$ | 1202.3 | 2787.0 | 2816.0 | 2856.3 | 2893.5 | 2976.8 | 3051.0 | 3119.3 | 3183.8 | 3245.9 |
| | $S$ | 3.0071 | 5.9066 | 5.9592 | 6.0314 | 6.0969 | 6.2393 | 6.3608 | 6.4683 | 6.5660 | 6.6565 |
| 5900 (274.46) | $V$ | 1.315 | 33.034 | 33.953 | 35.497 | 36.928 | 40.154 | 43.048 | 45.728 | 48.262 | 50.693 |
| | $U$ | 1200.3 | 2591.1 | 2610.2 | 2642.1 | 2671.4 | 2736.7 | 2794.4 | 2847.3 | 2897.2 | 2945.2 |
| | $H$ | 1208.0 | 2786.0 | 2810.5 | 2851.5 | 2889.3 | 2973.6 | 3048.4 | 3117.1 | 3182.0 | 3244.3 |
| | $S$ | 3.0172 | 5.8986 | 5.9431 | 6.0166 | 6.0830 | 6.2272 | 6.3496 | 6.4578 | 6.5560 | 6.6469 |
| 6000 (275.55) | $V$ | 1.319 | 32.438 | 33.173 | 34.718 | 36.145 | 39.353 | 42.222 | 44.874 | 47.379 | 49.779 |
| | $U$ | 1205.8 | 2590.4 | 2605.9 | 2638.4 | 2668.1 | 2734.2 | 2792.4 | 2845.7 | 2895.8 | 2944.0 |
| | $H$ | 1213.7 | 2785.0 | 2804.9 | 2846.7 | 2885.0 | 2970.4 | 3045.8 | 3115.0 | 3180.1 | 3242.6 |
| | $S$ | 3.0273 | 5.8908 | 5.9270 | 6.0017 | 6.0692 | 6.2151 | 6.3386 | 6.4475 | 6.5462 | 6.6374 |
| 6100 (276.63) | $V$ | 1.322 | 31.860 | 32.415 | 33.962 | 35.386 | 38.577 | 41.422 | 44.048 | 46.524 | 48.895 |
| | $U$ | 1211.2 | 2589.6 | 2601.5 | 2634.6 | 2664.8 | 2731.7 | 2790.4 | 2844.1 | 2894.5 | 2942.8 |
| | $H$ | 1219.3 | 2783.9 | 2799.3 | 2841.8 | 2880.7 | 2967.1 | 3043.1 | 3112.8 | 3178.3 | 3241.0 |
| | $S$ | 3.0372 | 5.8830 | 5.9108 | 5.9869 | 6.0555 | 6.2031 | 6.3277 | 6.4373 | 6.5364 | 6.6280 |
| 6200 (277.70) | $V$ | 1.325 | 31.300 | 31.679 | 33.227 | 34.650 | 37.825 | 40.648 | 43.248 | 45.697 | 48.039 |
| | $U$ | 1216.6 | 2588.8 | 2597.1 | 2630.8 | 2661.5 | 2729.2 | 2788.5 | 2842.4 | 2893.1 | 2941.6 |
| | $H$ | 1224.8 | 2782.9 | 2793.5 | 2836.8 | 2876.3 | 2963.8 | 3040.5 | 3110.6 | 3176.4 | 3239.4 |
| | $S$ | 3.0471 | 5.8753 | 5.8946 | 5.9721 | 6.0418 | 6.1911 | 6.3168 | 6.4272 | 6.5268 | 6.6188 |
| 6300 (278.75) | $V$ | 1.328 | 30.757 | 30.962 | 32.514 | 33.935 | 37.097 | 39.898 | 42.473 | 44.895 | 47.210 |
| | $U$ | 1221.9 | 2588.0 | 2592.6 | 2626.9 | 2658.1 | 2726.7 | 2786.5 | 2840.8 | 2891.7 | 2940.4 |
| | $H$ | 1230.3 | 2781.8 | 2787.6 | 2831.7 | 2871.9 | 2960.4 | 3037.8 | 3108.4 | 3174.5 | 3237.8 |
| | $S$ | 3.0568 | 5.8677 | 5.8783 | 5.9573 | 6.0281 | 6.1793 | 6.3061 | 6.4172 | 6.5173 | 6.6096 |
| 6400 (279.79) | $V$ | 1.332 | 30.230 | 30.265 | 31.821 | 33.241 | 36.390 | 39.170 | 41.722 | 44.119 | 46.407 |
| | $U$ | 1227.2 | 2587.2 | 2587.9 | 2623.0 | 2654.7 | 2724.2 | 2784.4 | 2839.1 | 2890.3 | 2939.2 |
| | $H$ | 1235.7 | 2780.6 | 2781.6 | 2826.6 | 2867.5 | 2957.1 | 3035.1 | 3106.2 | 3172.7 | 3236.2 |
| | $S$ | 3.0664 | 5.8601 | 5.8619 | 5.9425 | 6.0144 | 6.1675 | 6.2955 | 6.4072 | 6.5079 | 6.6006 |
| 6500 (280.82) | $V$ | 1.335 | 29.719 | ..... | 31.146 | 32.567 | 35.704 | 38.465 | 40.994 | 43.366 | 45.629 |
| | $U$ | 1232.5 | 2586.3 | ..... | 2619.0 | 2651.2 | 2721.6 | 2782.4 | 2837.5 | 2888.9 | 2938.0 |
| | $H$ | 1241.1 | 2779.5 | ..... | 2821.4 | 2862.9 | 2953.7 | 3032.4 | 3103.9 | 3170.8 | 3234.5 |
| | $S$ | 3.0759 | 5.8527 | ..... | 5.9277 | 6.0008 | 6.1558 | 6.2849 | 6.3974 | 6.4986 | 6.5917 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | V | 1.338 | 29.223 | ..... | 30.490 | 31.911 | 35.038 | 37.781 | 40.287 | 42.636 | 44.874 |
| 6600 | U | 1237.6 | 2585.5 | ..... | 2614.9 | 2647.7 | 2719.0 | 2780.4 | 2835.8 | 2887.5 | 2936.7 |
| (281.84) | H | 1246.5 | 2778.3 | ..... | 2816.1 | 2858.4 | 2950.2 | 3029.7 | 3101.7 | 3168.9 | 3232.9 |
| | S | 3.0853 | 5.8452 | ..... | 5.9129 | 5.9872 | 6.1442 | 6.2744 | 6.3877 | 6.4894 | 6.5828 |
| | V | 1.342 | 28.741 | ..... | 29.850 | 31.273 | 34.391 | 37.116 | 39.601 | 41.927 | 44.141 |
| 6700 | U | 1242.8 | 2584.6 | ..... | 2610.8 | 2644.2 | 2716.4 | 2778.3 | 2834.1 | 2886.1 | 2935.5 |
| (282.84) | H | 1251.8 | 2777.1 | ..... | 2810.8 | 2853.7 | 2946.8 | 3027.0 | 3099.5 | 3167.0 | 3231.3 |
| | S | 3.0946 | 5.8379 | ..... | 5.8980 | 5.9736 | 6.1326 | 6.2640 | 6.3781 | 6.4803 | 6.5741 |
| | V | 1.345 | 28.272 | ..... | 29.226 | 30.652 | 33.762 | 36.470 | 38.935 | 41.239 | 43.430 |
| 6800 | U | 1247.9 | 2583.7 | ..... | 2606.6 | 2640.6 | 2713.7 | 2776.2 | 2832.4 | 2884.7 | 2934.3 |
| (283.84) | H | 1257.0 | 2775.9 | ..... | 2805.3 | 2849.0 | 2943.3 | 3024.2 | 3097.2 | 3165.1 | 3229.6 |
| | S | 3.1038 | 5.8306 | ..... | 5.8830 | 5.9599 | 6.1211 | 6.2537 | 6.3686 | 6.4713 | 6.5655 |
| | V | 1.351 | 27.373 | ..... | 28.024 | 29.457 | 32.556 | 35.233 | 37.660 | 39.922 | 42.068 |
| 7000 | U | 1258.0 | 2581.8 | ..... | 2597.9 | 2633.2 | 2708.4 | 2772.1 | 2829.0 | 2881.8 | 2931.8 |
| (285.79) | H | 1267.4 | 2773.5 | ..... | 2794.1 | 2839.4 | 2936.3 | 3018.7 | 3092.7 | 3161.2 | 3226.3 |
| | S | 3.1219 | 5.8162 | ..... | 5.8530 | 5.9327 | 6.0982 | 6.2333 | 6.3497 | 6.4536 | 6.5485 |
| | V | 1.358 | 26.522 | ..... | 26.878 | 28.321 | 31.413 | 34.063 | 36.454 | 38.676 | 40.781 |
| 7200 | U | 1267.9 | 2579.9 | ..... | 2589.0 | 2625.6 | 2702.9 | 2767.8 | 2825.6 | 2878.9 | 2929.4 |
| (287.70) | H | 1277.6 | 2770.9 | ..... | 2782.5 | 2829.5 | 2929.1 | 3013.1 | 3088.1 | 3157.4 | 3223.0 |
| | S | 3.1397 | 5.8020 | ..... | 5.8226 | 5.9054 | 6.0755 | 6.2132 | 6.3312 | 6.4362 | 6.5319 |
| | V | 1.364 | 25.715 | ..... | 25.781 | 27.238 | 30.328 | 32.954 | 35.312 | 37.497 | 39.564 |
| 7400 | U | 1277.6 | 2578.0 | ..... | 2579.7 | 2617.8 | 2697.3 | 2763.5 | 2822.1 | 2876.0 | 2926.9 |
| (289.57) | H | 1287.7 | 2768.3 | ..... | 2770.5 | 2819.3 | 2921.8 | 3007.4 | 3083.4 | 3153.5 | 3219.6 |
| | S | 3.1571 | 5.7880 | ..... | 5.7919 | 5.8779 | 6.0530 | 6.1933 | 6.3130 | 6.4190 | 6.5156 |
| | V | 1.371 | 24.949 | ..... | ..... | 26.204 | 29.297 | 31.901 | 34.229 | 36.380 | 38.409 |
| 7600 | U | 1287.2 | 2575.9 | ..... | ..... | 2609.7 | 2691.7 | 2759.2 | 2818.6 | 2873.1 | 2924.3 |
| (291.41) | H | 1297.6 | 2765.5 | ..... | ..... | 2808.8 | 2914.3 | 3001.6 | 3078.7 | 3149.6 | 3216.3 |
| | S | 3.1742 | 5.7742 | ..... | ..... | 5.8503 | 6.0306 | 6.1737 | 6.2950 | 6.4022 | 6.4996 |
| | V | 1.378 | 24.220 | ..... | ..... | 25.214 | 28.315 | 30.900 | 33.200 | 35.319 | 37.314 |
| 7800 | U | 1296.7 | 2573.8 | ..... | ..... | 2601.3 | 2685.9 | 2754.8 | 2815.1 | 2870.1 | 2921.8 |
| (293.21) | H | 1307.4 | 2762.8 | ..... | ..... | 2798.0 | 2906.7 | 2995.8 | 3074.0 | 3145.6 | 3212.9 |
| | S | 3.1911 | 5.7605 | ..... | ..... | 5.8224 | 6.0082 | 6.1542 | 6.2773 | 6.3857 | 6.4839 |
| | V | 1.384 | 23.525 | ..... | ..... | 24.264 | 27.378 | 29.948 | 32.222 | 34.310 | 36.273 |
| 8000 | U | 1306.0 | 2571.7 | ..... | ..... | 2592.7 | 2679.9 | 2750.3 | 2811.5 | 2867.1 | 2919.3 |
| (294.97) | H | 1317.1 | 2759.9 | ..... | ..... | 2786.8 | 2899.0 | 2989.9 | 3069.2 | 3141.6 | 3209.5 |
| | S | 3.2076 | 5.7471 | ..... | ..... | 5.7942 | 5.9860 | 6.1349 | 6.2599 | 6.3694 | 6.4684 |

## Tabla F.2. Vapor sobrecalentado, unidades SI (*Continúa*)

| | | | | TEMPERATURA: $t$ °C (TEMPERATURA: $T$ kelvins) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| $P$/kPa | | liq. | vap. | 450 | 475 | 500 | 525 | 550 | 575 | 600 | 650 |
| ($t^{sat}$/°C) | | sat. | sat. | (723.15) | (748.15) | (773.15) | (798.15) | (823.15) | (848.15) | (873.15) | (923.15) |
| | *V* | 1.312 | 33.651 | 54.026 | 56.357 | 58.644 | 60.896 | 63.120 | 65.320 | 67.500 | 71.807 |
| 5800 | *U* | 1194.7 | 2591.9 | 2992.9 | 3038.8 | 3084.4 | 3129.8 | 3175.2 | 3220.7 | 3266.4 | 3358.5 |
| (273.35) | *H* | 1202.3 | 2787.0 | 3306.3 | 3365.7 | 3424.5 | 3483.0 | 3541.2 | 3599.5 | 3657.9 | 3775.0 |
| | *S* | 3.0071 | 5.9066 | 6.7416 | 6.8223 | 6.8996 | 6.9740 | 7.0460 | 7.1157 | 7.1835 | 7.3139 |
| | *V* | 1.315 | 33.034 | 53.048 | 55.346 | 57.600 | 59.819 | 62.010 | 64.176 | 66.322 | 70.563 |
| 5900 | *U* | 1200.3 | 2591.1 | 2991.9 | 3037.9 | 3083.5 | 3129.0 | 3174.4 | 3220.0 | 3265.7 | 3357.9 |
| (274.46) | *H* | 1208.0 | 2786.0 | 3304.9 | 3364.4 | 3423.3 | 3481.9 | 3540.3 | 3598.6 | 3657.0 | 3774.3 |
| | *S* | 3.0172 | 5.8986 | 6.7322 | 6.8132 | 6.8906 | 6.9652 | 7.0372 | 7.1070 | 7.1749 | 7.3054 |
| | *V* | 1.319 | 32.438 | 52.103 | 54.369 | 56.592 | 58.778 | 60.937 | 63.071 | 65.184 | 69.359 |
| 6000 | *U* | 1205.8 | 2590.4 | 2990.8 | 3036.9 | 3082.6 | 3128.2 | 3173.7 | 3219.3 | 3265.1 | 3357.4 |
| (275.55) | *H* | 1213.7 | 2785.0 | 3303.5 | 3363.2 | 3422.2 | 3480.8 | 3539.3 | 3597.7 | 3656.2 | 3773.5 |
| | *S* | 3.0273 | 5.8908 | 6.7230 | 6.8041 | 6.8818 | 6.9564 | 7.0285 | 7.0985 | 7.1664 | 7.2971 |
| | *V* | 1.322 | 31.860 | 51.189 | 53.424 | 55.616 | 57.771 | 59.898 | 62.001 | 64.083 | 68.196 |
| 6100 | *U* | 1211.2 | 2589.6 | 2989.8 | 3036.0 | 3081.8 | 3127.4 | 3173.0 | 3218.6 | 3264.5 | 3356.8 |
| (276.63) | *H* | 1219.3 | 2783.9 | 3302.0 | 3361.9 | 3421.0 | 3479.8 | 3538.3 | 3596.8 | 3655.4 | 3772.8 |
| | *S* | 3.0372 | 5.8830 | 6.7139 | 6.7952 | 6.8730 | 6.9478 | 7.0200 | 7.0900 | 7.1581 | 7.2889 |
| | *V* | 1.325 | 31.300 | 50.304 | 52.510 | 54.671 | 56.797 | 58.894 | 60.966 | 63.018 | 67.069 |
| 6200 | *U* | 1216.6 | 2588.8 | 2988.7 | 3035.0 | 3080.9 | 3126.6 | 3172.2 | 3218.0 | 3263.8 | 3356.3 |
| (277.70) | *H* | 1224.8 | 2782.9 | 3300.6 | 3360.6 | 3419.9 | 3478.7 | 3537.4 | 3595.9 | 3654.5 | 3772.1 |
| | *S* | 3.0471 | 5.8753 | 6.7049 | 6.7864 | 6.8644 | 6.9393 | 7.0116 | 7.0817 | 7.1498 | 7.2808 |
| | *V* | 1.328 | 30.757 | 49.447 | 51.624 | 53.757 | 55.853 | 57.921 | 59.964 | 61.986 | 65.979 |
| 6300 | *U* | 1221.9 | 2588.0 | 2987.7 | 3034.1 | 3080.1 | 3125.8 | 3171.5 | 3217.3 | 3263.2 | 3355.7 |
| (278.75) | *H* | 1230.3 | 2781.8 | 3299.2 | 3359.3 | 3418.7 | 3477.7 | 3536.4 | 3595.0 | 3653.7 | 3771.4 |
| | *S* | 3.0568 | 5.8677 | 6.6960 | 6.7778 | 6.8559 | 6.9309 | 7.0034 | 7.0735 | 7.1417 | 7.2728 |
| | *V* | 1.332 | 30.230 | 48.617 | 50.767 | 52.871 | 54.939 | 56.978 | 58.993 | 60.987 | 64.922 |
| 6400 | *U* | 1227.2 | 2587.2 | 2986.6 | 3033.1 | 3079.2 | 3125.0 | 3170.8 | 3216.6 | 3262.6 | 3355.2 |
| (279.79) | *H* | 1235.7 | 2780.6 | 3297.7 | 3358.0 | 3417.6 | 3476.6 | 3535.4 | 3594.1 | 3652.9 | 3770.7 |
| | *S* | 3.0664 | 5.8601 | 6.6872 | 6.7692 | 6.8475 | 6.9226 | 6.9952 | 7.0655 | 7.1337 | 7.2649 |
| | *V* | 1.335 | 29.719 | 47.812 | 49.935 | 52.012 | 54.053 | 56.065 | 58.052 | 60.018 | 63.898 |
| 6500 | *U* | 1232.5 | 2586.3 | 2985.5 | 3032.2 | 3078.3 | 3124.2 | 3170.0 | 3215.9 | 3261.9 | 3354.6 |
| (280.82) | *H* | 1241.1 | 2779.5 | 3296.3 | 3356.8 | 3416.4 | 3475.6 | 3534.4 | 3593.2 | 3652.1 | 3770.0 |
| | *S* | 3.0759 | 5.8527 | 6.6786 | 6.7608 | 6.8392 | 6.9145 | 6.9871 | 7.0575 | 7.1258 | 7.2572 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | *V* | 1.338 | 29.223 | 47.031 | 49.129 | 51.180 | 53.194 | 55.179 | 57.139 | 59.079 | 62.905 |
| 6600 | *U* | 1237.6 | 2585.5 | 2984.5 | 3031.2 | 3077.4 | 3123.4 | 3169.3 | 3215.2 | 3261.3 | 3354.1 |
| (281.84) | *H* | 1246.5 | 2778.3 | 3294.9 | 3355.5 | 3415.2 | 3474.5 | 3533.5 | 3592.3 | 3651.2 | 3769.2 |
| | *S* | 3.0853 | 5.8452 | 6.6700 | 6.7524 | 6.8310 | 6.9064 | 6.9792 | 7.0497 | 7.1181 | 7.2495 |
| | *V* | 1.342 | 28.741 | 46.274 | 48.346 | 50.372 | 52.361 | 54.320 | 56.254 | 58.168 | 61.942 |
| 6700 | *U* | 1242.8 | 2584.6 | 2983.4 | 3030.3 | 3076.6 | 3122.6 | 3168.6 | 3214.5 | 3260.7 | 3353.5 |
| (282.84) | *H* | 1251.8 | 2777.1 | 3293.4 | 3354.2 | 3414.1 | 3473.4 | 3532.5 | 3591.4 | 3650.4 | 3768.5 |
| | *S* | 3.0946 | 5.8379 | 6.6616 | 6.7442 | 6.8229 | 6.8985 | 6.9714 | 7.0419 | 7.1104 | 7.2420 |
| | *V* | 1.345 | 28.272 | 45.539 | 47.587 | 49.588 | 51.552 | 53.486 | 55.395 | 57.283 | 61.007 |
| 6800 | *U* | 1247.9 | 2583.7 | 2982.3 | 3029.3 | 3075.7 | 3121.8 | 3167.8 | 3213.9 | 3260.0 | 3353.0 |
| (283.84) | *H* | 1257.0 | 2775.9 | 3292.0 | 3352.9 | 3412.9 | 3472.4 | 3531.5 | 3590.5 | 3649.6 | 3767.8 |
| | *S* | 3.1038 | 5.8306 | 6.6532 | 6.7361 | 6.8150 | 6.8907 | 6.9636 | 7.0343 | 7.1028 | 7.2345 |
| | *V* | 1.351 | 27.373 | 44.131 | 46.133 | 48.086 | 50.003 | 51.889 | 53.750 | 55.590 | 59.217 |
| 7000 | *U* | 1258.0 | 2581.8 | 2980.1 | 3027.4 | 3074.0 | 3120.2 | 3166.3 | 3212.5 | 3258.8 | 3351.9 |
| (285.79) | *H* | 1267.4 | 2773.5 | 3289.1 | 3350.3 | 3410.6 | 3470.2 | 3529.6 | 3588.7 | 3647.9 | 3766.4 |
| | *S* | 3.1219 | 5.8162 | 6.6368 | 6.7201 | 6.7993 | 6.8753 | 6.9485 | 7.0193 | 7.0880 | 7.2200 |
| | *V* | 1.358 | 26.522 | 42.802 | 44.759 | 46.668 | 48.540 | 50.381 | 52.197 | 53.991 | 57.527 |
| 7200 | *U* | 1267.9 | 2579.9 | 2978.0 | 3025.4 | 3072.2 | 3118.6 | 3164.9 | 3211.1 | 3257.5 | 3350.7 |
| (287.70) | *H* | 1277.6 | 2770.9 | 3286.1 | 3347.7 | 3408.2 | 3468.1 | 3527.6 | 3586.9 | 3646.2 | 3764.9 |
| | *S* | 3.1397 | 5.8020 | 6.6208 | 6.7044 | 6.7840 | 6.8602 | 6.9337 | 7.0047 | 7.0735 | 7.2058 |
| | *V* | 1.364 | 25.715 | 41.544 | 43.460 | 45.327 | 47.156 | 48.954 | 50.727 | 52.478 | 55.928 |
| 7400 | *U* | 1277.6 | 2578.0 | 2975.8 | 3023.5 | 3070.4 | 3117.0 | 3163.4 | 3209.8 | 3256.2 | 3349.6 |
| (289.57) | *H* | 1287.7 | 2768.3 | 3283.2 | 3345.1 | 3405.9 | 3466.0 | 3525.7 | 3585.1 | 3644.5 | 3763.5 |
| | *S* | 3.1571 | 5.7880 | 6.6050 | 6.6892 | 6.7691 | 6.8456 | 6.9192 | 6.9904 | 7.0594 | 7.1919 |
| | *V* | 1.371 | 24.949 | 40.351 | 42.228 | 44.056 | 45.845 | 47.603 | 49.335 | 51.045 | 54.413 |
| 7600 | *U* | 1287.2 | 2575.9 | 2973.6 | 3021.5 | 3068.7 | 3115.4 | 3161.9 | 3208.4 | 3254.9 | 3348.5 |
| (291.41) | *H* | 1297.6 | 2765.5 | 3280.3 | 3342.5 | 3403.5 | 3463.8 | 3523.7 | 3583.3 | 3642.9 | 3762.1 |
| | *S* | 3.1742 | 5.7742 | 6.5896 | 6.6742 | 6.7545 | 6.8312 | 6.9051 | 6.9765 | 7.0457 | 7.1784 |
| | *V* | 1.378 | 24.220 | 39.220 | 41.060 | 42.850 | 44.601 | 46.320 | 48.014 | 49.686 | 52.976 |
| 7800 | *U* | 1296.7 | 2573.8 | 2971.4 | 3019.6 | 3066.9 | 3113.8 | 3160.4 | 3207.0 | 3253.7 | 3347.4 |
| (293.21) | *H* | 1307.4 | 2762.8 | 3277.3 | 3339.8 | 3401.1 | 3461.7 | 3521.7 | 3581.5 | 3641.2 | 3760.6 |
| | *S* | 3.1911 | 5.7605 | 6.5745 | 6.6596 | 6.7402 | 6.8172 | 6.8913 | 6.9629 | 7.0322 | 7.1652 |
| | *V* | 1.384 | 23.525 | 38.145 | 39.950 | 41.704 | 43.419 | 45.102 | 46.759 | 48.394 | 51.611 |
| 8000 | *U* | 1306.0 | 2571.7 | 2969.2 | 3017.6 | 3065.1 | 3112.2 | 3158.9 | 3205.6 | 3252.4 | 3346.3 |
| (294.97) | *H* | 1317.1 | 2759.9 | 3274.3 | 3337.2 | 3398.8 | 3459.5 | 3519.7 | 3579.7 | 3639.5 | 3759.2 |
| | *S* | 3.2076 | 5.7471 | 6.5597 | 6.6452 | 6.7262 | 6.8035 | 6.8778 | 6.9496 | 7.0191 | 7.1523 |

## Tabla F.2. Vapor sobrecalentado, unidades SI (*Continúa*)

| | | | | TEMPERATURA: $t$ °C (TEMPERATURA: $T$ kelvins) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| $P$/kPa | | liq. | vap. | 300 | 320 | 340 | 360 | 380 | 400 | 425 | 450 |
| ($t^{sat}$/ °C) | | sat. | sat. | (573.15) | (593.15) | (613.15) | (633.15) | (653.15) | (673.15) | (698.15) | (723.15) |
| | *V* | 1.391 | 22.863 | 23.350 | 25.916 | 28.064 | 29.968 | 31.715 | 33.350 | 35.282 | 37.121 |
| 8200 | *U* | 1315.2 | 2569.5 | 2583.7 | 2657.7 | 2718.5 | 2771.5 | 2819.5 | 2864.1 | 2916.7 | 2966.9 |
| (296.70) | *H* | 1326.6 | 2757.0 | 2775.2 | 2870.2 | 2948.6 | 3017.2 | 3079.5 | 3137.6 | 3206.0 | 3271.3 |
| | *S* | 3.2239 | 5.7338 | 5.7656 | 5.9288 | 6.0588 | 6.1689 | 6.2659 | 6.3534 | 6.4532 | 6.5452 |
| | *V* | 1.398 | 22.231 | 22.469 | 25.058 | 27.203 | 29.094 | 30.821 | 32.435 | 34.337 | 36.147 |
| 8400 | *U* | 1324.3 | 2567.2 | 2574.4 | 2651.1 | 2713.4 | 2767.3 | 2816.0 | 2861.1 | 2914.1 | 2964.7 |
| (298.39) | *H* | 1336.1 | 2754.0 | 2763.1 | 2861.6 | 2941.9 | 3011.7 | 3074.8 | 3133.5 | 3202.6 | 3268.3 |
| | *S* | 3.2399 | 5.7207 | 5.7366 | 5.9056 | 6.0388 | 6.1509 | 6.2491 | 6.3376 | 6.4383 | 6.5309 |
| | *V* | 1.404 | 21.627 | ..... | 24.236 | 26.380 | 28.258 | 29.968 | 31.561 | 33.437 | 35.217 |
| 8600 | *U* | 1333.3 | 2564.9 | ..... | 2644.3 | 2708.1 | 2763.1 | 2812.4 | 2858.0 | 2911.5 | 2962.4 |
| (300.06) | *H* | 1345.4 | 2750.9 | ..... | 2852.7 | 2935.0 | 3006.1 | 3070.1 | 3129.4 | 3199.1 | 3265.3 |
| | *S* | 3.2557 | 5.7076 | ..... | 5.8823 | 6.0189 | 6.1330 | 6.2326 | 6.3220 | 6.4236 | 6.5168 |
| | *V* | 1.411 | 21.049 | ..... | 23.446 | 25.592 | 27.459 | 29.153 | 30.727 | 32.576 | 34.329 |
| 8800 | *U* | 1342.2 | 2562.6 | ..... | 2637.3 | 2702.8 | 2758.8 | 2808.8 | 2854.9 | 2908.9 | 2960.1 |
| (301.70) | *H* | 1354.6 | 2747.8 | ..... | 2843.6 | 2928.0 | 3000.4 | 3065.3 | 3125.3 | 3195.6 | 3262.2 |
| | *S* | 3.2713 | 5.6948 | ..... | 5.8590 | 5.9990 | 6.1152 | 6.2162 | 6.3067 | 6.4092 | 6.5030 |
| | *V* | 1.418 | 20.495 | ..... | 22.685 | 24.836 | 26.694 | 28.372 | 29.929 | 31.754 | 33.480 |
| 9000 | *U* | 1351.0 | 2560.1 | ..... | 2630.1 | 2697.4 | 2754.4 | 2805.2 | 2851.8 | 2906.3 | 2957.8 |
| (303.31) | *H* | 1363.7 | 2744.6 | ..... | 2834.3 | 2920.9 | 2994.7 | 3060.5 | 3121.2 | 3192.0 | 32592 |
| | *S* | 3.2867 | 5.6820 | ..... | 5.8355 | 5.9792 | 6.0976 | 6.2000 | 6.2915 | 6.3949 | 6.4894 |
| | *V* | 1.425 | 19.964 | ..... | 21.952 | 24.110 | 25.961 | 27.625 | 29.165 | 30.966 | 32.668 |
| 9200 | *U* | 1359.7 | 2557.7 | ..... | 2622.7 | 2691.9 | 2750.0 | 2801.5 | 2848.7 | 2903.6 | 2955.5 |
| (304.89) | *H* | 1372.8 | 2741.3 | ..... | 2824.7 | 2913.7 | 2988.9 | 3055.7 | 3117.0 | 3188.5 | 3256.1 |
| | *S* | 3.3018 | 5.6694 | ..... | 5.8118 | 5.9594 | 6.0801 | 6.1840 | 6.2765 | 6.3808 | 6.4760 |
| | *V* | 1.432 | 19.455 | ..... | 21.245 | 23.412 | 25.257 | 26.909 | 28.433 | 30.212 | 31.891 |
| 9400 | *U* | 1368.2 | 2555.2 | ..... | 2615.1 | 2686.3 | 2745.6 | 2797.8 | 2845.5 | 2900.9 | 2953.2 |
| (306.44) | *H* | 1381.7 | 2738.0 | ..... | 2814.8 | 2906.3 | 2983.0 | 3050.7 | 3112.8 | 3184.9 | 3253.0 |
| | *S* | 3.3168 | 5.6568 | ..... | 5.7879 | 5.9397 | 6.0627 | 6.1681 | 6.2617 | 6.3669 | 6.4628 |
| | *V* | 1.439 | 18.965 | ..... | 20.561 | 22.740 | 24.581 | 26.221 | 27.731 | 29.489 | 31.145 |
| 9600 | *U* | 1376.7 | 2552.6 | ..... | 2607.3 | 2680.5 | 2741.0 | 2794.1 | 2842.3 | 2898.2 | 2950.9 |
| (307.97) | *H* | 1390.6 | 2734.7 | ..... | 2804.7 | 2898.8 | 2977.0 | 3045.8 | 3108.5 | 3181.3 | 3249.9 |
| | *S* | 3.3315 | 5.6444 | ..... | 5.7637 | 5.9199 | 6.0454 | 6.1524 | 6.2470 | 6.3532 | 6.4498 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | V | 1.446 | 18.494 | ..... | 19.899 | 22.093 | 23.931 | 25.561 | 27.056 | 28.795 | 30.429 |
| 9800 | U | 1385.2 | 2550.0 | ..... | 2599.2 | 2674.7 | 2736.4 | 2790.3 | 2839.1 | 2895.5 | 2948.6 |
| (309.48) | H | 1399.3 | 2731.2 | ..... | 2794.3 | 2891.2 | 2971.0 | 3040.8 | 3104.2 | 3177.7 | 3246.8 |
| | S | 3.3461 | 5.6321 | ..... | 5.7393 | 5.9001 | 6.0282 | 6.1368 | 6.2325 | 6.3397 | 6.4369 |
| | V | 1.453 | 18.041 | ..... | 19.256 | 21.468 | 23.305 | 24.926 | 26.408 | 28.128 | 29.742 |
| 10000 | U | 1393.5 | 2547.3 | ..... | 2590.9 | 2668.7 | 2731.8 | 2786.4 | 2835.8 | 2892.8 | 2946.2 |
| (310.96) | H | 1408.0 | 2727.7 | ..... | 2783.5 | 2883.4 | 2964.8 | 3035.7 | 3099.9 | 3174.1 | 3243.6 |
| | S | 3.3605 | 5.6198 | ..... | 5.7145 | 5.8803 | 6.0110 | 6.1213 | 6.2182 | 6.3264 | 6.4243 |
| | V | 1.460 | 17.605 | ..... | 18.632 | 20.865 | 22.702 | 24.315 | 25.785 | 27.487 | 29.081 |
| 10200 | U | 1401.8 | 2544.6 | ..... | 2582.3 | 2662.6 | 2727.0 | 2782.6 | 2832.6 | 2890.0 | 2943.9 |
| (312.42) | H | 1416.7 | 2724.2 | ..... | 2772.3 | 2875.4 | 2958.6 | 3030.6 | 3095.6 | 3170.4 | 3240.5 |
| | S | 3.3748 | 5.6076 | ..... | 5.6894 | 5.8604 | 5.9940 | 6.1059 | 6.2040 | 6.3131 | 6.4118 |
| | V | 1.467 | 17.184 | ..... | 18.024 | 20.282 | 22.121 | 23.726 | 25.185 | 26.870 | 28.446 |
| 10400 | U | 1410.0 | 2541.8 | ..... | 2573.4 | 2656.3 | 2722.2 | 2778.7 | 2829.3 | 2887.3 | 2941.5 |
| (313.86) | H | 1425.2 | 2720.6 | ..... | 2760.8 | 2867.2 | 2952.3 | 3025.4 | 3091.2 | 3166.7 | 3237.3 |
| | S | 3.3889 | 5.5955 | ..... | 5.6638 | 5.8404 | 5.9769 | 6.0907 | 6.1899 | 6.3001 | 6.3994 |
| | V | 1.474 | 16.778 | ..... | 17.432 | 19.717 | 21.560 | 23.159 | 24.607 | 26.276 | 27.834 |
| 10600 | U | 1418.1 | 2539.0 | ..... | 2564.1 | 2649.9 | 2717.4 | 2774.7 | 2825.9 | 2884.5 | 2939.1 |
| (315.27) | H | 1433.7 | 2716.9 | ..... | 2748.9 | 2858.9 | 2945.9 | 3020.2 | 3086.8 | 3163.0 | 3234.1 |
| | S | 3.4029 | 5.5835 | ..... | 5.6376 | 5.8203 | 5.9599 | 6.0755 | 6.1759 | 6.2872 | 6.3872 |
| | V | 1.481 | 16.385 | ..... | 16.852 | 19.170 | 21.018 | 22.612 | 24.050 | 25.703 | 27.245 |
| 10800 | U | 1426.2 | 2536.2 | ..... | 2554.5 | 2643.4 | 2712.4 | 2770.7 | 2822.6 | 2881.7 | 2936.7 |
| (316.67) | H | 1442.2 | 2713.1 | ..... | 2736.5 | 2850.4 | 2939.4 | 3014.9 | 3082.3 | 3159.3 | 3230.9 |
| | S | 3.4167 | 5.5715 | ..... | 5.6109 | 5.8000 | 5.9429 | 6.0604 | 6.1621 | 6.2744 | 6.3752 |
| | V | 1.489 | 16.006 | ..... | 16.285 | 18.639 | 20.494 | 22.083 | 23.512 | 25.151 | 26.676 |
| 11000 | U | 1434.2 | 2533.2 | ..... | 2544.4 | 2636.7 | 2707.4 | 2766.7 | 2819.2 | 2878.9 | 2934.3 |
| (318.05) | H | 1450.6 | 2709.3 | ..... | 2723.5 | 2841.7 | 2932.8 | 3009.6 | 3077.8 | 3155.5 | 3227.7 |
| | S | 3.4304 | 5.5595 | ..... | 5.5835 | 5.7797 | 5.9259 | 6.0454 | 6.1483 | 6.2617 | 6.3633 |
| | V | 1.496 | 15.639 | ..... | 15.726 | 18.124 | 19.987 | 21.573 | 22.993 | 24.619 | 26.128 |
| 11200 | U | 1442.1 | 2530.3 | ..... | 2533.8 | 2629.8 | 2702.2 | 2762.6 | 2815.8 | 2876.0 | 2931.8 |
| (319.40) | H | 1458.9 | 2705.4 | ..... | 2710.0 | 2832.8 | 2926.1 | 3004.2 | 3073.3 | 3151.7 | 3224.5 |
| | S | 3.4440 | 5.5476 | ..... | 5.5553 | 5.7591 | 5.9090 | 6.0305 | 6.1347 | 6.2491 | 6.3515 |
| | V | 1.504 | 15.284 | ..... | ..... | 17.622 | 19.495 | 21.079 | 22.492 | 24.104 | 25.599 |
| 11400 | U | 1450.0 | 2527.2 | ..... | ..... | 2622.7 | 2697.0 | 2758.4 | 2812.3 | 2873.1 | 2929.4 |
| (320.74) | H | 1467.2 | 2701.5 | ..... | ..... | 2823.6 | 2919.3 | 2998.7 | 3068.7 | 3147.9 | 3221.2 |
| | S | 3.4575 | 5.5357 | ..... | ..... | 5.7383 | 5.8920 | 6.0156 | 6.1211 | 6.2367 | 6.3399 |

## Tabla F.2. Vapor sobrecalentado, unidades SI (*Continúa*)

| | | | | TEMPERATURA: $t$ °C (TEMPERATURA: $T$ kelvins) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| $P$kPa | | liq. | vap. | 475 | 500 | 525 | 550 | 575 | 600 | 625 | 650 |
| ($t^{sat}$/ °C) | | sat. | sat. | (748.15) | (773.15) | (798.15) | (823.15) | (848.15) | (873.15) | (898.15) | (923.15) |
| | *V* | 1.391 | 22.863 | 38.893 | 40.614 | 42.295 | 43.943 | 45.566 | 47.166 | 48.747 | 50.313 |
| 8200 | *U* | 1315.2 | 2569.5 | 3015.6 | 3063.3 | 3110.5 | 3157.4 | 3204.3 | 3251.1 | 3298.1 | 3345.2 |
| (296.70) | *H* | 1326.6 | 2757.0 | 3334.5 | 3396.4 | 3457.3 | 3517.8 | 3577.9 | 3637.9 | 3697.8 | 3757.7 |
| | *S* | 3.2239 | 5.7338 | 6.6311 | 6.7124 | 6.7900 | 6.8646 | 6.9365 | 7.0062 | 7.0739 | 7.1397 |
| | *V* | 1.398 | 22.231 | 37.887 | 39.576 | 41.224 | 42.839 | 44.429 | 45.996 | 47.544 | 49.076 |
| 8400 | *U* | 1324.3 | 2567.2 | 3013.6 | 3061.6 | 3108.9 | 3155.9 | 3202.9 | 3249.8 | 3296.9 | 3344.1 |
| (298.39) | *H* | 1336.1 | 2754.0 | 3331.9 | 3394.0 | 3455.2 | 3515.8 | 3576.1 | 3636.2 | 3696.2 | 3756.3 |
| | *S* | 3.2399 | 5.7207 | 6.6173 | 6.6990 | 6.7769 | 6.8516 | 6.9238 | 6.9936 | 7.0614 | 7.1274 |
| | *V* | 1.404 | 21.627 | 36.928 | 38.586 | 40.202 | 41.787 | 43.345 | 44.880 | 46.397 | 47.897 |
| 8600 | *U* | 1333.3 | 2564.9 | 3011.6 | 3059.8 | 3107.3 | 3154.4 | 3201.5 | 3248.5 | 3295.7 | 3342.9 |
| (300.06) | *H* | 1345.4 | 2750.9 | 3329.2 | 3391.6 | 3453.0 | 3513.8 | 3574.3 | 3634.5 | 3694.7 | 3754.9 |
| | *S* | 3.2557 | 5.7076 | 6.6037 | 6.6858 | 6.7639 | 6.8390 | 6.9113 | 6.9813 | 7.0492 | 7.1153 |
| | *V* | 1.411 | 21.049 | 36.011 | 37.640 | 39.228 | 40.782 | 42.310 | 43.815 | 45.301 | 46.771 |
| 8800 | *U* | 1342.2 | 2562.6 | 3009.6 | 3058.0 | 3105.6 | 3152.9 | 3200.1 | 3247.2 | 3294.5 | 3341.8 |
| (301.70) | *H* | 1354.6 | 2747.8 | 3326.5 | 3389.2 | 3450.8 | 3511.8 | 3572.4 | 3632.8 | 3693.1 | 3753.4 |
| | *S* | 3.2713 | 5.6948 | 6.5904 | 6.6728 | 6.7513 | 6.8265 | 6.8990 | 6.9692 | 7.0373 | 7.1035 |
| | *V* | 1.418 | 20.495 | 35.136 | 36.737 | 38.296 | 39.822 | 41.321 | 42.798 | 44.255 | 45.695 |
| 9000 | *U* | 1351.0 | 2560.1 | 3007.6 | 3056.1 | 3104.0 | 3151.4 | 3198.7 | 3246.0 | 3293.3 | 3340.7 |
| (303.31) | *H* | 1363.7 | 2744.6 | 3323.8 | 3386.8 | 3448.7 | 3509.8 | 3570.6 | 3631.1 | 3691.6 | 3752.0 |
| | *S* | 3.2867 | 5.6820 | 6.5773 | 6.6600 | 6.7388 | 6.8143 | 6.8870 | 6.9574 | 7.0256 | 7.0919 |
| | *V* | 1.425 | 19.964 | 34.298 | 35.872 | 37.405 | 38.904 | 40.375 | 41.824 | 43.254 | 44.667 |
| 9200 | *U* | 1359.7 | 2557.7 | 3005.6 | 3054.3 | 3102.3 | 3149.9 | 3197.3 | 3244.7 | 3292.1 | 3339.6 |
| (304.89) | *H* | 1372.8 | 2741.3 | 3321.1 | 3384.4 | 3446.5 | 3507.8 | 3568.8 | 3629.5 | 3690.0 | 3750.5 |
| | *S* | 3.3018 | 5.6694 | 6.5644 | 6.6475 | 6.7266 | 6.8023 | 6.8752 | 6.9457 | 7.0141 | 7.0806 |
| | *V* | 1.432 | 19.455 | 33.495 | 35.045 | 36.552 | 38.024 | 39.470 | 40.892 | 42.295 | 43.682 |
| 9400 | *U* | 1368.2 | 2555.2 | 3003.5 | 3052.5 | 3100.7 | 3148.4 | 3195.9 | 3243.4 | 3290.9 | 3338.5 |
| (306.44) | *H* | 1381.7 | 2738.0 | 3318.4 | 3381.9 | 3444.3 | 3505.9 | 3566.9 | 3627.8 | 3688.4 | 3749.1 |
| | *S* | 3.3168 | 5.6568 | 6.5517 | 6.6352 | 6.7146 | 6.7906 | 6.8637 | 6.9343 | 7.0029 | 7.0695 |
| | *V* | 1.439 | 18.965 | 32.726 | 34.252 | 35.734 | 37.182 | 38.602 | 39.999 | 41.377 | 42.738 |
| 9600 | *U* | 1376.7 | 2552.6 | 3001.5 | 3050.7 | 3099.0 | 3146.9 | 3194.5 | 3242.1 | 3289.7 | 3337.4 |
| (307.97) | *H* | 1390.6 | 2734.7 | 3315.6 | 3379.5 | 3442.1 | 3503.9 | 3565.1 | 3626.1 | 3686.9 | 3747.6 |
| | *S* | 3.3315 | 5.6444 | 6.5392 | 6.6231 | 6.7028 | 6.7790 | 6.8523 | 6.9231 | 6.9918 | 7.0585 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | *V* | 1.446 | 18.494 | 31.988 | 33.491 | 34.949 | 36.373 | 37.769 | 39.142 | 40.496 | 41.832 |
| 9800 | *U* | 1385.2 | 2550.0 | 2999.4 | 3048.8 | 3097.4 | 3145.4 | 3193.1 | 3240.8 | 3288.5 | 3336.2 |
| (309.48) | *H* | 1399.3 | 2731.2 | 3312.9 | 3377.0 | 3439.9 | 3501.9 | 3563.3 | 3624.4 | 3685.3 | 3746.2 |
| | *S* | 3.3461 | 5.6321 | 6.5268 | 6.6112 | 6.6912 | 6.7676 | 6.8411 | 6.9121 | 6.9810 | 7.0478 |
| | *V* | 1.453 | 18.041 | 31.280 | 32.760 | 34.196 | 35.597 | 36.970 | 38.320 | 39.650 | 40.963 |
| 10000 | *U* | 1393.5 | 2547.3 | 2997.4 | 3047.0 | 3095.7 | 3143.9 | 3191.7 | 3239.5 | 3287.3 | 3335.1 |
| (310.96) | *H* | 1408.0 | 2727.7 | 3310.1 | 3374.6 | 3437.7 | 3499.8 | 3561.4 | 3622.7 | 3683.8 | 3744.7 |
| | *S* | 3.3605 | 5.6198 | 6.5147 | 6.5994 | 6.6797 | 6.7564 | 6.8302 | 6.9013 | 6.9703 | 7.0373 |
| | *V* | 1.460 | 17.605 | 30.599 | 32.058 | 33.472 | 34.851 | 36.202 | 37.530 | 38.837 | 40.128 |
| 10200 | *U* | 1401.8 | 2544.6 | 2995.3 | 3045.2 | 3094.0 | 3142.3 | 3190.3 | 3238.2 | 3286.1 | 3334.0 |
| (312.42) | *H* | 1416.7 | 2724.2 | 3307.4 | 3372.1 | 3435.5 | 3497.8 | 3559.6 | 3621.0 | 3682.2 | 3743.3 |
| | *S* | 3.3748 | 5.6076 | 6.5027 | 6.5879 | 6.6685 | 6.7454 | 6.8194 | 6.8907 | 6.9598 | 7.0269 |
| | *V* | 1.467 | 17.184 | 29.943 | 31.382 | 32.776 | 34.134 | 35.464 | 36.770 | 38.056 | 39.325 |
| 10400 | *U* | 1410.0 | 2541.8 | 2993.2 | 3043.3 | 3092.4 | 3140.8 | 3188.9 | 3236.9 | 3284.8 | 3332.9 |
| (313.86) | *H* | 1425.2 | 2720.6 | 3304.6 | 3369.7 | 3433.2 | 3495.8 | 3557.8 | 3619.3 | 3680.6 | 3741.8 |
| | *S* | 3.3889 | 5.5955 | 6.4909 | 6.5765 | 6.6574 | 6.7346 | 6.8087 | 6.8803 | 6.9495 | 7.0167 |
| | *V* | 1.474 | 16.778 | 29.313 | 30.732 | 32.106 | 33.444 | 34.753 | 36.039 | 37.304 | 38.552 |
| 10600 | *U* | 1418.1 | 2539.0 | 2991.1 | 3041.4 | 3090.7 | 3139.3 | 3187.5 | 3235.6 | 3283.6 | 3331.7 |
| (315.27) | *H* | 1433.7 | 2716.9 | 3301.8 | 3367.2 | 3431.0 | 3493.8 | 3555.9 | 3617.6 | 3679.1 | 3740.4 |
| | *S* | 3.4029 | 5.5835 | 6.4793 | 6.5652 | 6.6465 | 6.7239 | 6.7983 | 6.8700 | 6.9394 | 7.0067 |
| | *V* | 1.481 | 16.385 | 28.706 | 30.106 | 31.461 | 32.779 | 34.069 | 35.335 | 36.580 | 37.808 |
| 10800 | *U* | 1426.2 | 2536.2 | 2989.0 | 3039.6 | 3089.0 | 3137.8 | 3186.1 | 3234.3 | 3282.4 | 3330.6 |
| (316.67) | *H* | 1442.2 | 2713.1 | 3299.0 | 3364.7 | 3428.8 | 3491.8 | 3554.1 | 3615.9 | 3677.5 | 3738.9 |
| | *S* | 3.4167 | 5.5715 | 6.4678 | 6.5542 | 6.6357 | 6.7134 | 6.7880 | 6.8599 | 6.9294 | 6.9969 |
| | *V* | 1.489 | 16.006 | 28.120 | 29.503 | 30.839 | 32.139 | 33.410 | 34.656 | 35.882 | 37.091 |
| 11000 | *U* | 1434.2 | 2533.2 | 2986.9 | 3037.7 | 3087.3 | 3136.2 | 3184.7 | 3233.0 | 3281.2 | 3329.5 |
| (318.05) | *H* | 1450.6 | 2709.3 | 3296.2 | 3362.2 | 3426.5 | 3489.7 | 3552.2 | 3614.2 | 3675.9 | 3737.5 |
| | *S* | 3.4304 | 5.5595 | 6.4564 | 6.5432 | 6.6251 | 6.7031 | 6.7779 | 6.8499 | 6.9196 | 6.9872 |
| | *V* | 1.496 | 15.639 | 27.555 | 28.921 | 30.240 | 31.521 | 32.774 | 34.002 | 35.210 | 36.400 |
| 11200 | *U* | 1442.1 | 2530.3 | 2984.8 | 3035.8 | 3085.6 | 3134.7 | 3183.3 | 3231.7 | 3280.0 | 3328.4 |
| (319.40) | *H* | 1458.9 | 2705.4 | 3293.4 | 3359.7 | 3424.3 | 3487.7 | 3550.4 | 3612.5 | 3674.4 | 3736.0 |
| | *S* | 3.4440 | 5.5476 | 6.4452 | 6.5324 | 6.6147 | 6.6929 | 6.7679 | 6.8401 | 6.9099 | 6.9777 |
| | *V* | 1.504 | 15.284 | 27.010 | 28.359 | 29.661 | 30.925 | 32.160 | 33.370 | 34.560 | 35.733 |
| 11400 | *U* | 1450.0 | 2527.2 | 2982.6 | 3033.9 | 3083.9 | 3133.1 | 3181.9 | 3230.4 | 3278.8 | 3327.2 |
| (320.74) | *H* | 1467.2 | 2701.5 | 3290.5 | 3357.2 | 3422.1 | 3485.7 | 3548.5 | 3610.8 | 3672.8 | 3734.6 |
| | *S* | 3.4575 | 5.5357 | 6.4341 | 6.5218 | 6.6043 | 6.6828 | 6.7580 | 6.8304 | 6.9004 | 6.9683 |

## Tabla F.3: Vapor saturado, unidades inglesas

$V$ = VOLUMEN ESPECÍFICO $(pie)^3 (lb_m)^{-1}$
$U$ = ENERGÍA INTERNA ESPECÍFICA $(Btu) (lb_m)^{-1}$
$H$ = ENTALPÍA ESPECÍFICA $(Btu) (lb_m)^{-1}$
$S$ = ENTROPÍA ESPECÍFICA $(Btu) (lb_m)^{-1} R^{-1}$

| | | VOLUMEN ESPECÍFICO $V$ | | | ENERGÍA INTERNA $U$ | | | ENTALPÍA $H$ | | | ENTROPÍA $S$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $t$ | $P$ | liq. | | vap. | liq. | | vap. | liq. | | vap. | liq. | | vap. |
| (°F) | (psia) | sat. | evap. | sat. | sat. | evap. | sat. | sat. | evap. | sat. | sat. | evap. | sat. |
| 32 | 0.0886 | 0.01602 | 3304.6 | 3304.6 | −0.02 | 1021.3 | 1021.3 | −0.02 | 1075.5 | 1075.5 | 0.0 | 2.1873 | 2.1873 |
| 34 | 0.0960 | 0.01602 | 3061.9 | 3061.9 | 2.00 | 1020.0 | 1022.0 | 2.00 | 1074.4 | 1076.4 | 0.0041 | 2.1762 | 2.1802 |
| 36 | 0.1040 | 0.01602 | 2839.0 | 2839.0 | 4.01 | 1018.6 | 1022.6 | 4.01 | 1073.2 | 1077.2 | 0.0081 | 2.1651 | 2.1732 |
| 38 | 0.1125 | 0.01602 | 2634.1 | 2634.2 | 6.02 | 1017.3 | 1023.3 | 6.02 | 1072.1 | 1078.1 | 0.0122 | 2.1541 | 2.1663 |
| 40 | 0.1216 | 0.01602 | 2445.8 | 2445.8 | 8.03 | 1015.9 | 1023.9 | 8.03 | 1071.0 | 1079.0 | 0.0162 | 2.1432 | 2.1594 |
| 42 | 0.1314 | 0.01602 | 2272.4 | 2272.4 | 10.03 | 1014.6 | 1024.6 | 10.03 | 1069.8 | 1079.9 | 0.0202 | 2.1325 | 2.1527 |
| 44 | 0.1419 | 0.01602 | 2112.8 | 2112.8 | 12.04 | 1013.2 | 1025.2 | 12.04 | 1068.7 | 1080.7 | 0.0242 | 2.1217 | 2.1459 |
| 46 | 0.1531 | 0.01602 | 1965.7 | 1965.7 | 14.05 | 1011.9 | 1025.9 | 14.05 | 1067.6 | 1081.6 | 0.0282 | 2.1111 | 2.1393 |
| 48 | 0.1651 | 0.01602 | 1830.0 | 1830.0 | 16.05 | 1010.5 | 1026.6 | 16.05 | 1066.4 | 1082.5 | 0.0321 | 2.1006 | 2.1327 |
| 50 | 0.1780 | 0.01602 | 1704.8 | 1704.8 | 18.05 | 1009.2 | 1027.2 | 18.05 | 1065.3 | 1083.4 | 0.0361 | 2.0901 | 2.1262 |
| 52 | 0.1916 | 0.01602 | 1589.2 | 1589.2 | 20.06 | 1007.8 | 1027.9 | 20.06 | 1064.2 | 1084.2 | 0.0400 | 2.0798 | 2.1197 |
| 54 | 0.2063 | 0.01603 | 1482.4 | 1482.4 | 22.06 | 1006.5 | 1028.5 | 22.06 | 1063.1 | 1085.1 | 0.0439 | 2.0695 | 2.1134 |
| 56 | 0.2218 | 0.01603 | 1383.6 | 1383.6 | 24.06 | 1005.1 | 1029.2 | 24.06 | 1061.9 | 1086.0 | 0.0478 | 2.0593 | 2.1070 |
| 58 | 0.2384 | 0.01603 | 1292.2 | 1292.2 | 26.06 | 1003.8 | 1029.8 | 26.06 | 1060.8 | 1086.9 | 0.0516 | 2.0491 | 2.1008 |
| 60 | 0.2561 | 0.01603 | 1207.6 | 1207.6 | 28.06 | 1002.4 | 1030.5 | 28.06 | 1059.7 | 1087.7 | 0.0555 | 2.0391 | 2.0946 |
| 62 | 0.2749 | 0.01604 | 1129.2 | 1129.2 | 30.06 | 1001.1 | 1031.2 | 30.06 | 1058.5 | 1088.6 | 0.0593 | 2.0291 | 2.0885 |
| 64 | 0.2950 | 0.01604 | 1056.5 | 1056.5 | 32.06 | 999.8 | 1031.8 | 32.06 | 1057.4 | 1089.5 | 0.0632 | 2.0192 | 2.0824 |
| 66 | 0.3163 | 0.01604 | 989.0 | 989.1 | 34.06 | 998.4 | 1032.5 | 34.06 | 1056.3 | 1090.4 | 0.0670 | 2.0094 | 2.0764 |
| 68 | 0.3389 | 0.01605 | 926.5 | 926.5 | 36.05 | 997.1 | 1033.1 | 36.05 | 1055.2 | 1091.2 | 0.0708 | 1.9996 | 2.0704 |
| 70 | 0.3629 | 0.01605 | 868.3 | 868.4 | 38.05 | 995.7 | 1033.8 | 38.05 | 1054.0 | 1092.1 | 0.0745 | 1.9900 | 2.0645 |
| 72 | 0.3884 | 0.01605 | 814.3 | 814.3 | 40.05 | 994.4 | 1034.4 | 40.05 | 1052.9 | 1093.0 | 0.0783 | 1.9804 | 2.0587 |
| 74 | 0.4155 | 0.01606 | 764.1 | 764.1 | 42.05 | 993.0 | 1035.1 | 42.05 | 1051.8 | 1093.8 | 0.0821 | 1.9708 | 2.0529 |
| 76 | 0.4442 | 0.01606 | 717.4 | 717.4 | 44.04 | 991.7 | 1035.7 | 44.04 | 1050.7 | 1094.7 | 0.0858 | 1.9614 | 2.0472 |
| 78 | 0.4746 | 0.01607 | 673.8 | 673.9 | 46.04 | 990.3 | 1036.4 | 46.04 | 1049.5 | 1095.6 | 0.0895 | 1.9520 | 2.0415 |
| 80 | 0.5068 | 0.01607 | 633.3 | 633.3 | 48.03 | 989.0 | 1037.0 | 48.04 | 1048.4 | 1096.4 | 0.0932 | 1.9426 | 2.0359 |
| 82 | 0.5409 | | | | | | | | | | | | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 82 | 0.5409 | 0.01608 | 595.5 | 595.6 | 50.03 | 987.7 | 1037.7 | 50.03 | 1047.3 | 1097.3 | 0.0969 | 1.9334 | 2.0303 |
| 84 | 0.5770 | 0.01608 | 560.3 | 560.3 | 52.03 | 986.3 | 1038.3 | 52.03 | 1046.1 | 1098.2 | 0.1006 | 1.9242 | 2.0248 |
| 86 | 0.6152 | 0.01609 | 527.5 | 527.5 | 54.02 | 985.0 | 1039.0 | 54.03 | 1045.0 | 1099.0 | 0.1043 | 1.9151 | 2.0193 |
| 88 | 0.6555 | 0.01609 | 496.8 | 496.8 | 56.02 | 983.6 | 1039.6 | 56.02 | 1043.9 | 1099.9 | 0.1079 | 1.9060 | 2.0139 |
| 90 | 0.6981 | 0.01610 | 468.1 | 468.1 | 58.02 | 982.3 | 1040.3 | 58.02 | 1042.7 | 1100.8 | 0.1115 | 1.8970 | 2.0086 |
| 92 | 0.7431 | 0.01610 | 441.3 | 441.3 | 60.01 | 980.9 | 1040.9 | 60.01 | 1041.6 | 1101.6 | 0.1152 | 1.8881 | 2.0033 |
| 94 | 0.7906 | 0.01611 | 416.3 | 416.3 | 62.01 | 979.6 | 1041.6 | 62.01 | 1040.5 | 1102.5 | 0.1188 | 1.8792 | 1.9980 |
| 96 | 0.8407 | 0.01612 | 392.8 | 392.9 | 64.00 | 978.2 | 1042.2 | 64.01 | 1039.3 | 1103.3 | 0.1224 | 1.8704 | 1.9928 |
| 98 | 0.8936 | 0.01612 | 370.9 | 370.9 | 66.00 | 976.9 | 1042.9 | 66.00 | 1038.2 | 1104.2 | 0.1260 | 1.8617 | 1.9876 |
| 100 | 0.9492 | 0.01613 | 350.4 | 350.4 | 68.00 | 975.5 | 1043.5 | 68.00 | 1037.1 | 1105.1 | 0.1295 | 1.8530 | 1.9825 |
| 102 | 1.0079 | 0.01614 | 331.1 | 331.1 | 69.99 | 974.2 | 1044.2 | 70.00 | 1035.9 | 1105.9 | 0.1331 | 1.8444 | 1.9775 |
| 104 | 1.0697 | 0.01614 | 313.1 | 313.1 | 71.99 | 972.8 | 1044.8 | 71.99 | 1034.8 | 1106.8 | 0.1366 | 1.8358 | 1.9725 |
| 106 | 1.1347 | 0.01615 | 296.2 | 296.2 | 73.98 | 971.5 | 1045.4 | 73.99 | 1033.6 | 1107.6 | 0.1402 | 1.8273 | 1.9675 |
| 108 | 1.2030 | 0.01616 | 280.3 | 280.3 | 75.98 | 970.1 | 1046.1 | 75.98 | 1032.5 | 1108.5 | 0.1437 | 1.8188 | 1.9626 |
| 110 | 1.275 | 0.01617 | 265.4 | 265.4 | 77.98 | 968.8 | 1046.7 | 77.98 | 1031.4 | 1109.3 | 0.1472 | 1.8105 | 1.9577 |
| 112 | 1.351 | 0.01617 | 251.4 | 251.4 | 79.97 | 967.4 | 1047.4 | 79.98 | 1030.2 | 1110.2 | 0.1507 | 1.8021 | 1.9528 |
| 114 | 1.430 | 0.01618 | 238.2 | 238.2 | 81.97 | 966.0 | 1048.0 | 81.97 | 1029.1 | 1111.0 | 0.1542 | 1.7938 | 1.9480 |
| 116 | 1.513 | 0.01619 | 225.8 | 225.9 | 83.97 | 964.7 | 1048.6 | 83.97 | 1027.9 | 1111.9 | 0.1577 | 1.7856 | 1.9433 |
| 118 | 1.601 | 0.01620 | 214.2 | 214.2 | 85.96 | 963.3 | 1049.3 | 85.97 | 1026.8 | 1112.7 | 0.1611 | 1.7774 | 1.9386 |
| 120 | 1.693 | 0.01620 | 203.25 | 203.26 | 87.96 | 962.0 | 1049.9 | 87.97 | 1025.6 | 1113.6 | 0.1646 | 1.7693 | 1.9339 |
| 122 | 1.789 | 0.01621 | 192.94 | 192.95 | 89.96 | 960.6 | 1050.6 | 89.96 | 1024.5 | 1114.4 | 0.1680 | 1.7613 | 1.9293 |
| 124 | 1.890 | 0.01622 | 183.23 | 183.24 | 91.96 | 959.2 | 1051.2 | 91.96 | 1023.3 | 1115.3 | 0.1715 | 1.7533 | 1.9247 |
| 126 | 1.996 | 0.01623 | 174.08 | 174.09 | 93.95 | 957.9 | 1051.8 | 93.96 | 1022.2 | 1116.1 | 0.1749 | 1.7453 | 1.9202 |
| 128 | 2.107 | 0.01624 | 165.45 | 165.47 | 95.95 | 956.5 | 1052.4 | 95.96 | 1021.0 | 1117.0 | 0.1783 | 1.7374 | 1.9157 |
| 130 | 2.223 | 0.01625 | 157.32 | 157.33 | 97.95 | 955.1 | 1053.1 | 97.96 | 1019.8 | 1117.8 | 0.1817 | 1.7295 | 1.9112 |
| 132 | 2.345 | 0.01626 | 149.64 | 149.66 | 99.95 | 953.8 | 1053.7 | 99.95 | 1018.7 | 1118.6 | 0.1851 | 1.7217 | 1.9068 |
| 134 | 2.472 | 0.01626 | 142.40 | 142.41 | 101.94 | 952.4 | 1054.3 | 101.95 | 1017.5 | 1119.5 | 0.1884 | 1.7140 | 1.9024 |
| 136 | 2.605 | 0.01627 | 135.55 | 135.57 | 103.94 | 951.0 | 1055.0 | 103.95 | 1016.4 | 1120.3 | 0.1918 | 1.7063 | 1.8980 |
| 138 | 2.744 | 0.01628 | 129.09 | 129.11 | 105.94 | 949.6 | 1055.6 | 105.95 | 1015.2 | 1121.1 | 0.1951 | 1.6986 | 1.8937 |
| 140 | 2.889 | 0.01629 | 122.98 | 123.00 | 107.94 | 948.3 | 1056.2 | 107.95 | 1014.0 | 1122.0 | 0.1985 | 1.6910 | 1.8895 |
| 142 | 3.041 | 0.01630 | 117.21 | 117.22 | 109.94 | 946.9 | 1056.8 | 109.95 | 1012.9 | 1122.8 | 0.2018 | 1.6834 | 1.8852 |
| 144 | 3.200 | 0.01631 | 111.74 | 111.76 | 111.94 | 945.5 | 1057.5 | 111.95 | 1011.7 | 1123.6 | 0.2051 | 1.6759 | 1.8810 |
| 146 | 3.365 | 0.01632 | 106.58 | 106.59 | 113.94 | 944.1 | 1058.1 | 113.95 | 1010.5 | 1124.5 | 0.2084 | 1.6684 | 1.8769 |
| 148 | 3.538 | 0.01633 | 101.68 | 101.70 | 115.94 | 942.8 | 1058.7 | 115.95 | 1009.3 | 1125.3 | 0.2117 | 1.6610 | 1.8727 |
| 150 | 3.718 | 0.01634 | 97.05 | 97.07 | 117.94 | 941.4 | 1059.3 | 117.95 | 1008.2 | 1126.1 | 0.2150 | 1.6536 | 1.8686 |
| 152 | 3.906 | 0.01635 | 92.66 | 92.68 | 119.94 | 940.0 | 1059.9 | 119.95 | 1007.0 | 1126.9 | 0.2183 | 1.6463 | 1.8646 |
| 154 | 4.102 | 0.01636 | 88.50 | 88.52 | 121.94 | 938.6 | 1060.5 | 121.95 | 1005.8 | 1127.7 | 0.2216 | 1.6390 | 1.8606 |
| 156 | 4.307 | 0.01637 | 84.56 | 84.57 | 123.94 | 937.2 | 1061.2 | 123.95 | 1004.6 | 1128.6 | 0.2248 | 1.6318 | 1.8566 |
| 158 | 4.520 | 0.01638 | 80.82 | 80.83 | 125.94 | 935.8 | 1061.8 | 125.96 | 1003.4 | 1129.4 | 0.2281 | 1.6245 | 1.8526 |
| 160 | 4.741 | 0.01640 | 77.27 | 77.29 | 127.94 | 934.4 | 1062.4 | 127.96 | 1002.2 | 1130.2 | 0.2313 | 1.6174 | 1.8487 |

## Tabla F.3. Vapor saturado, unidades inglesas (*Continúa*)

| | | VOLUMEN ESPECÍFICO $V$ | | | ENERGÍA INTERNA $U$ | | | ENTALPÍA $H$ | | | ENTROPÍA $S$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $t$ (°F) | $P$ (psia) | liq. sat. | evap. | vap. sat. | liq. sat. | evap. | vap. sat. | liq. sat. | evap. | vap. sat. | liq. sat. | evap. | vap. sat. |
| 162 | 4.972 | 0.01641 | 73.90 | 73.92 | 129.95 | 933.0 | 1063.0 | 129.96 | 1001.0 | 1131.0 | 0.2345 | 1.6103 | 1.8448 |
| 164 | 5.212 | 0.01642 | 70.70 | 70.72 | 131.95 | 931.6 | 1063.6 | 131.96 | 999.8 | 1131.8 | 0.2377 | 1.6032 | 1.8409 |
| 166 | 5.462 | 0.01643 | 67.67 | 67.68 | 133.95 | 930.2 | 1064.2 | 133.97 | 998.6 | 1132.6 | 0.2409 | 1.5961 | 1.8371 |
| 168 | 5.722 | 0.01644 | 64.78 | 64.80 | 135.95 | 928.8 | 1064.8 | 135.97 | 997.4 | 1133.4 | 0.2441 | 1.5892 | 1.8333 |
| 170 | 5.993 | 0.01645 | 62.04 | 62.06 | 137.96 | 927.4 | 1065.4 | 137.97 | 996.2 | 1134.2 | 0.2473 | 1.5822 | 1.8295 |
| 172 | 6.274 | 0.01646 | 59.43 | 59.45 | 139.96 | 926.0 | 1066.0 | 139.98 | 995.0 | 1135.0 | 0.2505 | 1.5753 | 1.8258 |
| 174 | 6.566 | 0.01647 | 56.95 | 56.97 | 141.96 | 924.6 | 1066.6 | 141.98 | 993.8 | 1135.8 | 0.2537 | 1.5684 | 1.8221 |
| 176 | 6.869 | 0.01649 | 54.59 | 54.61 | 143.97 | 923.2 | 1067.2 | 143.99 | 992.6 | 1136.6 | 0.2568 | 1.5616 | 1.8184 |
| 178 | 7.184 | 0.01650 | 52.35 | 52.36 | 145.97 | 921.8 | 1067.8 | 145.99 | 991.4 | 1137.4 | 0.2600 | 1.5548 | 1.8147 |
| 180 | 7.511 | 0.01651 | 50.21 | 50.22 | 147.98 | 920.4 | 1068.4 | 148.00 | 990.2 | 1138.2 | 0.2631 | 1.5480 | 1.8111 |
| 182 | 7.850 | 0.01652 | 48.17 | 48.19 | 149.98 | 919.0 | 1069.0 | 150.01 | 989.0 | 1139.0 | 0.2662 | 1.5413 | 1.8075 |
| 184 | 8.203 | 0.01653 | 46.23 | 46.25 | 151.99 | 917.6 | 1069.6 | 152.01 | 987.8 | 1139.8 | 0.2694 | 1.5346 | 1.8040 |
| 186 | 8.568 | 0.01655 | 44.38 | 44.40 | 153.99 | 916.2 | 1070.2 | 154.02 | 986.5 | 1140.5 | 0.2725 | 1.5279 | 1.8004 |
| 188 | 8.947 | 0.01656 | 42.62 | 42.64 | 156.00 | 914.7 | 1070.7 | 156.03 | 985.3 | 1141.3 | 0.2756 | 1.5213 | 1.7969 |
| 190 | 9.340 | 0.01657 | 40.94 | 40.96 | 158.01 | 913.3 | 1071.3 | 158.04 | 984.1 | 1142.1 | 0.2787 | 1.5148 | 1.7934 |
| 192 | 9.747 | 0.01658 | 39.34 | 39.35 | 160.02 | 911.9 | 1071.9 | 160.05 | 982.8 | 1142.9 | 0.2818 | 1.5082 | 1.7900 |
| 194 | 10.168 | 0.01660 | 37.81 | 37.82 | 162.02 | 910.5 | 1072.5 | 162.05 | 981.6 | 1143.7 | 0.2848 | 1.5017 | 1.7865 |
| 196 | 10.605 | 0.01661 | 36.35 | 36.36 | 164.03 | 909.0 | 1073.1 | 164.06 | 980.4 | 1144.4 | 0.2879 | 1.4952 | 1.7831 |
| 198 | 11.058 | 0.01662 | 34.95 | 34.97 | 166.04 | 907.6 | 1073.6 | 166.08 | 979.1 | 1145.2 | 0.2910 | 1.4888 | 1.7798 |
| 200 | 11.526 | 0.01664 | 33.62 | 33.64 | 168.05 | 906.2 | 1074.2 | 168.09 | 977.9 | 1146.0 | 0.2940 | 1.4824 | 1.7764 |
| 202 | 12.011 | 0.01665 | 32.35 | 32.37 | 170.06 | 904.7 | 1074.8 | 170.10 | 976.6 | 1146.7 | 0.2971 | 1.4760 | 1.7731 |
| 204 | 12.512 | 0.01666 | 31.13 | 31.15 | 172.07 | 903.3 | 1075.3 | 172.11 | 975.4 | 1147.5 | 0.3001 | 1.4697 | 1.7698 |
| 206 | 13.031 | 0.01668 | 29.97 | 29.99 | 174.08 | 901.8 | 1075.9 | 174.12 | 974.1 | 1148.2 | 0.3031 | 1.4634 | 1.7665 |
| 208 | 13.568 | 0.01669 | 28.86 | 28.88 | 176.09 | 900.4 | 1076.5 | 176.14 | 972.8 | 1149.0 | 0.3061 | 1.4571 | 1.7632 |
| 210 | 14.123 | 0.01670 | 27.80 | 27.82 | 178.11 | 898.9 | 1077.0 | 178.15 | 971.6 | 1149.7 | 0.3091 | 1.4509 | 1.7600 |
| 212 | 14.696 | 0.01672 | 26.78 | 26.80 | 180.12 | 897.5 | 1077.6 | 180.17 | 970.3 | 1150.5 | 0.3121 | 1.4447 | 1.7568 |
| 215 | 15.592 | 0.01674 | 25.34 | 25.36 | 183.14 | 895.3 | 1078.4 | 183.19 | 968.4 | 1151.6 | 0.3166 | 1.4354 | 1.7520 |
| 220 | 17.186 | 0.01678 | 23.13 | 23.15 | 188.18 | 891.6 | 1079.8 | 188.23 | 965.2 | 1153.4 | 0.3241 | 1.4201 | 1.7442 |
| 225 | 18.912 | 0.01681 | 21.15 | 21.17 | 193.22 | 888.0 | 1081.2 | 193.28 | 962.0 | 1155.3 | 0.3315 | 1.4051 | 1.7365 |
| 230 | 20.78 | 0.01685 | 19.364 | 19.381 | 198.27 | 884.3 | 1082.5 | 198.33 | 958.7 | 1157.1 | 0.3388 | 1.3902 | 1.7290 |
| 235 | 22.79 | 0.01689 | 17.756 | 17.773 | 203.32 | 880.5 | 1083.9 | 203.39 | 955.4 | 1158.8 | 0.3461 | 1.3754 | 1.7215 |
| 240 | 24.97 | 0.01693 | 16.304 | 16.321 | 208.37 | 876.8 | 1085.2 | 208.45 | 952.1 | 1160.6 | 0.3533 | 1.3609 | 1.7142 |
| 245 | 27.31 | 0.01697 | 14.991 | 15.008 | 213.43 | 873.1 | 1086.5 | 213.52 | 948.8 | 1162.3 | 0.3606 | 1.3465 | 1.7070 |
| 250 | 29.82 | 0.01701 | 13.802 | 13.819 | 218.50 | 869.3 | 1087.8 | 218.59 | 945.4 | 1164.0 | 0.3677 | 1.3323 | 1.7000 |
| 255 | 32.53 | 0.01705 | 12.724 | 12.741 | 223.57 | 865.5 | 1089.0 | 223.67 | 942.1 | 1165.7 | 0.3748 | 1.3182 | 1.6930 |
| 260 | 35.43 | 0.01709 | 11.745 | 11.762 | 228.64 | 861.6 | 1090.3 | 228.76 | 938.8 | 1167.4 | 0.3818 | 1.3044 | 1.6862 |
| 265 | 38.53 | 0.01713 | 10.854 | 10.871 | 233.72 | 857.7 | 1091.4 | 233.85 | 935.4 | 1169.2 | 0.3889 | 1.2907 | 1.6796 |
| 270 | 41.86 | 0.01717 | 10.043 | 10.060 | 238.81 | 853.8 | 1092.6 | 238.94 | 932.0 | 1170.9 | 0.3959 | 1.2772 | 1.6731 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 260 | 35.43 | 0.01709 | 11.745 | 11.762 | 228.64 | 861.6 | 1090.3 | 228.76 | 938.6 | 1167.4 | 0.3819 | 1.3043 | 1.6862 |
| 265 | 38.53 | 0.01713 | 10.854 | 10.871 | 233.73 | 857.8 | 1091.5 | 233.85 | 935.2 | 1169.0 | 0.3890 | 1.2905 | 1.6795 |
| 270 | 47.86 | 0.01717 | 10.042 | 10.060 | 238.82 | 853.9 | 1092.7 | 238.95 | 931.7 | 1170.6 | 0.3960 | 1.2769 | 1.6729 |
| 275 | 45.41 | 0.01722 | 9.302 | 9.320 | 243.91 | 850.0 | 1093.9 | 244.06 | 928.2 | 1172.2 | 0.4029 | 1.2634 | 1.6663 |
| 280 | 49.20 | 0.01726 | 8.627 | 8.644 | 249.01 | 846.1 | 1095.1 | 249.17 | 924.6 | 1173.8 | 0.4098 | 1.2501 | 1.6599 |
| 285 | 53.24 | 0.01731 | 8.009 | 8.026 | 254.12 | 842.1 | 1096.2 | 254.29 | 921.0 | 1175.3 | 0.4167 | 1.2368 | 1.6536 |
| 290 | 57.55 | 0.01736 | 7.443 | 7.460 | 259.24 | 838.1 | 1097.4 | 259.43 | 917.4 | 1176.8 | 0.4236 | 1.2238 | 1.6473 |
| 295 | 62.13 | 0.01740 | 6.924 | 6.942 | 264.37 | 834.1 | 1098.5 | 264.57 | 913.7 | 1178.3 | 0.4304 | 1.2108 | 1.6412 |
| 300 | 67.01 | 0.01745 | 6.448 | 6.466 | 269.50 | 830.1 | 1099.6 | 269.71 | 910.0 | 1179.7 | 0.4372 | 1.1979 | 1.6351 |
| 305 | 72.18 | 0.01750 | 6.011 | 6.028 | 274.64 | 826.0 | 1100.6 | 274.87 | 906.3 | 1181.1 | 0.4439 | 1.1852 | 1.6291 |
| 310 | 77.67 | 0.01755 | 5.608 | 5.626 | 279.79 | 821.9 | 1101.7 | 280.04 | 902.5 | 1182.5 | 0.4506 | 1.1726 | 1.6232 |
| 315 | 83.48 | 0.01760 | 5.238 | 5.255 | 284.94 | 817.7 | 1102.7 | 285.21 | 898.7 | 1183.9 | 0.4573 | 1.1601 | 1.6174 |
| 320 | 89.64 | 0.01766 | 4.896 | 4.914 | 290.11 | 813.6 | 1103.7 | 290.40 | 894.8 | 1185.2 | 0.4640 | 1.1477 | 1.6116 |
| 325 | 96.16 | 0.01771 | 4.581 | 4.598 | 295.28 | 809.4 | 1104.6 | 295.60 | 890.9 | 1186.5 | 0.4706 | 1.1354 | 1.6059 |
| 330 | 103.05 | 0.01776 | 4.289 | 4.307 | 300.47 | 805.1 | 1105.6 | 300.81 | 886.9 | 1187.7 | 0.4772 | 1.1231 | 1.6003 |
| 335 | 110.32 | 0.01782 | 4.020 | 4.037 | 305.66 | 800.8 | 1106.5 | 306.03 | 882.9 | 1188.9 | 0.4837 | 1.1110 | 1.5947 |
| 340 | 117.99 | 0.01787 | 3.770 | 3.788 | 310.87 | 796.5 | 1107.4 | 311.26 | 878.8 | 1190.1 | 0.4902 | 1.0990 | 1.5892 |
| 345 | 126.08 | 0.01793 | 3.539 | 3.556 | 316.08 | 792.2 | 1108.2 | 316.50 | 874.7 | 1191.2 | 0.4967 | 1.0871 | 1.5838 |
| 350 | 134.60 | 0.01799 | 3.324 | 3.342 | 321.31 | 787.8 | 1109.1 | 321.76 | 870.6 | 1192.3 | 0.5032 | 1.0752 | 1.5784 |
| 355 | 143.57 | 0.01805 | 3.124 | 3.143 | 326.55 | 783.3 | 1109.9 | 327.03 | 866.3 | 1193.4 | 0.5097 | 1.0634 | 1.5731 |
| 360 | 153.01 | 0.01811 | 2.939 | 2.957 | 331.79 | 778.9 | 1110.7 | 332.31 | 862.1 | 1194.4 | 0.5161 | 1.0517 | 1.5678 |
| 365 | 162.93 | 0.01817 | 2.767 | 2.785 | 337.05 | 774.3 | 1111.4 | 337.60 | 857.8 | 1195.4 | 0.5225 | 1.0401 | 1.5626 |
| 370 | 173.34 | 0.01823 | 2.606 | 2.624 | 342.33 | 769.8 | 1112.1 | 342.91 | 853.4 | 1196.3 | 0.5289 | 1.0286 | 1.5575 |
| 375 | 184.27 | 0.01830 | 2.457 | 2.475 | 347.61 | 765.2 | 1112.8 | 348.24 | 849.0 | 1197.2 | 0.5352 | 1.0171 | 1.5523 |
| 380 | 195.73 | 0.01836 | 2.317 | 2.335 | 352.91 | 760.5 | 1113.5 | 353.58 | 844.5 | 1198.0 | 0.5416 | 1.0057 | 1.5473 |
| 385 | 207.74 | 0.01843 | 2.187 | 2.205 | 358.22 | 755.9 | 1114.1 | 358.93 | 839.9 | 1198.8 | 0.5479 | 0.9944 | 1.5422 |
| 390 | 220.32 | 0.01850 | 2.065 | 2.083 | 363.55 | 751.1 | 1114.7 | 364.30 | 835.3 | 1199.6 | 0.5542 | 0.9831 | 1.5372 |
| 395 | 233.49 | 0.01857 | 1.9510 | 1.9695 | 368.89 | 746.3 | 1115.2 | 369.69 | 830.6 | 1200.3 | 0.5604 | 0.9718 | 1.5323 |
| 400 | 247.26 | 0.01864 | 1.8444 | 1.8630 | 374.24 | 741.5 | 1115.7 | 375.09 | 825.9 | 1201.0 | 0.5667 | 0.9607 | 1.5274 |
| 405 | 261.65 | 0.01871 | 1.7445 | 1.7633 | 379.61 | 736.6 | 1116.2 | 380.52 | 821.1 | 1201.6 | 0.5729 | 0.9496 | 1.5225 |
| 410 | 276.69 | 0.01878 | 1.6510 | 1.6697 | 384.99 | 731.7 | 1116.7 | 385.96 | 816.2 | 1202.1 | 0.5791 | 0.9385 | 1.5176 |
| 415 | 292.40 | 0.01886 | 1.5632 | 1.5820 | 390.40 | 726.7 | 1117.1 | 391.42 | 811.2 | 1202.7 | 0.5853 | 0.9275 | 1.5128 |
| 420 | 308.78 | 0.01894 | 1.4808 | 1.4997 | 395.81 | 721.6 | 1117.4 | 396.90 | 806.2 | 1203.1 | 0.5915 | 0.9165 | 1.5080 |
| 425 | 325.87 | 0.01901 | 1.4033 | 1.4224 | 401.25 | 716.5 | 1117.8 | 402.40 | 801.1 | 1203.5 | 0.5977 | 0.9055 | 1.5032 |
| 430 | 343.67 | 0.01909 | 1.3306 | 1.3496 | 406.70 | 711.3 | 1118.0 | 407.92 | 796.0 | 1203.9 | 0.6038 | 0.8946 | 1.4985 |
| 435 | 362.23 | 0.01918 | 1.2621 | 1.2812 | 412.18 | 706.1 | 1118.3 | 413.46 | 790.7 | 1204.2 | 0.6100 | 0.8838 | 1.4937 |
| 440 | 381.54 | 0.01926 | 1.1976 | 1.2169 | 417.67 | 700.8 | 1118.5 | 419.03 | 785.4 | 1204.4 | 0.6161 | 0.8729 | 1.4890 |
| 445 | 401.64 | 0.01934 | 1.1369 | 1.1562 | 423.18 | 695.5 | 1118.7 | 424.62 | 780.0 | 1204.6 | 0.6222 | 0.8621 | 1.4843 |
| 450 | 422.55 | 0.01943 | 1.0796 | 1.0991 | 428.71 | 690.1 | 1118.8 | 430.23 | 774.5 | 1204.7 | 0.6283 | 0.8514 | 1.4797 |
| 455 | 444.28 | 0.0195 | 1.0256 | 1.0451 | 434.27 | 684.6 | 1118.9 | 435.87 | 768.9 | 1204.8 | 0.6344 | 0.8406 | 1.4750 |

## Tabla F.3. Vapor saturado, unidades inglesas (*Continúa*)

| | | VOLUMEN ESPECÍFICO *V* | | | ENERGÍA INTERNA *U* | | | ENTALPÍA *H* | | | ENTROPÍA *S* | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *t* (°F) | *P* (psia) | liq. sat. | evap. | vap. sat. | liq. sat. | evap. | vap. sat. | liq. sat. | evap. | vap. sat. | liq. sat. | evap. | vap. sat. |
| 460 | 466.87 | 0.0196 | 0.9746 | 0.9942 | 439.84 | 679.0 | 1118.9 | 441.54 | 763.2 | 1204.8 | 0.6405 | 0.8299 | 1.4704 |
| 465 | 490.32 | 0.0197 | 0.9265 | 0.9462 | 445.44 | 673.4 | 1118.9 | 447.23 | 757.5 | 1204.7 | 0.6466 | 0.8192 | 1.4657 |
| 470 | 514.67 | 0.0198 | 0.8810 | 0.9008 | 451.06 | 667.7 | 1118.8 | 452.95 | 751.6 | 1204.6 | 0.6527 | 0.8084 | 1.4611 |
| 475 | 539.94 | 0.0199 | 0.8379 | 0.8578 | 456.71 | 662.0 | 1118.7 | 458.70 | 745.7 | 1204.4 | 0.6587 | 0.7977 | 1.4565 |
| 480 | 566.15 | 0.0200 | 0.7972 | 0.8172 | 462.39 | 656.1 | 1118.5 | 464.48 | 739.6 | 1204.1 | 0.6648 | 0.7871 | 1.4518 |
| 485 | 593.32 | 0.0201 | 0.7586 | 0.7787 | 468.09 | 650.2 | 1118.3 | 470.29 | 733.5 | 1203.8 | 0.6708 | 0.7764 | 1.4472 |
| 490 | 621.48 | 0.0202 | 0.7220 | 0.7422 | 473.82 | 644.2 | 1118.0 | 476.14 | 727.2 | 1203.3 | 0.6769 | 0.7657 | 1.4426 |
| 495 | 650.65 | 0.0203 | 0.6874 | 0.7077 | 479.57 | 638.0 | 1117.6 | 482.02 | 720.8 | 1202.8 | 0.6830 | 0.7550 | 1.4380 |
| 500 | 680.86 | 0.0204 | 0.6545 | 0.6749 | 485.36 | 631.8 | 1117.2 | 487.94 | 714.3 | 1202.2 | 0.6890 | 0.7443 | 1.4333 |
| 505 | 712.12 | 0.0205 | 0.6233 | 0.6438 | 491.2 | 625.6 | 1116.7 | 493.9 | 707.7 | 1201.6 | 0.6951 | 0.7336 | 1.4286 |
| 510 | 744.47 | 0.0207 | 0.5936 | 0.6143 | 497.0 | 619.2 | 1116.2 | 499.9 | 700.9 | 1200.8 | 0.7012 | 0.7228 | 1.4240 |
| 515 | 777.93 | 0.0208 | 0.5654 | 0.5862 | 502.9 | 612.7 | 1115.6 | 505.9 | 694.1 | 1200.0 | 0.7072 | 0.7120 | 1.4193 |
| 520 | 812.53 | 0.0209 | 0.5386 | 0.5596 | 508.8 | 606.1 | 1114.9 | 512.0 | 687.0 | 1199.0 | 0.7133 | 0.7013 | 1.4146 |
| 525 | 848.28 | 0.0210 | 0.5131 | 0.5342 | 514.8 | 599.3 | 1114.2 | 518.1 | 679.9 | 1198.0 | 0.7194 | 0.6904 | 1.4098 |
| 530 | 885.23 | 0.0212 | 0.4889 | 0.5100 | 520.8 | 592.5 | 1113.3 | 524.3 | 672.6 | 1196.9 | 0.7255 | 0.6796 | 1.4051 |
| 535 | 923.39 | 0.0213 | 0.4657 | 0.4870 | 526.9 | 585.6 | 1112.4 | 530.5 | 665.1 | 1195.6 | 0.7316 | 0.6686 | 1.4003 |
| 540 | 962.79 | 0.0215 | 0.4437 | 0.4651 | 532.9 | 578.5 | 1111.4 | 536.8 | 657.5 | 1194.3 | 0.7378 | 0.6577 | 1.3954 |
| 545 | 1003.5 | 0.0216 | 0.4226 | 0.4442 | 539.1 | 571.2 | 1110.3 | 543.1 | 649.7 | 1192.8 | 0.7439 | 0.6467 | 1.3906 |
| 550 | 1045.4 | 0.0218 | 0.4026 | 0.4243 | 545.3 | 563.9 | 1109.1 | 549.5 | 641.8 | 1191.2 | 0.7501 | 0.6356 | 1.3856 |
| 555 | 1088.7 | 0.0219 | 0.3834 | 0.4053 | 551.5 | 556.4 | 1107.9 | 555.9 | 633.6 | 1189.5 | 0.7562 | 0.6244 | 1.3807 |
| 560 | 1133.4 | 0.0221 | 0.3651 | 0.3871 | 557.8 | 548.7 | 1106.5 | 562.4 | 625.3 | 1187.7 | 0.7625 | 0.6132 | 1.3757 |
| 565 | 1179.4 | 0.0222 | 0.3475 | 0.3698 | 564.1 | 540.9 | 1105.0 | 569.0 | 616.8 | 1185.7 | 0.7687 | 0.6019 | 1.3706 |
| 570 | 1226.9 | 0.0224 | 0.3308 | 0.3532 | 570.5 | 532.9 | 1103.4 | 575.6 | 608.0 | 1183.6 | 0.7750 | 0.5905 | 1.3654 |
| 575 | 1275.8 | 0.0226 | 0.3147 | 0.3373 | 577.0 | 524.8 | 1101.7 | 582.3 | 599.1 | 1181.4 | 0.7813 | 0.5790 | 1.3602 |
| 580 | 1326.2 | 0.0228 | 0.2994 | 0.3222 | 583.5 | 516.4 | 1099.9 | 589.1 | 589.9 | 1179.0 | 0.7876 | 0.5673 | 1.3550 |
| 585 | 1378.1 | 0.0230 | 0.2846 | 0.3076 | 590.1 | 507.9 | 1098.0 | 596.0 | 580.4 | 1176.4 | 0.7940 | 0.5556 | 1.3496 |
| 590 | 1431.5 | 0.0232 | 0.2705 | 0.2937 | 596.8 | 499.1 | 1095.9 | 602.9 | 570.8 | 1173.7 | 0.8004 | 0.5437 | 1.3442 |
| 595 | 1486.6 | 0.0234 | 0.2569 | 0.2803 | 603.5 | 490.2 | 1093.7 | 610.0 | 560.8 | 1170.8 | 0.8069 | 0.5317 | 1.3386 |
| 600 | 1543.2 | 0.0236 | 0.2438 | 0.2675 | 610.4 | 481.0 | 1091.3 | 617.1 | 550.6 | 1167.7 | 0.8134 | 0.5196 | 1.3330 |
| 605 | 1601.5 | 0.0239 | 0.2313 | 0.2551 | 617.3 | 471.5 | 1088.8 | 624.4 | 540.0 | 1164.4 | 0.8200 | 0.5072 | 1.3273 |
| 610 | 1661.6 | 0.0241 | 0.2191 | 0.2433 | 624.4 | 461.8 | 1086.1 | 631.8 | 529.2 | 1160.9 | 0.8267 | 0.4947 | 1.3214 |
| 615 | 1723.3 | 0.0244 | 0.2075 | 0.2318 | 631.5 | 451.8 | 1083.3 | 639.3 | 517.9 | 1157.2 | 0.8334 | 0.4819 | 1.3154 |
| 620 | 1786.9 | 0.0247 | 0.1961 | 0.2208 | 638.8 | 441.4 | 1080.2 | 646.9 | 506.3 | 1153.2 | 0.8403 | 0.4689 | 1.3092 |
| 625 | 1852.2 | 0.0250 | 0.1852 | 0.2102 | 646.2 | 430.7 | 1076.8 | 654.7 | 494.2 | 1148.9 | 0.8472 | 0.4556 | 1.3028 |
| 630 | 1919.5 | 0.0253 | 0.1746 | 0.1999 | 653.7 | 419.5 | 1073.2 | 662.7 | 481.6 | 1144.2 | 0.8542 | 0.4419 | 1.2962 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 635 | 1988.7 | 0.0256 | 0.1643 | 0.1899 | 661.4 | 407.9 | 1069.3 | 670.8 | 468.4 | 1139.2 | 0.8614 | 0.4279 | 1.2893 |
| 640 | 2059.9 | 0.0259 | 0.1543 | 0.1802 | 669.2 | 395.8 | 1065.0 | 679.1 | 454.6 | 1133.7 | 0.8686 | 0.4134 | 1.2821 |
| 645 | 2133.1 | 0.0263 | 0.1445 | 0.1708 | 677.3 | 383.1 | 1060.4 | 687.7 | 440.2 | 1127.8 | 0.8761 | 0.3985 | 1.2746 |
| 650 | 2208.4 | 0.0267 | 0.1350 | 0.1617 | 685.5 | 369.8 | 1055.3 | 696.4 | 425.0 | 1121.4 | 0.8837 | 0.3830 | 1.2667 |
| 655 | 2285.9 | 0.0272 | 0.1257 | 0.1529 | 694.0 | 355.8 | 1049.8 | 705.5 | 409.0 | 1114.5 | 0.8915 | 0.3670 | 1.2584 |
| 660 | 2365.7 | 0.0277 | 0.1166 | 0.1443 | 702.8 | 341.0 | 1043.9 | 714.9 | 392.1 | 1107.0 | 0.8995 | 0.3502 | 1.2498 |
| 662 | 2398.2 | 0.0279 | 0.1131 | 0.1409 | 706.4 | 335.0 | 1041.4 | 718.7 | 385.2 | 1103.9 | 0.9029 | 0.3433 | 1.2462 |
| 664 | 2431.1 | 0.0281 | 0.1095 | 0.1376 | 710.2 | 328.5 | 1038.7 | 722.9 | 377.7 | 1100.6 | 0.9064 | 0.3361 | 1.2425 |
| 666 | 2464.4 | 0.0283 | 0.1059 | 0.1342 | 714.2 | 321.7 | 1035.9 | 727.1 | 370.0 | 1097.1 | 0.9100 | 0.3286 | 1.2387 |
| 668 | 2498.1 | 0.0286 | 0.1023 | 0.1309 | 718.3 | 314.8 | 1033.0 | 731.5 | 362.1 | 1093.5 | 0.9137 | 0.3210 | 1.2347 |
| 670 | 2532.2 | 0.0288 | 0.0987 | 0.1275 | 722.3 | 307.7 | 1030.0 | 735.8 | 354.0 | 1089.8 | 0.9174 | 0.3133 | 1.2307 |
| 672 | 2566.6 | 0.0291 | 0.0951 | 0.1242 | 726.4 | 300.5 | 1026.9 | 740.2 | 345.7 | 1085.9 | 0.9211 | 0.3054 | 1.2266 |
| 674 | 2601.5 | 0.0294 | 0.0916 | 0.1210 | 730.5 | 293.1 | 1023.6 | 744.7 | 337.2 | 1081.9 | 0.9249 | 0.2974 | 1.2223 |
| 676 | 2636.8 | 0.0297 | 0.0880 | 0.1177 | 734.7 | 285.5 | 1020.2 | 749.2 | 328.5 | 1077.6 | 0.9287 | 0.2892 | 1.2179 |
| 678 | 2672.5 | 0.0300 | 0.0844 | 0.1144 | 738.9 | 277.7 | 1016.6 | 753.8 | 319.4 | 1073.2 | 0.9326 | 0.2807 | 1.2133 |
| 680 | 2708.6 | 0.0304 | 0.0808 | 0.1112 | 743.2 | 269.6 | 1012.8 | 758.5 | 310.1 | 1068.5 | 0.9365 | 0.2720 | 1.2086 |
| 682 | 2745.1 | 0.0307 | 0.0772 | 0.1079 | 747.7 | 261.2 | 1008.8 | 763.3 | 300.4 | 1063.6 | 0.9406 | 0.2631 | 1.2036 |
| 684 | 2782.1 | 0.0311 | 0.0735 | 0.1046 | 752.2 | 252.4 | 1004.6 | 768.2 | 290.2 | 1058.4 | 0.9447 | 0.2537 | 1.1984 |
| 686 | 2819.5 | 0.0316 | 0.0698 | 0.1013 | 756.9 | 243.1 | 1000.0 | 773.4 | 279.5 | 1052.9 | 0.9490 | 0.2439 | 1.1930 |
| 688 | 2857.4 | 0.0320 | 0.0659 | 0.0980 | 761.8 | 233.3 | 995.2 | 778.8 | 268.2 | 1047.0 | 0.9535 | 0.2337 | 1.1872 |
| 690 | 2895.7 | 0.0326 | 0.0620 | 0.0946 | 767.0 | 222.9 | 989.9 | 784.5 | 256.1 | 1040.6 | 0.9583 | 0.2227 | 1.1810 |
| 692 | 2934.5 | 0.0331 | 0.0580 | 0.0911 | 772.5 | 211.6 | 984.1 | 790.5 | 243.1 | 1033.6 | 0.9634 | 0.2110 | 1.1744 |
| 694 | 2973.7 | 0.0338 | 0.0537 | 0.0875 | 778.5 | 199.2 | 977.7 | 797.1 | 228.8 | 1025.9 | 0.9689 | 0.1983 | 1.1671 |
| 696 | 3013.4 | 0.0345 | 0.0492 | 0.0837 | 785.1 | 185.4 | 970.5 | 804.4 | 212.8 | 1017.2 | 0.9749 | 0.1841 | 1.1591 |
| 698 | 3053.6 | 0.0355 | 0.0442 | 0.0797 | 792.6 | 169.6 | 962.2 | 812.6 | 194.6 | 1007.2 | 0.9818 | 0.1681 | 1.1499 |
| 700 | 3094.3 | 0.0366 | 0.0386 | 0.0752 | 801.5 | 150.7 | 952.1 | 822.4 | 172.7 | 995.2 | 0.9901 | 0.1490 | 1.1390 |
| 702 | 3135.5 | 0.0382 | 0.0317 | 0.0700 | 812.8 | 126.3 | 939.1 | 835.0 | 144.7 | 979.7 | 1.0006 | 0.1246 | 1.1252 |
| 704 | 3177.2 | 0.0411 | 0.0219 | 0.0630 | 830.1 | 89.1 | 919.2 | 854.2 | 102.0 | 956.2 | 1.0169 | 0.0876 | 1.1046 |
| 705.47 | 3208.2 | 0.0508 | 0.0000 | 0.0508 | 875.9 | −0.0 | 875.9 | 906.0 | −0.0 | 906.0 | 1.0612 | 0.0000 | 1.0612 |

## Tabla F.4: Vapor sobrecalentado, unidades inglesas

| $P$(psia) ($t^{sat}$/°F) | | liq. sat. | vap. sat. | TEMPERATURA: $t$ (°F) 200 | 250 | 300 | 350 | 400 | 450 | 500 |
|---|---|---|---|---|---|---|---|---|---|---|
| | $V$ | 0.0161 | 333.60 | 392.5 | 422.4 | 452.3 | 482.1 | 511.9 | 541.7 | 571.5 |
| 1 | $U$ | 69.73 | 1044.1 | 1077.5 | 1094.7 | 1112.0 | 1129.5 | 1147.1 | 1164.9 | 1182.8 |
| (101.74) | $H$ | 69.73 | 1105.8 | 1150.2 | 1172.9 | 1195.7 | 1218.7 | 1241.8 | 1265.1 | 1288.6 |
| | $S$ | 0.1326 | 1.9781 | 2.0509 | 2.0841 | 2.1152 | 2.1445 | 2.1722 | 2.1985 | 2.2237 |
| | $V$ | 0.0164 | 73.532 | 78.14 | 84.21 | 90.24 | 96.25 | 102.2 | 108.2 | 114.2 |
| 5 | $U$ | 130.18 | 1063.1 | 1076.3 | 1093.8 | 1111.3 | 1128.9 | 1146.7 | 1164.5 | 1182.6 |
| (162.24) | $H$ | 130.20 | 1131.1 | 1148.6 | 1171.7 | 1194.8 | 1218.0 | 1241.3 | 1264.7 | 1288.2 |
| | $S$ | 0.2349 | 1.8443 | 1.8716 | 1.9054 | 1.9369 | 1.9664 | 1.9943 | 2.0208 | 2.0460 |
| | $V$ | 0.0166 | 38.420 | 38.84 | 41.93 | 44.98 | 48.02 | 51.03 | 54.04 | 57.04 |
| 10 | $U$ | 161.23 | 1072.3 | 1074.7 | 1092.6 | 1110.4 | 1128.3 | 1146.1 | 1164.1 | 1182.2 |
| (193.21) | $H$ | 161.26 | 1143.3 | 1146.6 | 1170.2 | 1193.7 | 1217.1 | 1240.6 | 1264.1 | 1287.8 |
| | $S$ | 0.2836 | 1.7879 | 1.7928 | 1.8273 | 1.8593 | 1.8892 | 1.9173 | 1.9439 | 1.9692 |
| | $V$ | 0.0167 | 26.799 | ..... | 28.42 | 30.52 | 32.60 | 34.67 | 36.72 | 38.77 |
| → 14.696 | $U$ | 180.12 | 1077.6 | ..... | 1091.5 | 1109.6 | 1127.6 | 1145.7 | 1163.7 | 1181.9 |
| (212.00) | $H$ | 180.17 | 1150.5 | ..... | 1168.8 | 1192.6 | 1216.3 | 1239.9 | 1263.6 | 1287.4 |
| | $S$ | 0.3121 | 1.7568 | ..... | 1.7833 | 1.8158 | 1.8460 | 1.8743 | 1.9010 | 1.9265 |
| | $V$ | 0.0167 | 26.290 | ..... | 27.84 | 29.90 | 31.94 | 33.96 | 35.98 | 37.98 |
| 15 | $U$ | 181.16 | 1077.9 | ..... | 1091.4 | 1109.5 | 1127.6 | 1145.6 | 1163.7 | 1181.9 |
| (213.03) | $H$ | 181.21 | 1150.9 | ..... | 1168.7 | 1192.5 | 1216.2 | 1239.9 | 1263.6 | 1287.3 |
| | $S$ | 0.3137 | 1.7552 | ..... | 1.7809 | 1.8134 | 1.8436 | 1.8720 | 1.8988 | 1.9242 |
| | $V$ | 0.0168 | 20.087 | ..... | 20.79 | 22.36 | 23.90 | 25.43 | 26.95 | 28.46 |
| 20 | $U$ | 196.21 | 1082.0 | ..... | 1090.2 | 1108.6 | 1126.9 | 1145.1 | 1163.3 | 1181.6 |
| (227.96) | $H$ | 196.27 | 1156.3 | ..... | 1167.1 | 1191.4 | 1215.4 | 1239.2 | 1263.0 | 1286.9 |
| | $S$ | 0.3358 | 1.7320 | ..... | 1.7475 | 1.7805 | 1.8111 | 1.8397 | 1.8666 | 1.8921 |
| | $V$ | 0.0169 | 16.301 | ..... | 16.56 | 17.83 | 19.08 | 20.31 | 21.53 | 22.74 |
| 25 | $U$ | 208.44 | 1085.2 | ..... | 1089.0 | 1107.7 | 1126.2 | 1144.6 | 1162.9 | 1181.2 |
| (240.07) | $H$ | 208.52 | 1160.6 | ..... | 1165.6 | 1190.2 | 1214.5 | 1238.5 | 1262.5 | 1286.4 |
| | $S$ | 0.3535 | 1.7141 | ..... | 1.7212 | 1.7547 | 1.7856 | 1.8145 | 1.8415 | 1.8672 |
| | $V$ | 0.0170 | 13.744 | ..... | ..... | 14.81 | 15.86 | 16.89 | 17.91 | 18.93 |
| 30 | $U$ | 218.84 | 1087.9 | ..... | ..... | 1106.8 | 1125.5 | 1144.0 | 1162.5 | 1180.9 |
| (250.34) | $H$ | 218.93 | 7164.7 | ..... | ..... | 1189.0 | 1213.6 | 1237.8 | 1261.9 | 1286.0 |
| | $S$ | 0.3682 | 1.6995 | ..... | ..... | 1.7334 | 1.7647 | 1.7937 | 1.8210 | 1.8467 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | V | 0.0171 | 11.896 | ..... | ..... | 12.65 | 13.56 | 14.45 | 15.33 | 16.21 |
| 35 | U | 227.92 | 1090.1 | ..... | ..... | 1105.9 | 1124.8 | 1143.5 | 1162.0 | 1180.5 |
| (259.29) | H | 228.03 | 1167.1 | ..... | ..... | 1187.8 | 1212.7 | 1237.1 | 1261.3 | 1285.5 |
| | S | 0.3809 | 1.6872 | ..... | ..... | 1.7152 | 1.7468 | 1.7761 | 1.8035 | 1.8294 |
| | V | 0.0172 | 10.497 | ..... | ..... | 11.04 | 11.84 | 12.62 | 13.40 | 14.16 |
| 40 | U | 236.02 | 1092.1 | ..... | ..... | 1104.9 | 1124.1 | 1142.9 | 1161.6 | 1180.2 |
| (267.25) | H | 236.14 | 1169.8 | ..... | ..... | 1186.6 | 1211.7 | 1236.4 | 1260.8 | 1285.0 |
| | S | 0.3921 | 1.6765 | ..... | ..... | 1.6992 | 1.7312 | 1.7608 | 1.7883 | 1.8143 |
| | V | 0.0172 | 9.399 | ..... | ..... | 9.777 | 10.50 | 11.20 | 11.89 | 12.58 |
| 45 | U | 243.34 | 1093.8 | ..... | ..... | 1104.0 | 1123.4 | 1142.4 | 1161.2 | 1179.8 |
| (274.44) | H | 243.49 | 1172.0 | ..... | ..... | 1185.4 | 1210.8 | 1235.7 | 1260.2 | 1284.6. |
| | S | 0.4021 | 1.6671 | ..... | ..... | 1.6849 | 1.7173 | 1.7471 | 1.7749 | 1.8009 |
| | V | 0.0173 | 8.514 | ..... | ..... | 8.769 | 9.424 | 10.06 | 10.69 | 11.31 |
| 50 | U | 250.05 | 1095.3 | ..... | ..... | 1103.0 | 1122.7 | 1141.8 | 1160.7 | 1179.5 |
| (281.01) | H | 250.21 | 1174.1 | ..... | ..... | 1184.1 | 1209.9 | 1234.9 | 1259.6 | 1284.1 |
| | S | 0.4112 | 1.6586 | ..... | ..... | 1.6720 | 1.7048 | 1.7349 | 1.7628 | 1.7890 |
| | V | 0.0173 | 7.785 | ..... | ..... | 7.945 | 8.546 | 9.130 | 9.702 | 10.27 |
| 55 | U | 256.25 | 1096.7 | ..... | ..... | 1102.0 | 1121.9 | 1141.3 | 1160.3 | 1179.1 |
| (287.08) | H | 256.43 | 1175.9 | ..... | ..... | 1182.8 | 1208.9 | 1234.2 | 1259.1 | 1283.6 |
| | S | 0.4196 | 1.6510 | ..... | ..... | 1.6601 | 1.6934 | 1.7237 | 1.7518 | 1.7781 |
| | V | 0.0174 | 7.174 | ..... | ..... | 7.257 | 7.815 | 8.354 | 8.881 | 9.400 |
| 60 | U | 262.02 | 1098.0 | ..... | ..... | 1101.0 | 1121.2 | 1140.7 | 1159.9 | 1178.8 |
| (292.71) | H | 262.21 | 1177.6 | ..... | ..... | 1181.6 | 1208.0 | 1233.5 | 1258.5 | 1283.2 |
| | S | 0.4273 | 1.6440 | ..... | ..... | 1.6492 | 1.6829 | 1.7134 | 1.7417 | 1.7681 |
| | V | 0.0174 | 6.653 | ..... | ..... | 6.675 | 7.195 | 7.697 | 8.186 | 8.667 |
| 65 | U | 267.42 | 1099.1 | ..... | ..... | 1100.0 | 1120.4 | 1140.2 | 1159.4 | 1178.4 |
| (297.98) | H | 267.63 | 1179.1 | ..... | ..... | 1180.3 | 1207.0 | 1232.7 | 1257.9 | 1282.7 |
| | S | 0.4344 | 1.6375 | ..... | ..... | 1.6390 | 1.6731 | 1.7040 | 1.7324 | 1.7589 |
| | V | 0.0175 | 6.205 | ..... | ..... | ..... | 6.664 | 7.133 | 7.590 | 8.039 |
| 70 | U | 272.51 | 1100.2 | ..... | ..... | ..... | 1119.7 | 1139.6 | 1159.0 | 1178.1 |
| (302.93) | H | 272.74 | 1180.6 | ..... | ..... | ..... | 1206.0 | 1232.0 | 1257.3 | 7282.2 |
| | S | 0.4411 | 1.6316 | ..... | ..... | ..... | 1.6640 | 1.6951 | 1.7237 | 1.7504 |
| | V | 0.0175 | 5.814 | ..... | ..... | ..... | 6.204 | 6.645 | 7.074 | 7.494 |
| 75 | U | 277.32 | 1101.2 | ..... | ..... | ..... | 1118.9 | 1139.0 | 1158.5 | 1177.7 |
| (307.61) | H | 277.56 | 1181.9 | ..... | ..... | ..... | 1205.0 | 1231.2 | 1256.7 | 1281.7 |
| | S | 0.4474 | 1.6260 | ..... | ..... | ..... | 1.6554 | 1.6868 | 1.7156 | 1.7424 |

## Tabla F.4. Vapor sobrecalentado, unidades inglesas (*Continúa*)

| $P$(psia) ($t^{\rightarrow}$ / °F) | | liq. sat. | vap. sat. | TEMPERATURA: $t$ (°F) 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 |
|---|---|---|---|---|---|---|---|---|---|---|
| | *V* | 0.0161 | 333.60 | 631.1 | 690.7 | 750.3 | 809.9 | 869.5 | 929.0 | 988.6 |
| 1 | *U* | 69.73 | 1044.1 | 1219.3 | 1256.7 | 1294.9 | 1334.0 | 1374.0 | 1414.9 | 1456.7 |
| (101.74) | *H* | 69.73 | 1105.8 | 1336.1 | 1384.5 | 1433.7 | 1483.8 | 1534.9 | 1586.8 | 1639.7 |
| | *S* | 0.1326 | 1.9781 | 2.2708 | 2.3144 | 2.3551 | 2.3934 | 2.4296 | 2.4640 | 2.4969 |
| | *V* | 0.0164 | 73.532 | 126.1 | 138.1 | 150.0 | 161.9 | 173.9 | 185.8 | 197.7 |
| 5 | *U* | 130.18 | 1063.1 | 1219.2 | 1256.5 | 1294.8 | 1333.9 | 1373.9 | 1414.8 | 1456.7 |
| (162.24) | *H* | 130.20 | 1131.1 | 1335.9 | 1384.3 | 1433.6 | 1483.7 | 1534.7 | 1586.7 | 1639.6 |
| | *S* | 0.2349 | 1.8443 | 2.0932 | 2.1369 | 2.1776 | 2.2159 | 2.2521 | 2.2866 | 2.3194 |
| | *V* | 0.0166 | 38.420 | 63.03 | 69.00 | 74.98 | 80.94 | 86.91 | 92.87 | 98.84 |
| 10 | *U* | 161.23 | 1072.3 | 1218.9 | 1256.4 | 1294.6 | 1333.7 | 1373.8 | 1414.7 | 1456.6 |
| (193.21) | *H* | 161.26 | 1143.3 | 1335.5 | 1384.0 | 1433.4 | 1483.5 | 1534.6 | 1586.6 | 1639.5 |
| | *S* | 0.2836 | 1.7879 | 2.0166 | 2.0603 | 2.1011 | 2.1394 | 2.1757 | 2.2101 | 2.2430 |
| | *V* | 0.0167 | 26.799 | 42.86 | 46.93 | 51.00 | 55.06 | 59.13 | 63.19 | 67.25 |
| 14.696 | *U* | 180.12 | 1077.6 | 1218.7 | 1256.2 | 1294.5 | 1333.6 | 1373.7 | 1414.6 | 1456.5 |
| (212.00) | *H* | 180.17 | 1150.5 | 1335.2 | 1383.8 | 1433.2 | 1483.4 | 1534.5 | 1586.5 | 1639.4 |
| | *S* | 0.3121 | 1.7568 | 1.9739 | 2.0177 | 2.0585 | 2.0969 | 2.1331 | 2.1676 | 2.2005 |
| | *V* | 0.0167 | 26.290 | 41.99 | 45.98 | 49.96 | 53.95 | 57.93 | 61.90 | 65.88 |
| 15 | *U* | 181.16 | 1077.9 | 1218.7 | 1256.2 | 1294.5 | 1333.6 | 1373.7 | 1414.6 | 1456.5 |
| (213.03) | *H* | 181.21 | 1150.9 | 1335.2 | 1383.8 | 1433.2 | 1483.4 | 1534.5 | 1586.5 | 1639.4 |
| | *S* | 0.3137 | 1.7552 | 1.9717 | 2.0155 | 2.0563 | 2.0946 | 2.1309 | 2.1653 | 2.1982 |
| | *V* | 0.0168 | 20.087 | 31.47 | 34.46 | 37.46 | 40.45 | 43.43 | 46.42 | 49.40 |
| 20 | *U* | 196.21 | 1082.0 | 1218.4 | 1256.0 | 1294.3 | 1333.5 | 1373.6 | 1414.5 | 1456.4 |
| (227.96) | *H* | 196.27 | 1156.3 | 1334.9 | 1383.5 | 1432.9 | 1483.2 | 1534.3 | 1586.3 | 1639.3 |
| | *S* | 0.3358 | 1.7320 | 1.9397 | 1.9836 | 2.0244 | 2.0628 | 2.0991 | 2.1336 | 2.1665 |
| | *V* | 0.0169 | 16.301 | 25.15 | 27.56 | 29.95 | 32.35 | 34.74 | 37.13 | 39.52 |
| 25 | *U* | 208.44 | 1085.2 | 1218.2 | 1255.8 | 1294.2 | 1333.4 | 1373.5 | 1414.4 | 1456.3 |
| (240.07) | *H* | 208.52 | 1160.6 | 1334.6 | 1383.3 | 1432.7 | 1483.0 | 1534.2 | 1586.2 | 1639.2 |
| | *S* | 0.3535 | 1.7141 | 1.9149 | 1.9588 | 1.9997 | 2.0381 | 2.0744 | 2.1089 | 2.1418 |
| | *V* | 0.0170 | 13.744 | 20.95 | 22.95 | 24.95 | 26.95 | 28.94 | 30.94 | 32.93 |
| 30 | *U* | 218.84 | 1087.9 | 1218.0 | 1255.6 | 1294.0 | 1333.2 | 1373.3 | 1414.3 | 1456.3 |
| (250.34) | *H* | 218.93 | 1164.1 | 1334.2 | 1383.0 | 1432.5 | 1482.8 | 1534.0 | 1586.1 | 1639.0 |
| | *S* | 0.3682 | 1.6995 | 1.8946 | 1.9386 | 1.9795 | 2.0179 | 2.0543 | 2.0888 | 2.1217 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | V | 0.0171 | 11.896 | 17.94 | 19.66 | 21.38 | 23.09 | 24.80 | 26.51 | 28.22 |
| 35 | U | 227.92 | 1090.1 | 1217.7 | 1255.4 | 1293.9 | 1333.1 | 1373.2 | 1414.3 | 1456.2 |
| (259.29) | H | 228.03 | 1167.1 | 1333.9 | 1382.8 | 1432.3 | 1482.7 | 1533.9 | 1586.0 | 1638.9 |
| | S | 0.3809 | 1.6872 | 1.8774 | 1.9214 | 1.9624 | 2.0009 | 2.0372 | 2.0717 | 2.1046 |
| | V | 0.0172 | 10.497 | 15.68 | 17.19 | 18.70 | 20.20 | 21.70 | 23.19 | 24.69 |
| 40 | U | 236.02 | 1092.1 | 1217.5 | 1255.3 | 1293.7 | 1333.0 | 1373.1 | 1414.2 | 1456.1 |
| (267.25) | H | 236.14 | 1169.8 | 1333.6 | 1382.5 | 1432.1 | 1482.5 | 1533.7 | 1585.8 | 1638.8 |
| | S | 0.3921 | 1.6765 | 1.8624 | 1.9065 | 1.9476 | 1.9860 | 2.0224 | 2.0569 | 2.0899 |
| | V | 0.0172 | 9.399 | 13.93 | 15.28 | 16.61 | 17.95 | 19.28 | 20.61 | 21.94 |
| 45 | U | 243.34 | 1093.8 | 1217.2 | 1255.1 | 1293.6 | 1332.9 | 1373.0 | 1414.1 | 1456.0 |
| (274.44) | H | 243.49 | 1172.0 | 1333.3 | 1382.3 | 1431.9 | 1482.3 | 1533.6 | 1585.7 | 1638.7 |
| | S | 0.4021 | 1.6671 | 1.8492 | 1.8934 | 1.9345 | 1.9730 | 2.0093 | 2.0439 | 2.0768 |
| | V | 0.0173 | 8.514 | 12.53 | 13.74 | 14.95 | 16.15 | 17.35 | 18.55 | 19.75 |
| 50 | U | 250.05 | 1095.3 | 1217.0 | 1254.9 | 1293.4 | 1332.7 | 1372.9 | 1414.0 | 1455.9 |
| (281.01) | H | 250.21 | 1774.1 | 1332.9 | 1382.0 | 1431.7 | 1482.2 | 1533.4 | 1585.6 | 1638.6 |
| | S | 0.4112 | 1.6586 | 1.8374 | 1.8816 | 1.9227 | 1.9613 | 1.9977 | 2.0322 | 2.0652 |
| | V | 0.0173 | 7.785 | 11.38 | 12.48 | 13.58 | 14.68 | 15.77 | 16.86 | 17.95 |
| 55 | U | 256.25 | 1096.7 | 1276.8 | 1254.7 | 1293.3 | 1332.6 | 1372.8 | 1413.9 | 1455.8 |
| (287.08) | H | 256.43 | 1175.9 | 1332.6 | 1381.8 | 1431.5 | 1482.0 | 1533.3 | 1585.5 | 1638.5 |
| | S | 0.4196 | 1.6510 | 1.8266 | 1.8710 | 1.9121 | 1.9507 | 1.9871 | 2.0216 | 2.0546 |
| | V | 0.0174 | 7.174 | 10.42 | 11.44 | 12.45 | 13.45 | 14.45 | 15.45 | 16.45 |
| 60 | U | 262.02 | 1098.0 | 1216.5 | 1254.5 | 1293.1 | 1332.5 | 1372.7 | 1413.8 | 1455.8 |
| (292.71) | H | 262.21 | 1177.6 | 1332.3 | 1381.5 | 1431.3 | 1481.8 | 1533.2 | 1585.3 | 1638.4 |
| | S | 0.4273 | 1.6440 | 1.8168 | 1.8612 | 1.9024 | 1.9410 | 1.9774 | 2.0120 | 2.0450 |
| | V | 0.0174 | 6.653 | 9.615 | 10.55 | 11.48 | 12.41 | 13.34 | 14.26 | 15.18 |
| 65 | U | 267.42 | 1099.1 | 1216.3 | 1254.3 | 1293.0 | 1332.4 | 1372.6 | 1413.7 | 1455.7 |
| (297.98) | H | 267.63 | 1179.1 | 1331.9 | 1381.3 | 1431.1 | 1481.6 | 1533.0 | 1585.2 | 1638.3 |
| | S | 0.4344 | 1.6375 | 1.8077 | 1.8522 | 1.8935 | 1.9321 | 1.9685 | 2.0031 | 2.0361 |
| | V | 0.0175 | 6.205 | 8.922 | 9.793 | 10.66 | 11.52 | 12.38 | 13.24 | 14.10 |
| 70 | U | 272.51 | 1100.2 | 1216.0 | 1254.1 | 1292.8 | 1332.2 | 1372.5 | 1413.6 | 1455.6 |
| (302.93) | H | 272.74 | 1180.6 | 1331.6 | 1381.0 | 1430.9 | 1481.5 | 1532.9 | 1585.1 | 1638.2 |
| | S | 0.4411 | 1.6316 | 1.7993 | 1.8439 | 1.8852 | 1.9238 | 1.9603 | 1.9949 | 2.0279 |
| | V | 0.0175 | 5.814 | 8.320 | 9.135 | 9.945 | 10.75 | 11.55 | 12.35 | 13.15 |
| 75 | U | 277.32 | 1101.2 | 1215.8 | 1254.0 | 1292.7 | 1332.1 | 1372.4 | 1413.5 | 1455.5 |
| (307.61) | H | 277.56 | 1181.9 | 1331.3 | 1380.7 | 1430.7 | 1481.3 | 1532.7 | 1585.0 | 1638.1 |
| | S | 0.4474 | 1.6260 | 1.7915 | 1.8361 | 1.8774 | 1.9161 | 1.9526 | 1.9872 | 2.0202 |

## Tabla F.4. Vapor sobrecalentado, unidades inglesas (*Continúa*)

| *P*(psia) ($t^{sat}$ / °F) | | liq. sat. | vap. sat. | TEMPERATURA: *t* (°F) 340 | 360 | 380 | 400 | 420 | 450 | 500 |
|---|---|---|---|---|---|---|---|---|---|---|
| | *V* | 0.0176 | 5.471 | 5.715 | 5.885 | 6.053 | 6.218 | 6.381 | 6.622 | 7.018 |
| 80 | *U* | 281.89 | 1102.1 | 1114.0 | 1122.3 | 1130.4 | 1138.4 | 1146.3 | 1158.1 | 1177.4 |
| (312.04) | *H* | 282.15 | 1183.1 | 1198.6 | 1209.4 | 1220.0 | 1230.5 | 1240.8 | 1256.1 | 1281.3 |
| | *S* | 0.4534 | 1.6208 | 1.6405 | 1.6539 | 1.6667 | 1.6790 | 1.6909 | 1.7080 | 1.7349 |
| | *V* | 0.0176 | 5.167 | 5.364 | 5.525 | 5.684 | 5.840 | 5.995 | 6.223 | 6.597 |
| 85 | *U* | 286.24 | 1102.9 | 1113.1 | 1121.5 | 1129.7 | 1137.8 | 1145.8 | 1157.6 | 1177.0 |
| (316.26) | *H* | 286.52 | 1184.2 | 1197.5 | 1208.4 | 1219.1 | 1229.7 | 1240.1 | 1255.5 | 1280.8 |
| | *S* | 0.4590 | 1.6159 | 1.6328 | 1.6463 | 1.6592 | 1.6716 | 1.6836 | 1.7008 | 1.7279 |
| | *V* | 0.0177 | 4.895 | 5.051 | 5.205 | 5.356 | 5.505 | 5.652 | 5.869 | 6.223 |
| 90 | *U* | 290.40 | 1103.7 | 1112.3 | 1120.8 | 1129.1 | 1137.2 | 1145.3 | 1157.2 | 1176.7 |
| (320.28) | *H* | 290.69 | 1185.3 | 1196.4 | 1207.5 | 1218.3 | 1228.9 | 1239.4 | 1254.9 | 1280.3 |
| | *S* | 0.4643 | 1.6713 | 1.6254 | 1.6391 | 1.6521 | 1.6646 | 1.6767 | 1.6940 | 1.7212 |
| | *V* | 0.0177 | 4.651 | 4.771 | 4.919 | 5.063 | 5.205 | 5.345 | 5.551 | 5.889 |
| 95 | *U* | 294.38 | 1104.5 | 1111.4 | 1120.0 | 1128.4 | 1136.6 | 1144.7 | 1156.7 | 1176.3 |
| (324.13) | *H* | 294.70 | 1186.2 | 1195.3 | 1206.5 | 1217.4 | 1228.1 | 1238.7 | 1254.3 | 1279.8 |
| | *S* | 0.4694 | 1.6069 | 1.6184 | 1.6322 | 1.6453 | 1.6580 | 1.6701 | 1.6876 | 7.7149 |
| | *V* | 0.0177 | 4.431 | 4.519 | 4.660 | 4.799 | 4.935 | 5.068 | 5.266 | 5.588 |
| 100 | *U* | 298.21 | 1105.2 | 1110.6 | 1119.2 | 1127.7 | 1136.0 | 1144.2 | 1156.3 | 1175.9 |
| (327.82) | *H* | 298.54 | 1187.2 | 1194.2 | 1205.5 | 1216.5 | 1227.4 | 1238.0 | 1253.7 | 1279.3 |
| | *S* | 0.4743 | 1.6027 | 1.6116 | 1.6255 | 1.6389 | 1.6516 | 1.6638 | 1.6814 | 1.7088 |
| | *V* | 0.0178 | 4.231 | 4.291 | 4.427 | 4.560 | 4.690 | 4.818 | 5.007 | 5.315 |
| 105 | *U* | 301.89 | 1105.8 | 1109.7 | 1118.5 | 1127.0 | 1135.4 | 1143.7 | 1155.8 | 1175.6 |
| (331.37) | *H* | 302.24 | 1188.0 | 1193.1 | 1204.5 | 1215.6 | 1226.6 | 1237.3 | 1253.1 | 1278.8 |
| | *S* | 0.4790 | 1.5988 | 1.6051 | 1.6192 | 1.6326 | 1.6455 | 1.6578 | 1.6755 | 1.7031 |
| | *V* | 0.0178 | 4.048 | 4.083 | 4.214 | 4.343 | 4.468 | 4.591 | 4.772 | 5.068 |
| 110 | *U* | 305.44 | 1106.5 | 1108.8 | 1117.7 | 1126.4 | 1134.8 | 1143.1 | 1155.3 | 1175.2 |
| (334.79) | *H* | 305.80 | 1188.9 | 1191.9 | 1203.5 | 1214.7 | 1225.8 | 1236.6 | 1252.5 | 1278.3 |
| | *S* | 0.4834 | 1.5950 | 1.5988 | 1.6131 | 1.6267 | 1.6396 | 1.6521 | 1.6698 | 1.6975 |
| | *V* | 0.0179 | 3.881 | 3.894 | 4.020 | 4.144 | 4.265 | 4.383 | 4.558 | 4.841 |
| 115 | *U* | 308.87 | 1107.0 | 1107.9 | 1116.9 | 1125.7 | 1134.2 | 1142.6 | 1154.8 | 1174.8 |
| (338.08) | *H* | 309.25 | 1189.6 | 1190.8 | 1202.5 | 1213.8 | 1225.0 | 1235.8 | 1251.8 | 1277.9 |
| | *S* | 0.4877 | 1.5913 | 1.5928 | 1.6072 | 1.6209 | 1.6340 | 1.6465 | 1.6644 | 1.6922 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | *V* | 0.0179 | 3.728 | ..... | 3.842 | 3.962 | 4.079 | 4.193 | 4.361 | 4.634 |
| 120 | *U* | 312.19 | 1107.6 | ..... | 1116.1 | 1124.9 | 1133.6 | 1142.0 | 1154.4 | 1174.5 |
| (341.27) | *H* | 312.58 | 1190.4 | ..... | 1201.4 | 1212.9 | 1224.1 | 1235.1 | 1251.2 | 1277.4 |
| | *S* | 0.4919 | 1.5879 | ..... | 1.6015 | 1.6154 | 1.6286 | 1.6412 | 1.6592 | 1.6872 |
| | *V* | 0.0179 | 3.586 | ..... | 3.679 | 3.794 | 3.907 | 4.018 | 4.180 | 4.443 |
| 125 | *U* | 315.40 | 1108.1 | ..... | 1115.3 | 1124.2 | 1132.9 | 1141.4 | 1153.9 | 1174.1 |
| (344.35) | *H* | 315.82 | 1191.1 | ..... | 1200.4 | 1212.0 | 1223.3 | 1234.4 | 1250.6 | 1276.9 |
| | *S* | 0.4959 | 1.5845 | ..... | 1.5960 | 1.6100 | 1.6233 | 1.6360 | 1.6541 | 1.6823 |
| | *V* | 0.0180 | 3.454 | ..... | 3.527 | 3.639 | 3.749 | 3.856 | 4.013 | 4.267 |
| 130 | *U* | 318.52 | 1108.6 | ..... | 1114.5 | 1123.5 | 1132.3 | 1140.9 | 1153.4 | 1173.7 |
| (347.33) | *H* | 318.95 | 1191.7 | ..... | 1199.4 | 1211.1 | 1222.5 | 1233.6 | 1249.9 | 1276.4 |
| | *S* | 0.4998 | 1.5813 | ..... | 1.5907 | 1.6048 | 1.6182 | 1.6310 | 1.6493 | 1.6775 |
| | *V* | 0.0180 | 3.332 | ..... | 3.387 | 3.496 | 3.602 | 3.706 | 3.858 | 4.104 |
| 135 | *U* | 321.55 | 1109.1 | ..... | 1113.7 | 1122.8 | 1131.7 | 1140.3 | 1152.9 | 1173.3 |
| (350.23) | *H* | 322.00 | 1192.4 | ..... | 1198.3 | 1210.1 | 1221.6 | 1232.9 | 1249.3 | 1275.8 |
| | *S* | 0.5035 | 1.5782 | ..... | 1.5855 | 1.5997 | 1.6133 | 1.6262 | 1.6446 | 1.6730 |
| | *V* | 0.0180 | 3.219 | ..... | 3.257 | 3.363 | 3.466 | 3.567 | 3.714 | 3.953 |
| 140 | *U* | 324.49 | 1109.6 | ..... | 1112.9 | 1122.1 | 1131.0 | 1139.7 | 1152.4 | 1172.9 |
| (353.04) | *H* | 324.96 | 1193.0 | ..... | 1197.2 | 1209.2 | 1220.8 | 1232.1 | 1248.7 | 1275.3 |
| | *S* | 0.5071 | 1.5752 | ..... | 1.5804 | 1.5948 | 1.6085 | 1.6215 | 1.6400 | 1.6686 |
| | *V* | 0.0181 | 3.113 | ..... | 3.135 | 3.239 | 3.339 | 3.437 | 3.580 | 3.812 |
| 145 | *U* | 327.36 | 1110.0 | ..... | 1112.0 | 1121.3 | 1130.4 | 1139.1 | 1151.9 | 1172.6 |
| (355.77) | *H* | 327.84 | 1193.5 | ..... | 1196.1 | 1208.2 | 1220.0 | 1231.4 | 1248.0 | 1274.8 |
| | *S* | 0.5107 | 1.5723 | ..... | 1.5755 | 1.5901 | 1.6039 | 1.6170 | 1.6356 | 1.6643 |
| | *V* | 0.0181 | 3.014 | ..... | 3.022 | 3.123 | 3.221 | 3.316 | 3.455 | 3.680 |
| 150 | *U* | 330.15 | 1110.4 | ..... | 1111.2 | 1120.6 | 1129.7 | 1138.6 | 1151.4 | 1172.2 |
| (358.43) | *H* | 330.65 | 1194.1 | ..... | 1195.1 | 1207.3 | 1219.1 | 1230.6 | 1247.4 | 1274.3 |
| | *S* | 0.5141 | 1.5695 | ..... | 1.5707 | 1.5854 | 1.5993 | 1.6126 | 1.6313 | 1.6602 |
| | *V* | 0.0181 | 2.921 | ..... | ..... | 3.014 | 3.110 | 3.203 | 3.339 | 3.557 |
| 155 | *U* | 332.87 | 1110.8 | ..... | ..... | 1119.8 | 1129.0 | 1138.0 | 1150.9 | 1171.8 |
| (361.02) | *H* | 333.39 | 1194.6 | ..... | ..... | 1206.3 | 1218.2 | 1229.8 | 1246.7 | 1273.8 |
| | *S* | 0.5174 | 1.5668 | ..... | ..... | 1.5809 | 1.5949 | 1.6083 | 1.6271 | 1.6561 |
| | *V* | 0.0182 | 2.834 | ..... | ..... | 2.913 | 3.006 | 3.097 | 3.229 | 3.441 |
| 160 | *U* | 335.53 | 1111.2 | ..... | ..... | 1119.1 | 1128.4 | 1137.4 | 1150.4 | 1171.4 |
| (363.55) | *H* | 336.07 | 1195.1 | ..... | ..... | 1205.3 | 1217.4 | 1229.1 | 1246.0 | 1273.3 |
| | *S* | 0.5206 | 1.5641 | ..... | ..... | 1.5764 | 1.5906 | 1.6041 | 1.6231 | 1.6522 |

## Tabla F.4. Vapor sobrecalentado, unidades inglesas (*Continúa*)

| *P*(psia) ($t^{sat}$ / °F) | | liq. sat. | vap. sat. | TEMPERATURA: *t* (°F) 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 |
|---|---|---|---|---|---|---|---|---|---|---|
| 80 (312.04) | *V* | 0.0176 | 5.471 | 7.794 | 8.560 | 9.319 | 10.08 | 10.83 | 11.58 | 12.33 |
| | *U* | 281.89 | 1102.1 | 1215.5 | 1253.8 | 1292.5 | 1332.0 | 1372.3 | 1413.4 | 1455.4 |
| | *H* | 282.15 | 1183.1 | 1330.9 | 1380.5 | 1430.5 | 1481.1 | 1532.6 | 1584.9 | 1638.0 |
| | *S* | 0.4534 | 1.6208 | 1.7842 | 1.8289 | 1.8702 | 1.9089 | 1.9454 | 1.9800 | 2.0131 |
| 85 (316.26) | *V* | 0.0176 | 5.167 | 7.330 | 8.052 | 8.768 | 9.480 | 10.19 | 10.90 | 11.60 |
| | *U* | 286.24 | 1102.9 | 1215.3 | 1253.6 | 1292.4 | 1331.9 | 1372.2 | 1413.3 | 1455.4 |
| | *H* | 286.52 | 1184.2 | 1330.6 | 1380.2 | 1430.3 | 1481.0 | 1532.4 | 1584.7 | 1637.9 |
| | *S* | 0.4590 | 1.6159 | 1.7772 | 1.8220 | 1.8634 | 1.9021 | 1.9386 | 1.9733 | 2.0063 |
| 90 (320.28) | *V* | 0.0177 | 4.895 | 6.917 | 7.600 | 8.277 | 8.950 | 9.621 | 10.29 | 10.96 |
| | *U* | 290.40 | 1103.7 | 1275.0 | 1253.4 | 1292.2 | 1331.7 | 1372.0 | 1413.2 | 1455.3 |
| | *H* | 290.69 | 1185.3 | 1330.2 | 1380.0 | 1430.1 | 1480.8 | 1532.3 | 1584.6 | 1637.8 |
| | *S* | 0.4643 | 1.6113 | 1.7707 | 1.8156 | 1.8570 | 1.8957 | 1.9323 | 1.9669 | 2.0000 |
| 95 (324.13) | *V* | 0.0177 | 4.651 | 6.548 | 7.196 | 7.838 | 8.477 | 9.113 | 9.747 | 10.38 |
| | *U* | 294.38 | 1104.5 | 1214.8 | 1253.2 | 1292.1 | 1331.6 | 1371.9 | 1413.1 | 1455.2 |
| | *H* | 294.70 | 1186.2 | 1329.9 | 1379.7 | 1429.9 | 1480.6 | 1532.1 | 1584.5 | 1637.7 |
| | *S* | 0.4694 | 1.6069 | 1.7645 | 1.8094 | 1.8509 | 1.8897 | 1.9262 | 1.9609 | 1.9940 |
| 100 (327.82) | *V* | 0.0177 | 4.431 | 6.216 | 6.833 | 7.443 | 8.050 | 8.655 | 9.258 | 9.860 |
| | *U* | 298.21 | 1105.2 | 1214.5 | 1253.0 | 1291.9 | 1331.5 | 1377.8 | 1413.0 | 1455.1 |
| | *H* | 298.54 | 1187.2 | 1329.6 | 1379.5 | 1429.7 | 1480.4 | 1532.0 | 1584.4 | 1637.6 |
| | *S* | 0.4743 | 1.6027 | 1.7586 | 1.8036 | 1.8451 | 1.8839 | 1.9205 | 1.9552 | 1.9883 |
| 105 (331.37) | *V* | 0.0178 | 4.231 | 5.915 | 6.504 | 7.086 | 7.665 | 8.241 | 8.816 | 9.389 |
| | *U* | 301.89 | 1105.8 | 1214.3 | 1252.8 | 1291.8 | 1331.3 | 1371.7 | 1412.9 | 1455.0 |
| | *H* | 302.24 | 1188.0 | 1329.2 | 1379.2 | 1429.4 | 1480.3 | 1531.8 | 1584.2 | 1637.5 |
| | *S* | 0.4790 | 1.5988 | 1.7530 | 1.7981 | 1.8396 | 1.8785 | 1.9151 | 1.9498 | 1.9828 |
| 110 (334.79) | *V* | 0.0178 | 4.048 | 5.642 | 6.205 | 6.761 | 7.314 | 7.865 | 8.413 | 8.961 |
| | *U* | 305.44 | 1106.5 | 1214.0 | 1252.7 | 1291.6 | 1337.2 | 1371.6 | 1412.8 | 1455.0 |
| | *H* | 305.80 | 1188.9 | 1328.9 | 1378.9 | 1429.2 | 1480.1 | 1531.7 | 1584.1 | 1637.4 |
| | *S* | 0.4834 | 1.5950 | 1.7476 | 1.7928 | 1.8344 | 1.8732 | 1.9099 | 1.9446 | 1.9777 |
| 115 (338.08) | *V* | 0.0179 | 3.881 | 5.392 | 5.932 | 6.465 | 6.994 | 7.521 | 8.046 | 8.570 |
| | *U* | 308.87 | 1107.0 | 1213.8 | 1252.5 | 1297.5 | 1331.1 | 1371.5 | 1412.8 | 1454.9 |
| | *H* | 309.25 | 1189.6 | 1328.6 | 1378.7 | 1429.0 | 1479.9 | 1531.6 | 1584.0 | 1637.2 |
| | *S* | 0.4877 | 1.5913 | 1.7425 | 1.7877 | 1.8294 | 1.8682 | 1.9049 | 1.9396 | 1.9727 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | *V* | 0.0179 | 3.728 | 5.164 | 5.681 | 6.193 | 6.701 | 7.206 | 7.710 | 8.212 |
| 120 | *U* | 312.19 | 1107.6 | 1213.5 | 1252.3 | 1291.3 | 1331.0 | 1371.4 | 1412.7 | 1454.8 |
| (341.27) | *H* | 312.58 | 1190.4 | 1328.2 | 1378.4 | 1428.8 | 1479.8 | 1531.4 | 1583.9 | 1637.1 |
| | *S* | 0.4919 | 1.5879 | 1.7376 | 1.7829 | 1.8246 | 1.8635 | 1.9001 | 1.9349 | 1.9680 |
| | *V* | 0.0179 | 3.586 | 4.953 | 5.451 | 5.943 | 6.431 | 6.916 | 7.400 | 7.882 |
| 125 | *U* | 315.40 | 1108.1 | 1213.3 | 1252.1 | 1291.2 | 1330.8 | 1371.3 | 1412.6 | 1454.7 |
| (344.35) | *H* | 315.82 | 1191.1 | 1327.9 | 1378.2 | 1428.6 | 1479.6 | 1531.3 | 1583.7 | 1637.0 |
| | *S* | 0.4959 | 1.5845 | 1.7328 | 1.7782 | 1.8199 | 1.8589 | 1.8955 | 1.9303 | 1.9634 |
| | *V* | 0.0180 | 3.454 | 4.759 | 5.238 | 5.712 | 6.181 | 6.649 | 7.114 | 7.578 |
| 130 | *U* | 318.52 | 1108.6 | 1213.0 | 1251.9 | 1291.0 | 1330.7 | 1371.2 | 1412.5 | 1454.6 |
| (347.33) | *H* | 318.95 | 1191.7 | 1327.5 | 1377.9 | 1428.4 | 1479.4 | 1531.1 | 1583.6 | 1636.9 |
| | *S* | 0.4998 | 1.5813 | 1.7283 | 1.7737 | 1.8155 | 1.8545 | 1.8911 | 1.9259 | 1.9591 |
| | *V* | 0.0180 | 3.332 | 4.579 | 5.042 | 5.498 | 5.951 | 6.401 | 6.849 | 7.296 |
| 135 | *U* | 321.55 | 1109.1 | 1212.8 | 1251.7 | 1290.9 | 1330.6 | 1371.1 | 1412.4 | 1454.5 |
| (350.23) | *H* | 322.00 | 1192.4 | 1327.2 | 1377.7 | 1428.2 | 1479.2 | 1531.0 | 1583.5 | 1636.8 |
| | *S* | 0.5035 | 1.5782 | 1.7239 | 1.7694 | 1.8112 | 1.8502 | 1.8869 | 1.9217 | 1.9548 |
| | *V* | 0.0180 | 3.219 | 4.412 | 4.859 | 5.299 | 5.736 | 6.171 | 6.604 | 7.035 |
| 140 | *U* | 324.49 | 1109.6 | 1212.5 | 1251.5 | 1290.7 | 1330.5 | 1371.0 | 1412.3 | 1454.5 |
| (353.04) | *H* | 324.96 | 1193.0 | 1326.8 | 1377.4 | 1428.0 | 1479.1 | 1530.8 | 1583.4 | 1636.7 |
| | *S* | 0.5071 | 1.5752 | 1.7196 | 1.7652 | 1.8071 | 1.8461 | 1.8828 | 1.9176 | 1.9508 |
| | *V* | 0.0181 | 3.113 | 4.256 | 4.689 | 5.115 | 5.537 | 5.957 | 6.375 | 6.791 |
| 145 | *U* | 327.36 | 1110.0 | 1212.3 | 1251.3 | 1290.6 | 1330.3 | 1370.9 | 1412.2 | 1454.4 |
| (355.77) | *H* | 327.84 | 1193.5 | 1326.5 | 1377.1 | 1427.8 | 1478.9 | 1530.7 | 1583.2 | 1636.6 |
| | *S* | 0.5107 | 1.5723 | 1.7155 | 1.7612 | 1.8031 | 1.8421 | 1.8789 | 1.9137 | 1.9469 |
| | *V* | 0.0181 | 3.014 | 4.111 | 4.530 | 4.942 | 5.351 | 5.757 | 6.161 | 6.564 |
| 150 | *U* | 330.15 | 1110.4 | 1212.0 | 1251.1 | 1290.4 | 1330.2 | 1370.7 | 1412.1 | 1454.3 |
| (358.43) | *H* | 330.65 | 1194.1 | 1326.1 | 1376.9 | 1427.6 | 1478.7 | 1530.5 | 1583.1 | 1636.5 |
| | *S* | 0.5141 | 1.5695 | 1.7115 | 1.7573 | 1.7992 | 1.8383 | 1.8751 | 1.9099 | 1.9431 |
| | *V* | 0.0181 | 2.921 | 3.975 | 4.381 | 4.781 | 5.177 | 5.570 | 5.961 | 6.352 |
| 155 | *U* | 332.87 | 1110.8 | 1211.8 | 1251.0 | 1290.3 | 1330.1 | 1370.6 | 1412.0 | 1454.2 |
| (361.02) | *H* | 333.39 | 1194.6 | 1325.8 | 1376.6 | 1427.4 | 1478.6 | 1530.4 | 1583.0 | 1636.4 |
| | *S* | 0.5174 | 1.5668 | 1.7077 | 1.7535 | 1.7955 | 1.8346 | 1.8714 | 1.9062 | 1.9394 |
| | *V* | 0.0182 | 2.834 | 3.848 | 4.242 | 4.629 | 5.013 | 5.395 | 5.774 | 6.152 |
| 160 | *U* | 335.53 | 1111.2 | 1211.5 | 1250.8 | 1290.1 | 1330.0 | 1370.5 | 1411.9 | 1454.1 |
| (363.55) | *H* | 336.07 | 1195.1 | 1325.4 | 1376.4 | 1427.2 | 1478.4 | 1530.3 | 1582.9 | 1636.3 |
| | *S* | 0.5206 | 1.5641 | 1.7039 | 1.7499 | 1.7919 | 1.8310 | 1.8678 | 1.9027 | 1.9359 |

## Tabla F.4. Vapor sobrecalentado, unidades inglesas (*Continúa*)

| $P$(psia) ($t^{sat}$ / °F) | | liq. sat. | vap. sat. | TEMPERATURA: $t$ (°F) 400 | 420 | 440 | 460 | 480 | 500 | 550 |
|---|---|---|---|---|---|---|---|---|---|---|
| | *V* | 0.0182 | 2.751 | 2.908 | 2.997 | 3.083 | 3.168 | 3.251 | 3.333 | 3.533 |
| 165 | *U* | 338.12 | 1111.6 | 1127.7 | 1136.8 | 1145.6 | 1154.2 | 1162.7 | 1171.0 | 1191.3 |
| (366.02) | *H* | 338.68 | 1195.6 | 1216.5 | 1228.3 | 1239.7 | 1251.0 | 1261.9 | 1272.8 | 1299.2 |
| | *S* | 0.5238 | 1.5616 | 1.5864 | 1.6000 | 1.6129 | 1.6252 | 1.6370 | 1.6484 | 1.6753 |
| | *V* | 0.0182 | 2.674 | 2.816 | 2.903 | 2.987 | 3.070 | 3.151 | 3.231 | 3.425 |
| 170 | *U* | 340.66 | 1111.9 | 1127.0 | 1136.2 | 1145.1 | 1153.7 | 1162.3 | 1170.6 | 1191.0 |
| (368.42) | *H* | 341.24 | 1196.0 | 1215.6 | 1227.5 | 1239.0 | 1250.3 | 1261.4 | 1272.2 | 1298.8 |
| | *S* | 0.5269 | 1.5591 | 1.5823 | 1.5960 | 1.6090 | 1.6214 | 1.6333 | 1.6447 | 1.6717 |
| | *V* | 0.0182 | 2.601 | 2.729 | 2.814 | 2.897 | 2.977 | 3.056 | 3.134 | 3.324 |
| 175 | *U* | 343.15 | 1112.2 | 1126.3 | 1135.6 | 1144.5 | 1153.3 | 1161.8 | 1170.2 | 1190.7 |
| (370.77) | *H* | 343.74 | 1196.4 | 1214.7 | 1226.7 | 1238.3 | 1249.7 | 1260.8 | 1271.7 | 1298.4 |
| | *S* | 0.5299 | 1.5567 | 1.5783 | 1.5921 | 1.6051 | 1.6176 | 1.6296 | 1.6411 | 1.6682 |
| | *V* | 0.0183 | 2.531 | 2.647 | 2.730 | 2.811 | 2.890 | 2.967 | 3.043 | 3.229 |
| 180 | *U* | 345.58 | 1112.5 | 1125.6 | 1134.9 | 1144.0 | 1152.8 | 1161.4 | 1169.8 | 1190.4 |
| (373.08) | *H* | 346.19 | 1196.9 | 1213.8 | 1225.9 | 1237.6 | 1249.0 | 1260.2 | 1271.2 | 1297.9 |
| | *S* | 0.5328 | 1.5543 | 1.5743 | 1.5882 | 1.6014 | 1.6140 | 1.6260 | 1.6376 | 1.6647 |
| | *V* | 0.0183 | 2.465 | 2.570 | 2.651 | 2.730 | 2.807 | 2.883 | 2.957 | 3.138 |
| 184 | *U* | 347.96 | 1112.8 | 1124.9 | 1134.3 | 1143.4 | 1152.3 | 1160.9 | 1169.4 | 1190.1 |
| (375.33) | *H* | 348.58 | 1197.2 | 1212.9 | 1225.1 | 1236.9 | 1248.4 | 1259.6 | 1270.7 | 1297.5 |
| | *S* | 0.5356 | 1.5520 | 1.5705 | 1.5845 | 1.5978 | 1.6104 | 1.6225 | 1.6341 | 1.6614 |
| | *V* | 0.0183 | 2.403 | 2.496 | 2.576 | 2.654 | 2.729 | 2.803 | 2.876 | 3.052 |
| 190 | *U* | 350.29 | 1113.1 | 1124.2 | 1133.7 | 1142.9 | 1151.8 | 1160.5 | 17 69.0 | 1189.8 |
| (377.53) | *H* | 350.94 | 1197.6 | 1212.0 | 1224.3 | 1236.2 | 1247.7 | 1259.0 | 1270.1 | 1297.1 |
| | *S* | 0.5384 | 1.5498 | 1.5667 | 1.5808 | 1.5942 | 1.6069 | 1.6191 | 1.6307 | 1.6581 |
| | *V* | 0.0184 | 2.344 | 2.426 | 2.505 | 2.581 | 2.655 | 2.727 | 2.798 | 2.971 |
| 195 | *U* | 352.58 | 1113.4 | 1123.5 | 1133.1 | 1142.3 | 1151.3 | 1160.0 | 1168.6 | 1189.4 |
| (379.69) | *H* | 353.24 | 1198.0 | 1211.1 | 7223.4 | 1235.4 | 1247.1 | 1258.4 | 1269.6 | 1296.6 |
| | *S* | 0.5412 | 1.5476 | 1.5630 | 1.5772 | 1.5907 | 1.6035 | 1.6157 | 1.6274 | 1.6549 |
| | *V* | 0.0184 | 2.287 | 2.360 | 2.437 | 2.511 | 2.584 | 2.655 | 2.725 | 2.894 |
| 200 | *U* | 354.82 | 1113.7 | 1122.8 | 1132.4 | 1141.7 | 1150.8 | 1159.6 | 1168.2 | 1189.1 |
| (381.80) | *H* | 355.51 | 1198.3 | 1210.1 | 1222.6 | 1234.7 | 1246.4 | 1257.9 | 1269.0 | 1296.2 |
| | *S* | 0.5438 | 1.5454 | 1.5593 | 1.5737 | 1.5872 | 1.6001 | 1.6124 | 1.6242 | 1.6518 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | V | 0.0184 | 2.233 | 2.297 | 2.372 | 2.446 | 2.517 | 2.587 | 2.655 | 2.820 |
| 205 | U | 357.03 | 1113.9 | 1122.1 | 1131.8 | 1141.2 | 1150.3 | 1159.1 | 1167.8 | 1188.8 |
| (383.88) | H | 357.73 | 1198.7 | 1209.2 | 1221.8 | 1234.0 | 1245.8 | 1257.3 | 1268.5 | 1295.8 |
| | S | 0.5465 | 1.5434 | 1.5557 | 1.5702 | 1.5839 | 1.5969 | 1.6092 | 1.6211 | 1.6488 |
| | V | 0.0184 | 2.182 | 2.236 | 2.311 | 2.383 | 2.453 | 2.521 | 2.588 | 2.750 |
| 210 | U | 359.20 | 1114.2 | 1121.3 | 1131.2 | 1140.6 | 1149.8 | 1158.7 | 1167.4 | 1188.5 |
| (385.92) | H | 359.91 | 1199.0 | 1208.2 | 1221.0 | 1233.2 | 1245.1 | 1256.7 | 1268.0 | 1295.3 |
| | S | 0.5490 | 1.5413 | 1.5522 | 1.5668 | 1.5806 | 1.5936 | 1.6061 | 1.6180 | 1.6458 |
| | V | 0.0185 | 2.133 | 2.179 | 2.252 | 2.323 | 2.392 | 2.459 | 2.524 | 2.684 |
| 215 | U | 361.32 | 1114.4 | 1120.6 | 1130.5 | 1140.0 | 1149.3 | 1158.2 | 1167.0 | 1188.1 |
| (387.91) | H | 362.06 | 1199.3 | 1207.3 | 1220.1 | 1232.5 | 1244.4 | 1256.0 | 1267.4 | 1294.9 |
| | S | 0.5515 | 1.5393 | 1.5487 | 1.5634 | 1.5773 | 1.5905 | 1.6030 | 1.6149 | 1.6429 |
| | V | 0.0185 | 2.086 | 2.124 | 2.196 | 2.266 | 2.333 | 2.399 | 2.464 | 2.620 |
| 220 | U | 363.41 | 1114.6 | 1119.9 | 1129.9 | 1139.5 | 1148.7 | 1157.8 | 1166.6 | 1187.8 |
| (389.88) | H | 364.17 | 1199.6 | 1206.3 | 1219.3 | 1231.7 | 1243.7 | 1255.4 | 1266.9 | 1294.5 |
| | S | 0.5540 | 1.5374 | 1.5453 | 1.5601 | 1.5741 | 1.5873 | 1.5999 | 1.6120 | 1.6400 |
| | V | 0.0185 | 2.041 | 2.071 | 2.143 | 2.211 | 2.278 | 2.342 | 2.406 | 2.559 |
| 225 | U | 365.47 | 1114.9 | 1119.1 | 1129.2 | 1138.9 | 1148.2 | 1157.3 | 1166.1 | 1187.5 |
| (391.80) | H | 366.24 | 1199.9 | 1205.4 | 1218.4 | 1230.9 | 1243.1 | 1254.8 | 1266.3 | 1294.0 |
| | S | 0.5564 | 1.5354 | 1.5419 | 1.5569 | 1.5710 | 1.5843 | 1.5969 | 1.6090 | 1.6372 |
| | V | 0.0185 | 1.9985 | 2.021 | 2.091 | 2.159 | 2.224 | 2.288 | 2.350 | 2.501 |
| 230 | U | 367.49 | 1115.1 | 1118.4 | 1128.5 | 1138.3 | 1147.7 | 1156.8 | 1165.7 | 1187.2 |
| (393.70) | H | 368.28 | 1200.1 | 1204.4 | 1217.5 | 1230.2 | 1242.4 | 1254.2 | 1265.7 | 1293.6 |
| | S | 0.5588 | 1.5336 | 1.5385 | 1.5537 | 1.5679 | 1.5813 | 1.5940 | 1.6062 | 1.6344 |
| | V | 0.0186 | 1.9573 | 1.973 | 2.042 | 2.109 | 2.173 | 2.236 | 2.297 | 2.445 |
| 235 | U | 369.48 | 1115.3 | 1117.6 | 1127.9 | 1137.7 | 1147.2 | 1156.4 | 1165.3 | 1186.8 |
| (395.56) | H | 370.29 | 1200.4 | 1203.4 | 1216.7 | 1229.4 | 1247.7 | 1253.6 | 1265.2 | 1293.1 |
| | S | 0.5611 | 1.5317 | 1.5353 | 1.5505 | 1.5648 | 1.5783 | 1.5911 | 1.6033 | 1.6317 |
| | V | 0.0186 | 1.9177 | 1.927 | 1.995 | 2.061 | 2.124 | 2.186 | 2.246 | 2.391 |
| 240 | U | 371.45 | 1115.5 | 1116.8 | 1127.2 | 1137.1 | 1146.6 | 1155.9 | 1164.9 | 1186.5 |
| (397.39) | H | 372.27 | 1200.6 | 1202.4 | 1215.8 | 7228.6 | 1241.0 | 1253.0 | 1264.6 | 1292.7 |
| | S | 0.5634 | 1.5299 | 1.5320 | 1.5474 | 1.5618 | 1.5754 | 1.5883 | 1.6006 | 1.6291 |
| | V | 0.0186 | 1.8797 | 1.882 | 1.950 | 2.015 | 2.077 | 2.138 | 2.197 | 2.340 |
| 245 | U | 373.38 | 1115.6 | 1116.1 | 1126.5 | 1136.5 | 1146.1 | 1155.4 | 1164.4 | 1186.2 |
| (399.19) | H | 374.22 | 1200.9 | 1201.4 | 1214.9 | 1227.8 | 1240.3 | 1252.3 | 1264.1 | 1292.3 |
| | S | 0.5657 | 1.5281 | 1.5288 | 1.5443 | 1.5588 | 1.5725 | 1.5855 | 1.5978 | 1.6265 |

## Tabla F.4. Vapor sobrecalentado, unidades inglesas (*Continúa*)

| *P*(psia) ($t^{sat}$ / °F) | | liq. sat. | vap. sat. | TEMPERATURA: *t* (°F) 600 | 700 | 800 | 900 | 1 000 | 1 100 | 1 200 |
|---|---|---|---|---|---|---|---|---|---|---|
| | *V* | 0.0182 | 2.751 | 3.728 | 4.111 | 4.487 | 4.860 | 5.230 | 5.598 | 5.965 |
| 165 | *U* | 338.12 | 1111.6 | 1211.3 | 1250.6 | 1289.9 | 1329.8 | 1370.4 | 1411.8 | 1454.1 |
| (366.02) | *H* | 338.68 | 1195.6 | 1325.1 | 1376.1 | 1427 .0 | 1478.2 | 1530.1 | 1582.7 | 1636.2 |
| | *S* | 0.5238 | 1.5616 | 1.7003 | 1.7463 | 1.7884 | 1.8275 | 1.8643 | 1.8992 | 1.9324 |
| | *V* | 0.0182 | 2.674 | 3.616 | 3.988 | 4.354 | 4.715 | 5.075 | 5.432 | 5.789 |
| 170 | *U* | 340.66 | 1111.9 | 1211.0 | 1250.4 | 1289.8 | 1329.7 | 1370.3 | 1411.7 | 1454.0 |
| (368.42) | *H* | 341.24 | 1196.0 | 1324.7 | 1375.8 | 1426.8 | 1478.0 | 1530.0 | 1582.6 | 1636.1 |
| | *S* | 0.5269 | 1.5591 | 1.6968 | 1.7428 | 1.7850 | 1.8241 | 1.8610 | 1.8959 | 1.9291 |
| | *V* | 0.0182 | 2.601 | 3.510 | 3.872 | 4.227 | 4.579 | 4.929 | 5.276 | 5.623 |
| 175 | *U* | 343.15 | 1112.2 | 1210.7 | 1250.2 | 1289.6 | 1329.6 | 1370.2 | 1411.6 | 1453.9 |
| (370.77) | *H* | 343.74 | 1196.4 | 1324.4 | 1375.6 | 1426.5 | 1477.9 | 1529.8 | 1582.5 | 1636.0 |
| | *S* | 0.5299 | 1.5567 | 1.6933 | 1.7395 | 1.7816 | 1.8208 | 1.8577 | 1.8926 | 1.9258 |
| | *V* | 0.0183 | 2.531 | 3.409 | 3.762 | 4.108 | 4.451 | 4.791 | 5.129 | 5.466 |
| 180 | *U* | 345.58 | 1112.5 | 1210.5 | 1250.0 | 1289.5 | 1329.4 | 1370.1 | 1411.5 | 1453.8 |
| (373.08) | *H* | 346.19 | 1196.9 | 1324.0 | 1375.3 | 1426.3 | 1477.7 | 1529.7 | 1582.4 | 1635.9 |
| | *S* | 0.5328 | 1.5543 | 1.6900 | 1.7362 | 1.7784 | 1.8176 | 1.8545 | 1.8894 | 1.9227 |
| | *V* | 0.0183 | 2.465 | 3.314 | 3.658 | 3.996 | 4.329 | 4.660 | 4.989 | 5.317 |
| 185 | *U* | 347.96 | 1112.8 | 1210.2 | 1249.8 | 1289.3 | 1329.3 | 1370.0 | 1411.4 | 1453.7 |
| (375.33) | *H* | 348.58 | 1197.2 | 1323.7 | 1375.1 | 1426.1 | 1477.5 | 1529.5 | 1582.3 | 1635.8 |
| | *S* | 0.5356 | 1.5520 | 1.6867 | 1.7330 | 1.7753 | 1.8145 | 1.8514 | 1.8864 | 1.9196 |
| | *V* | 0.0183 | 2.403 | 3.225 | 3.560 | 3.889 | 4.214 | 4.536 | 4.857 | 5.177 |
| 190 | *U* | 350.29 | 1113.1 | 1209.9 | 1249.6 | 1289.2 | 1329.2 | 1369.9 | 1411.3 | 1453.7 |
| (377.53) | *H* | 350.94 | 1197.6 | 1323.3 | 1374.8 | 1425.9 | 1477.4 | 1529.4 | 1582.1 | 1635.7 |
| | *S* | 0.5384 | 1.5498 | 1.6835 | 1.7299 | 1.7722 | 1.8115 | 1.8484 | 1.8834 | 1.9166 |
| | *V* | 0.0184 | 2.344 | 3.139 | 3.467 | 3.788 | 4.105 | 4.419 | 4.732 | 5.043 |
| 195 | *U* | 352.58 | 1113.4 | 1209.7 | 1249.4 | 1289.0 | 1329.1 | 1369.8 | 1411.3 | 1453.6 |
| (379.69) | *H* | 353.24 | 1198.0 | 1323.0 | 1374.5 | 1425.7 | 1477.2 | 1529.2 | 1582.0 | 1635.6 |
| | *S* | 0.5412 | 1.5476 | 1.6804 | 1.7269 | 1.7692 | 1.8085 | 1.8455 | 1.8804 | 1.9137 |
| | *V* | 0.0184 | 2.287 | 3.058 | 3.378 | 3.691 | 4.001 | 4.308 | 4.613 | 4.916 |
| 200 | *U* | 354.82 | 1113.7 | 1209.4 | 1249.2 | 1288.9 | 1328.9 | 1369.7 | 1411.2 | 1453.5 |
| (381.80) | *H* | 355.51 | 1198.3 | 1322.6 | 1374.3 | 1425.5 | 1477.0 | 1529.1 | 1581.9 | 1635.4 |
| | *S* | 0.5438 | 1.5454 | 1.6773 | 1.7239 | 1.7663 | 1.8057 | 1.8426 | 1.8776 | 1.9109 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | V | 0.0184 | 2.233 | 2.981 | 3.294 | 3.600 | 3.902 | 4.202 | 4.499 | 4.796 |
| 205 | U | 357.03 | 1113.9 | 1209.2 | 1249.0 | 1288.7 | 1328.8 | 1369.6 | 1411.1 | 1453.4 |
| (383.88) | H | 357.73 | 1198.7 | 1322.3 | 1374.0 | 1425.3 | 1476.8 | 1528.9 | 1581.8 | 1635.3 |
| | S | 0.5465 | 1.5434 | 1.6744 | 1.7210 | 1.7635 | 1.8028 | 1.8398 | 1.8748 | 1.9081 |
| | V | 0.0184 | 2.182 | 2.908 | 3.214 | 3.513 | 3.808 | 4.101 | 4.392 | 4.681 |
| 210 | U | 359.20 | 1114.2 | 1208.9 | 1248.8 | 1288.6 | 1328.7 | 1369.4 | 1411.0 | 1453.3 |
| (385.92) | H | 359.91 | 1199.0 | 1321.9 | 1373.7 | 1425.1 | 1476.7 | 1528.8 | 1581.6 | 1635.2 |
| | S | 0.5490 | 1.5413 | 1.6715 | 1.7182 | 1.7607 | 1.8001 | 1.8371 | 1.8721 | 1.9054 |
| | V | 0.0185 | 2.133 | 2.838 | 3.137 | 3.430 | 3.718 | 4.004 | 4.289 | 4.572 |
| 215 | U | 361.32 | 1114.4 | 1208.6 | 1248.7 | 1288.4 | 1328.6 | 1369.3 | 1410.9 | 1453.2 |
| (387.91) | H | 362.06 | 1199.3 | 1321.5 | 1373.5 | 1424.9 | 1476.5 | 1528.7 | 1581.5 | 1635.1 |
| | S | 0.5515 | 1.5393 | 1.6686 | 1.7155 | 1.7580 | 1.7974 | 1.8344 | 1.8694 | 1.9028 |
| | V | 0.0185 | 2.086 | 2.771 | 3.064 | 3.350 | 3.633 | 3.912 | 4.190 | 4.467 |
| 220 | U | 363.41 | 1114.6 | 1208.4 | 1248.5 | 1288.3 | 1328.4 | 1369.2 | 1410.8 | 1453.2 |
| (389.88) | H | 364.17 | 1199.6 | 1321.2 | 1373.2 | 1424.7 | 1476.3 | 1528.5 | 1581.4 | 1635.0 |
| | S | 0.5540 | 1.5374 | 1.6658 | 1.7128 | 1.7553 | 1.7948 | 1.8318 | 1.8668 | 1.9002 |
| | V | 0.0185 | 2.041 | 2.707 | 2.994 | 3.275 | 3.551 | 3.825 | 4.097 | 4.367 |
| 225 | U | 365.47 | 1114.9 | 1208.1 | 1248.3 | 1288.1 | 1328.3 | 1369.1 | 1410.7 | 1453.1 |
| (391.80) | H | 366.24 | 1199.9 | 1320.8 | 1372.9 | 1424.5 | 1476.1 | 1528.4 | 1581.3 | 1634.9 |
| | S | 0.5564 | 1.5354 | 1.6631 | 1.7101 | 1.7527 | 1.7922 | 1.8293 | 1.8643 | 1.8977 |
| | V | 0.0185 | 1.9984 | 2.646 | 2.928 | 3.202 | 3.473 | 3.741 | 4.007 | 4.272 |
| 230 | U | 367.49 | 1115.1 | 1207.8 | 1248.1 | 1288.0 | 1328.2 | 1369.0 | 1410.6 | 1453.0 |
| (393.70) | H | 368.28 | 1200.1 | 1320.4 | 1372.7 | 1424.2 | 1476.0 | 1528.2 | 1581.1 | 1634.8 |
| | S | 0.5588 | 1.5336 | 1.6604 | 1.7075 | 1.7502 | 1.7897 | 1.8268 | 1.8618 | 1.8952 |
| | V | 0.0186 | 1.9573 | 2.588 | 2.864 | 3.133 | 3.398 | 3.660 | 3.921 | 4.180 |
| 235 | U | 369.48 | 1115.3 | 1207.6 | 1247.9 | 1287.8 | 1328.0 | 1368.9 | 1410.5 | 1452.9 |
| (395.56) | H | 370.29 | 1200.4 | 1320.1 | 1372.4 | 1424.0 | 1475.8 | 1528.1 | 1581.0 | 1634.7 |
| | S | 0.5611 | 1.5317 | 1.6578 | 1.7050 | 1.7477 | 1.7872 | 1.8243 | 1.8594 | 1.8928 |
| | V | 0.0186 | 1.9177 | 2.532 | 2.802 | 3.066 | 3.326 | 3.583 | 3.839 | 4.093 |
| 240 | U | 371.45 | 1115.5 | 1207.3 | 1247.7 | 1287.7 | 1327.9 | 1368.8 | 1410.4 | 1452.8 |
| (397.39) | H | 372.27 | 1200.6 | 1319.7 | 1372.1 | 1423.8 | 1475.6 | 1527.9 | 1580.9 | 1634.6 |
| | S | 0.5634 | 1.5299 | 1.6552 | 1.7025 | 1.7452 | 1.7848 | 1.8219 | 1.8570 | 1.8904 |
| | V | 0.0186 | 1.8797 | 2.478 | 2.744 | 3.002 | 3.257 | 3.509 | 3.760 | 4.009 |
| 245 | U | 373.38 | 1115.6 | 1207.0 | 1247.5 | 1287.5 | 1327.8 | 1368.7 | 1410.3 | 1452.8 |
| (399.19) | H | 374.22 | 1200.9 | 1319.4 | 1371.9 | 1423.6 | 1475.5 | 1527.8 | 1580.8 | 1634.5 |
| | S | 0.5657 | 1.5281 | 1.6527 | 1.7000 | 1.7428 | 1.7824 | 1.8196 | 1.8547 | 1.8881 |

## Tabla F.4. Vapor sobrecalentado, unidades inglesas (*Continúa*)

| *P*(psia) ($t^{sat}$/°F) | | liq. sat. | vap. sat. | TEMPERATURA: *t* (°F) 420 | 440 | 460 | 480 | 500 | 520 | 550 |
|---|---|---|---|---|---|---|---|---|---|---|
| | *V* | 0.0187 | 1.8432 | 1.907 | 1.970 | 2.032 | 2.092 | 2.150 | 2.207 | 2.291 |
| 250 | *U* | 375.28 | 1115.8 | 1125.8 | 1135.9 | 1145.6 | 1154.9 | 1164.0 | 1172.9 | 1185.8 |
| (400.97) | *H* | 376.14 | 1201.1 | 1214.0 | 1227.1 | 1239.6 | 1251.7 | 1263.5 | 1275.0 | 1291.8 |
| | *S* | 0.5679 | 1.5264 | 1.5413 | 1.5559 | 1.5697 | 1.5827 | 1.5951 | 1.6070 | 1.6239 |
| | *V* | 0.0187 | 1.8080 | 1.865 | 1.928 | 1.989 | 2.048 | 2.105 | 2.161 | 2.244 |
| 255 | *U* | 377.15 | 1116.0 | 1125.1 | 1135.3 | 1145.0 | 1154.5 | 1163.6 | 1172.5 | 1185.5 |
| (402.72) | *H* | 378.04 | 1201.3 | 1213.1 | 1226.3 | 1238.9 | 1251.1 | 1262.9 | 1274.5 | 1291.4 |
| | *S* | 0.5701 | 1.5247 | 1.5383 | 7.5530 | 1.5669 | 1.5800 | 1.5925 | 1.6044 | 1.6214 |
| | *V* | 0.0187 | 1.7742 | 1.825 | 1.887 | 1.947 | 2.005 | 2.062 | 2.117 | 2.198 |
| 260 | *U* | 379.00 | 1116.2 | 1124.5 | 1134.7 | 1144.5 | 1154.0 | 1163.1 | 1172.1 | 1185.1 |
| (404.44) | *H* | 379.90 | 1201.5 | 1212.2 | 1225.5 | 1238.2 | 1250.4 | 1262.4 | 1274.0 | 1290.9 |
| | *S* | 0.5722 | 1.5230 | 1.5353 | 1.5502 | 1.5642 | 1.5774 | 1.5899 | 1.6019 | 1.6189 |
| | *V* | 0.0187 | 1.7416 | 1.786 | 1.848 | 1.907 | 1.964 | 2.020 | 2.075 | 2.154 |
| 265 | *U* | 380.83 | 1116.3 | 1123.8 | 1134.1 | 1144.0 | 1153.5 | 1162.7 | 1171.7 | 1184.8 |
| (406.13) | *H* | 381.74 | 1201.7 | 1211.3 | 1224.7 | 1237.5 | 1249.8 | 1261.8 | 1273.4 | 1290.4 |
| | *S* | 0.5743 | 1.5214 | 1.5324 | 1.5474 | 1.5614 | 1.5747 | 1.5873 | 1.5993 | 1.6165 |
| | *V* | 0.0188 | 1.7101 | 1.749 | 1.810 | 1.868 | 1.925 | 1.980 | 2.034 | 2.112 |
| 270 | *U* | 382.62 | 1116.5 | 1123.1 | 1133.5 | 1143.4 | 1153.0 | 1162.3 | 1171.3 | 1184.5 |
| (407.80) | *H* | 383.56 | 1201.9 | 1210.4 | 1223.9 | 1236.7 | 1249.2 | 1261.2 | 1272.9 | 1290.0 |
| | *S* | 0.5764 | 1.5197 | 1.5295 | 1.5446 | 1.5588 | 1.5721 | 1.5848 | 1.5969 | 1.6140 |
| | *V* | 0.0188 | 1.6798 | 1.713 | 1.773 | 1.831 | 1.887 | 1.941 | 1.994 | 2.071 |
| 275 | *U* | 384.40 | 1116.6 | 1122.3 | 1132.8 | 1142.9 | 1152.5 | 1161.8 | 1170.9 | 1184.1 |
| (409.45) | *H* | 385.35 | 1202.1 | 1209.5 | 1223.1 | 1236.0 | 1248.5 | 1260.6 | 1272.4 | 1289.5 |
| | *S* | 0.5784 | 1.5181 | 1.5266 | 1.5419 | 1.5561 | 1.5696 | 1.5823 | 1.5944 | 1.6117 |
| | *V* | 0.0188 | 1.6505 | 1.678 | 1.738 | 1.795 | 1.850 | 1.904 | 1.956 | 2.032 |
| 280 | *U* | 386.15 | 1116.7 | 1121.6 | 1132.2 | 1142.3 | 1152.0 | 1161.4 | 1170.5 | 1183.8 |
| (411.07) | *H* | 387.12 | 1202.3 | 1208.6 | 1222.2 | 1235.3 | 1247.9 | 1260.0 | 1271.9 | 1289.1 |
| | *S* | 0.5805 | 1.5166 | 1.5238 | 1.5391 | 1.5535 | 1.5670 | 1.5798 | 1.5920 | 1.6093 |
| | *V* | 0.0188 | 1.6222 | 1.645 | 1.704 | 1.760 | 1.815 | 1.868 | 1.919 | 1.994 |
| 285 | *U* | 387.88 | 1116.9 | 1120.9 | 1131.6 | 1141.7 | 1151.5 | 1160.9 | 1170.7 | 17 83.4 |
| (412.67) | *H* | 388.87 | 1202.4 | 1207.6 | 1221.4 | 1234.6 | 1247.2 | 1259.4 | 1271.3 | 1288.6 |
| | *S* | 0.5824 | 1.5150 | 1.5210 | 1.5365 | 1.5509 | 1.5645 | 1.5774 | 1.5897 | 1.6070 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | V | 0.0188 | 1.5948 | 1.612 | 1.671 | 1.727 | 1.780 | 1.833 | 1.884 | 1.958 |
| 290 | U | 389.59 | 1117.0 | 1120.2 | 1130.9 | 1141.2 | 1151.0 | 1160.5 | 1169.7 | 1183.1 |
| (414.25) | H | 390.60 | 1202.6 | 1206.7 | 1220.6 | 1233.8 | 1246.6 | 1258.9 | 1270.8 | 1288.1 |
| | S | 0.5844 | 1.5135 | 1.5182 | 1.5338 | 1.5484 | 1.5621 | 1.5750 | 1.5873 | 1.6048 |
| | V | 0.0189 | 1.5684 | 1.581 | 1.639 | 1.694 | 1.747 | 1.799 | 1.849 | 1.922 |
| 295 | U | 391.27 | 1117.1 | 1119.5 | 1130.3 | 1140.6 | 1150.5 | 1160.0 | 1169.3 | 1182.7 |
| (415.81) | H | 392.30 | 1202.7 | 1205.8 | 1219.7 | 1233.1 | 1245.9 | 1258.3 | 1270.2 | 1287.7 |
| | S | 0.5863 | 1.5120 | 1.5155 | 1.5312 | 1.5458 | 1.5596 | 1.5726 | 1.5850 | 1.6025 |
| | V | 0.0189 | 1.5427 | 1.551 | 1.608 | 1.663 | 1.715 | 1.766 | 1.816 | 1.888 |
| 300 | U | 392.94 | 1117.2 | 1118.7 | 1129.6 | 1140.0 | 1150.0 | 1159.6 | 1168.9 | 1182.4 |
| (417.35) | H | 393.99 | 1202.9 | 1204.8 | 1218.9 | 1232.3 | 1245.2 | 1257.7 | 1269.7 | 1287.2 |
| | S | 0.5882 | 1.5105 | 1.5127 | 1.5286 | 1.5433 | 1.5572 | 1.5703 | 1.5827 | 1.6003 |
| | V | 0.0189 | 1.4939 | ..... | 1.549 | 1.603 | 1.655 | 1.704 | 1.753 | 1.823 |
| 310 | U | 396.21 | 1117.5 | ..... | 1128.3 | 1138.9 | 1149.0 | 1158.7 | 1168.1 | 1181.7 |
| (420.36) | H | 397.30 | 1203.2 | ..... | 1217.2 | 1230.8 | 1243.9 | 1256.5 | 1268.6 | 1286.3 |
| | S | 0.5920 | 1.5076 | ..... | 1.5234 | 1.5384 | 1.5525 | 1.5657 | 1.5782 | 1.5960 |
| | V | 0.0190 | 1.4480 | ..... | 1.494 | 1.547 | 1.597 | 1.646 | 1.694 | 1.762 |
| 320 | U | 399.41 | 1117.7 | ..... | 1127.0 | 1137.7 | 1147.9 | 1157.8 | 1167.2 | 1181.0 |
| (423.31) | H | 400.53 | 1203.4 | ..... | 1215.5 | 1229.3 | 1242.5 | 1255.2 | 1267.5 | 1285.3 |
| | S | 0.5956 | 1.5048 | ..... | 1.5184 | 1.5336 | 1.5478 | 1.5612 | 1.5739 | 1.5918 |
| | V | 0.0190 | 1.4048 | ..... | 1.442 | 1.494 | 1.544 | 1.591 | 1.638 | 1.705 |
| 330 | U | 402.53 | 1117.8 | ..... | 1125.7 | 1136.6 | 1146.9 | 1156.8 | 1166.4 | 1180.2 |
| (426.18) | H | 403.70 | 1203.6 | ..... | 1213.8 | 1227.8 | 1241.2 | 1254.0 | 1266.4 | 1284.4 |
| | S | 0.5991 | 1.5021 | ..... | 1.5134 | 1.5289 | 1.5433 | 1.5568 | 1.5696 | 1.5876 |
| | V | 0.0191 | 1.3640 | ..... | 1.393 | 1.444 | 1.493 | 1.540 | 1.585 | 1.651 |
| 340 | U | 405.60 | 1118.0 | ..... | 1124.3 | 1135.4 | 1145.8 | 1155.9 | 1165.6 | 1179.5 |
| (428.98) | H | 406.80 | 1203.8 | ..... | 1212.0 | 1226.2 | 1239.8 | 1252.8 | 1265.3 | 1283.4 |
| | S | 0.6026 | 1.4994 | ..... | 1.5086 | 1.5242 | 1.5388 | 1.5525 | 1.5654 | 1.5836 |
| | V | 0.0191 | 1.3255 | ..... | 1.347 | 1.397 | 1.445 | 1.491 | 1.536 | 1.600 |
| 350 | U | 408.59 | 1118.1 | ..... | 1123.0 | 1134.2 | 1144.8 | 1154.9 | 1164.7 | 1178.8 |
| (431.73) | H | 409.83 | 1204.0 | ..... | 1210.2 | 1224.7 | 1238.4 | 1251.5 | 1264.2 | 1282.4 |
| | S | 0.6059 | 1.4968 | ..... | 1.5038 | 1.5197 | 1.5344 | 1.5483 | 1.5613 | 1.5797 |
| | V | 0.0192 | 1.2891 | ..... | 1.303 | 1.353 | 1.400 | 1.445 | 1.489 | 1.552 |
| 360 | U | 411.53 | 1118.3 | ..... | 1121.6 | 1132.9 | 1143.7 | 1154.0 | 1163.9 | 1178.1 |
| (434.41) | H | 412.81 | 1204.1 | ..... | 1208.4 | 1223.1 | 1237.0 | 1250.3 | 1263.1 | 1281.5 |
| | S | 0.6092 | 1.4943 | ..... | 1.4990 | 1.5152 | 1.5301 | 1.5441 | 1.5573 | 1.5758 |

## Tabla F.4. Vapor sobrecalentado, unidades inglesas (*Continúa*)

| $P$(psia) ($t^{sat}$ / °F) | | liq. sat. | vap. sat. | TEMPERATURA: $t$ (°F) 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 |
|---|---|---|---|---|---|---|---|---|---|---|
| | *V* | 0.0187 | 1.8432 | 2.426 | 2.687 | 2.941 | 3.191 | 3.438 | 3.684 | 3.928 |
| 250 | *U* | 375.28 | 1115.8 | 1206.7 | 1247.3 | 1287.3 | 1327.7 | 1368.6 | 1410.2 | 1452.7 |
| (400.97) | *H* | 376.14 | 1201.1 | 1319.0 | 1371.6 | 1423.4 | 1475.3 | 1527.6 | 1580.6 | 1634.4 |
| | *S* | 0.5679 | 1.5264 | 1.6502 | 1.6976 | 1.7405 | 1.7801 | 1.8173 | 1.8524 | 1.8858 |
| | *V* | 0.0187 | 1.8080 | 2.377 | 2.633 | 2.882 | 3.127 | 3.370 | 3.611 | 3.850 |
| 255 | *U* | 377.15 | 1116.0 | 1206.5 | 1247.1 | 1287.2 | 1327.5 | 1368.5 | 1410.1 | 1452.6 |
| (402.72) | *H* | 378.04 | 1201.3 | 1318.6 | 1371.3 | 1423.2 | 1475.1 | 1527.5 | 1580.5 | 1634.3 |
| | *S* | 0.5701 | 1.5247 | 1.6477 | 1.6953 | 1.7382 | 1.7778 | 1.8150 | 1.8502 | 1.8836 |
| | *V* | 0.0187 | 1.7742 | 2.329 | 2.581 | 2.826 | 3.066 | 3.304 | 3.541 | 3.776 |
| 260 | *U* | 379.00 | 1116.2 | 1206.2 | 1246.9 | 1287.0 | 1327.4 | 1368.4 | 1410.0 | 1452.5 |
| (404.44) | *H* | 379.90 | 1201.5 | 1318.2 | 1371.1 | 1423.0 | 1474.9 | 1527.3 | 1580.4 | 1634.2 |
| | *S* | 0.5722 | 1.5230 | 1.6453 | 1.6930 | 1.7359 | 1.7756 | 1.8128 | 1.8480 | 1.8814 |
| | *V* | 0.0187 | 1.7416 | 2.283 | 2.531 | 2.771 | 3.007 | 3.241 | 3.473 | 3.704 |
| 265 | *U* | 380.83 | 1116.3 | 1205.9 | 1246.7 | 1286.9 | 1327.3 | 1368.2 | 1409.9 | 1452.4 |
| (406.13) | *H* | 381.74 | 1201.7 | 1317.9 | 1370.8 | 1422.8 | 1474.8 | 1527.2 | 1580.3 | 1634.1 |
| | *S* | 0.5743 | 1.5214 | 1.6430 | 1.6907 | 1.7337 | 1.7734 | 1.8106 | 1.8458 | 1.8792 |
| | *V* | 0.0188 | 1.7101 | 2.239 | 2.482 | 2.719 | 2.951 | 3.181 | 3.408 | 3.635 |
| 270 | *U* | 382.62 | 1116.5 | 1205.6 | 1246.5 | 1286.7 | 1327.2 | 1368.1 | 1409.8 | 1452.3 |
| (407.80) | *H* | 383.56 | 1201.9 | 1317.5 | 1370.5 | 1422.6 | 1474.6 | 1527.0 | 1580.1 | 1634.0 |
| | *S* | 0.5764 | 1.5197 | 1.6406 | 1.6885 | 1.7315 | 1.7713 | 1.8085 | 1.8437 | 1.8771 |
| | *V* | 0.0188 | 1.6798 | 2.196 | 2.436 | 2.668 | 2.896 | 3.122 | 3.346 | 3.568 |
| 275 | *U* | 384.40 | 1116.6 | 1205.4 | 1246.3 | 1286.6 | 1327.0 | 1368.0 | 1409.8 | 1452.3 |
| (409.45) | *H* | 385.35 | 1202.1 | 1317.1 | 1370.3 | 1422.4 | 1474.4 | 1526.9 | 1580.0 | 1633.9 |
| | *S* | 0.5784 | 1.5181 | 1.6384 | 1.6863 | 1.7294 | 1.7691 | 1.8064 | 1.8416 | 1.8750 |
| | *V* | 0.0188 | 1.6505 | 2.155 | 2.391 | 2.619 | 2.844 | 3.066 | 3.286 | 3.504 |
| 280 | *U* | 386.15 | 1116.7 | 1205.1 | 1246.1 | 1286.4 | 1326.9 | 1367.9 | 1409.7 | 1452.2 |
| (411.07) | *H* | 387.12 | 1202.3 | 1316.8 | 1370.0 | 1422.1 | 1474.2 | 1526.8 | 1579.9 | 1633.8 |
| | *S* | 0.5805 | 1.5166 | 1.6361 | 1.6841 | 7.7273 | 1.7671 | 1.8043 | 1.8395 | 1.8730 |
| | *V* | 0.0188 | 1.6222 | 2.115 | 2.348 | 2.572 | 2.793 | 3.011 | 3.227 | 3.442 |
| 285 | *U* | 387.88 | 1116.9 | 1204.8 | 1245.9 | 1286.3 | 1326.8 | 1367.8 | 1409.6 | 1452.1 |
| (412.67) | *H* | 388.87 | 1202.4 | 1316.4 | 1369.7 | 1421.9 | 1474.1 | 1526.6 | 1579.8 | 1633.6 |
| | *S* | 0.5824 | 1.5150 | 1.6339 | 1.6820 | 1.7252 | 1.7650 | 1.8023 | 1.8375 | 1.8710 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | V | 0.0188 | 1.5948 | 2.077 | 2.306 | 2.527 | 2.744 | 2.958 | 3.171 | 3.382 |
| 290 | U | 389.59 | 1117.0 | 1204.5 | 1245.7 | 1286.1 | 1326.6 | 1367.7 | 1409.5 | 1452.0 |
| (414.25) | H | 390.60 | 1202.6 | 1316.0 | 1369.5 | 1421.7 | 1473.9 | 1526.5 | 1579.6 | 1633.5 |
| | S | 0.5844 | 1.5135 | 1.6317 | 1.6799 | 1.7232 | 1.7630 | 1.8003 | 1.8356 | 1.8690 |
| | V | 0.0189 | 1.5684 | 2.040 | 2.265 | 2.483 | 2.697 | 2.908 | 3.117 | 3.325 |
| 295 | U | 391.27 | 1117.1 | 1204.3 | 1245.5 | 1286.0 | 1326.5 | 1367.6 | 1409.4 | 1451.9 |
| (415.81) | H | 392.30 | 1202.7 | 1315.6 | 1369.2 | 1421.5 | 1473.7 | 1526.3 | 1579.5 | 1633.4 |
| | S | 0.5863 | 1.5120 | 1.6295 | 1.6779 | 1.7211 | 1.7610 | 1.7984 | 1.8336 | 1.8671 |
| | V | 0.0189 | 1.5427 | 2.004 | 2.226 | 2.441 | 2.651 | 2.859 | 3.064 | 3.269 |
| 300 | U | 392.94 | 1117.2 | 1204.0 | 1245.3 | 1285.8 | 1326.4 | 1367.5 | 1409.3 | 1451.9 |
| (417.35) | H | 393.99 | 1202.9 | 1315.2 | 1368.9 | 1421.3 | 1473.6 | 1526.2 | 1579.4 | 1633.3 |
| | S | 0.5882 | 1.5105 | 1.6274 | 1.6758 | 1.7192 | 1.7591 | 1.7964 | 1.8317 | 1.8652 |
| | V | 0.0189 | 1.4939 | 1.936 | 2.152 | 2.360 | 2.564 | 2.765 | 2.964 | 3.162 |
| 310 | U | 396.21 | 1117.5 | 1203.4 | 1244.9 | 1285.5 | 1326.1 | 1367.3 | 1409.1 | 1451.7 |
| (420.36) | H | 397.30 | 1203.2 | 1314.5 | 1368.4 | 1420.9 | 1473.2 | 1525.9 | 1579.2 | 1633.1 |
| | S | 0.5920 | 1.5076 | 1.6233 | 1.6719 | 1.7153 | 1.7553 | 1.7927 | 1.8280 | 1.8615 |
| | V | 0.0190 | 1.4480 | 1.873 | 2.082 | 2.284 | 2.482 | 2.677 | 2.871 | 3.063 |
| 320 | U | 399.41 | 1117.7 | 1202.8 | 1244.5 | 1285.2 | 1325.9 | 1367.0 | 1408.9 | 1451.5 |
| (423.31) | H | 400.53 | 1203.4 | 1313.7 | 1367.8 | 1420.4 | 1472.9 | 1525.6 | 1578.9 | 1632.9 |
| | S | 0.5956 | 1.5048 | 1.6192 | 1.6680 | 1.7116 | 1.7516 | 1.7890 | 1.8243 | 1.8579 |
| | V | 0.0190 | 1.4048 | 1.813 | 2.017 | 2.213 | 2.405 | 2.595 | 2.783 | 2.969 |
| 330 | U | 402.53 | 1117.8 | 1202.3 | 1244.1 | 1284.9 | 1325.6 | 1366.8 | 1408.7 | 1451.4 |
| (426.18) | H | 403.70 | 1203.6 | 1313.0 | 1367.3 | 1420.0 | 1472.5 | 1525.3 | 1578.7 | 1632.7 |
| | S | 0.5991 | 1.5021 | 1.6153 | 1.6643 | 1.7079 | 1.7480 | 1.7855 | 1.8208 | 1.8544 |
| | V | 0.0191 | 1.3640 | 1.756 | 1.955 | 2.146 | 2.333 | 2.518 | 2.700 | 2.881 |
| 340 | U | 405.60 | 1118.0 | 1201.7 | 1243.7 | 1284.6 | 1325.4 | 1366.6 | 1408.5 | 1451.2 |
| (428.98) | H | 406.80 | 1203.8 | 1312.2 | 1366.7 | 1419.6 | 1472.2 | 1525.0 | 1578.4 | 1632.5 |
| | S | 0.6026 | 1.4994 | 1.6114 | 1.6606 | 1.7044 | 1.7445 | 1.7820 | 1.8174 | 1.8510 |
| | V | 0.0191 | 1.3255 | 1.703 | 1.897 | 2.083 | 2.265 | 2.444 | 2.622 | 2.798 |
| 350 | U | 408.59 | 1118.1 | 1201.1 | 1243.3 | 1284.2 | 1325.1 | 1366.4 | 1408.3 | 1451.0 |
| (431.73) | H | 409.83 | 1204.0 | 1311.4 | 1366.2 | 1419.2 | 1471.8 | 1524.7 | 1578.2 | 1632.3 |
| | S | 0.6059 | 1.4968 | 1.6077 | 1.6571 | 1.7009 | 1.7411 | 1.7787 | 1.8141 | 1.8477 |
| | V | 0.0192 | 1.2891 | 1.652 | 1.842 | 2.024 | 2.201 | 2.375 | 2.548 | 2.720 |
| 360 | U | 411.53 | 1118.3 | 1200.5 | 1242.9 | 1283.9 | 1324.8 | 1366.2 | 1408.2 | 1450.9 |
| (434.41) | H | 412.81 | 1204.1 | 1310.6 | 1365.6 | 1418.7 | 1471.5 | 1524.4 | 1577.9 | 1632.1 |
| | S | 0.6092 | 1.4943 | 1.6040 | 1.6536 | 1.6976 | 1.7379 | 1.7754 | 1.8109 | 1.8445 |

## Tabla F.4. Vapor sobrecalentado, unidades inglesas (*Continúa*)

| $P$(psia) ($t^{sat}$ / °F) | | liq. sat. | vap. sat. | TEMPERATURA: $t$ (°F) 460 | 480 | 500 | 520 | 540 | 560 | 580 |
|---|---|---|---|---|---|---|---|---|---|---|
| 370 (437.04) | $V$ | 0.0192 | 1.2546 | 1.311 | 1.357 | 1.402 | 1.445 | 1.486 | 1.527 | 1.566 |
| | $U$ | 414.41 | 1118.4 | 1131.7 | 1142.6 | 1153.0 | 1163.0 | 1172.6 | 1182.0 | 1191.0 |
| | $H$ | 415.73 | 1204.3 | 1221.4 | 1235.5 | 1249.0 | 1261.9 | 1274.4 | 1286.5 | 1298.3 |
| | $S$ | 0.6125 | 1.4918 | 1.5107 | 1.5259 | 1.5401 | 1.5534 | 1.5660 | 1.5780 | 1.5894 |
| 380 (439.61) | $V$ | 0.0193 | 1.2218 | 1.271 | 1.317 | 1.361 | 1.403 | 1.444 | 1.483 | 1.522 |
| | $U$ | 417.24 | 1118.5 | 1130.4 | 1141.5 | 1152.0 | 1162.1 | 1171.8 | 1181.2 | 1190.4 |
| | $H$ | 418.59 | 1204.4 | 1219.8 | 1234.1 | 1247.7 | 1260.8 | 1273.3 | 1285.5 | 1297.4 |
| | $S$ | 0.6156 | 1.4894 | 1.5063 | 1.5217 | 1.5360 | 1.5495 | 1.5622 | 1.5743 | 1.5858 |
| 390 (442.13) | $V$ | 0.0193 | 1.1906 | 1.233 | 1.278 | 1.321 | 1.363 | 1.403 | 1.442 | 1.480 |
| | $U$ | 420.01 | 1118.6 | 1129.2 | 1140.4 | 1151.0 | 1161.2 | 1171.0 | 1180.5 | 1189.7 |
| | $H$ | 421.40 | 1204.5 | 1218.2 | 1232.6 | 1246.4 | 1259.6 | 1272.3 | 1284.6 | 1296.5 |
| | $S$ | 0.6187 | 1.4870 | 1.5020 | 1.5176 | 1.5321 | 1.5457 | 1.5585 | 1.5707 | 1.5823 |
| 400 (444.60) | $V$ | 0.0193 | 1.1610 | 1.197 | 1.242 | 1.284 | 1.325 | 1.364 | 1.403 | 1.440 |
| | $U$ | 422.74 | 1118.7 | 1127.9 | 1139.3 | 1150.0 | 1160.3 | 1170.2 | 1179.8 | 1189.1 |
| | $H$ | 424.17 | 1204.6 | 1216.5 | 1231.2 | 1245.1 | 1258.4 | 1271.2 | 1283.6 | 1295.7 |
| | $S$ | 0.6217 | 1.4847 | 1.4978 | 1.5136 | 1.5282 | 1.5420 | 1.5549 | 1.5672 | 1.5789 |
| 410 (447.02) | $V$ | 0.0194 | 1.1327 | 1.163 | 1.207 | 1.249 | 1.289 | 1.328 | 1.365 | 1.402 |
| | $U$ | 425.41 | 1118.7 | 1126.6 | 1138.1 | 1149.0 | 1159.4 | 1169.4 | 1179.1 | 1188.4 |
| | $H$ | 426.88 | 1204.7 | 1214.8 | 1229.7 | 1243.8 | 1257.2 | 1270.2 | 1282.7 | 1294.8 |
| | $S$ | 0.6247 | 1.4825 | 1.4936 | 1.5096 | 1.5244 | 1.5383 | 1.5514 | 1.5637 | 1.5755 |
| 420 (449.40) | $V$ | 0.0194 | 1.1057 | 1.130 | 1.173 | 1.215 | 1.254 | 1.293 | 1.330 | 1.366 |
| | $U$ | 428.05 | 1118.8 | 1125.3 | 1137.0 | 1148.0 | 1158.5 | 1168.6 | 1178.3 | 1187.8 |
| | $H$ | 429.56 | 1204.7 | 1213.1 | 1228.2 | 1242.4 | 1256.0 | 7269.1 | 1281.7 | 1293.9 |
| | $S$ | 0.6276 | 1.4802 | 1.4894 | 1.5056 | 1.5206 | 1.5347 | 1.5479 | 1.5603 | 1.5722 |
| 430 (451.74) | $V$ | 0.0195 | 1.0800 | 1.099 | 1.142 | 1.183 | 1.222 | 1.259 | 1.296 | 1.331 |
| | $U$ | 430.64 | 1118.8 | 1123.9 | 1135.8 | 1147.0 | 1157.6 | 1167.8 | 1177.6 | 1187.1 |
| | $H$ | 432.19 | 1204.8 | 1211.4 | 1226.6 | 1241.1 | 1254.8 | 1268.0 | 1280.7 | 1293.0 |
| | $S$ | 0.6304 | 1.4781 | 1.4853 | 1.5017 | 1.5169 | 1.5311 | 1.5444 | 1.5570 | 1.5689 |
| 440 (454.03) | $V$ | 0.0195 | 1.0554 | 1.069 | 1.111 | 1.152 | 1.190 | 1.227 | 1.263 | 1.298 |
| | $U$ | 433.19 | 1118.8 | 1122.6 | 1134.6 | 1145.9 | 1156.7 | 1167.0 | 1176.9 | 1186.4 |
| | $H$ | 434.77 | 1204.8 | 1209.6 | 1225.1 | 1239.7 | 1253.6 | 1266.9 | 1279.7 | 1292.1 |
| | $S$ | 0.6332 | 1.4759 | 1.4812 | 1.4979 | 1.5132 | 1.5276 | 1.5410 | 1.5537 | 1.5657 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | V | 0.0195 | 1.0318 | 1.040 | 1.082 | 1.122 | 1.160 | 1.197 | 1.232 | 1.266 |
| 450 | U | 435.69 | 1118.9 | 1121.2 | 1133.4 | 1144.9 | 1155.8 | 1166.1 | 1176.1 | 1185.7 |
| (456.28) | H | 437.32 | 1204.8 | 1207.8 | 1223.5 | 1238.3 | 1252.4 | 1265.8 | 1278.7 | 1291.2 |
| | S | 0.6360 | 1.4738 | 1.4771 | 1.4940 | 1.5096 | 1.5241 | 1.5377 | 1.5505 | 1.5626 |
| | V | 0.0196 | 1.0092 | 1.012 | 1.054 | 1.094 | 1.132 | 1.168 | 1.203 | 1.236 |
| 460 | U | 438.17 | 1118.9 | 1119.8 | 1132.2 | 1143.8 | 1154.8 | 1165.3 | 1175.4 | 1185.1 |
| (458.50) | H | 439.83 | 1204.8 | 1206.0 | 1222.0 | 1236.9 | 1251.1 | 1264.7 | 1277.7 | 1290.3 |
| | S | 0.6387 | 1.4718 | 1.4731 | 1.4903 | 1.5060 | 1.5207 | 1.5344 | 1.5473 | 1.5595 |
| | V | 0.0196 | 0.9876 | ..... | 1.028 | 1.067 | 1.104 | 1.140 | 1.174 | 1.207 |
| 470 | U | 440.60 | 1118.9 | ..... | 1131.0 | 1142.8 | 1153.9 | 1164.5 | 1174.6 | 1184.4 |
| (460.68) | H | 442.31 | 1204.8 | ..... | 1220.4 | 1235.5 | 1249.9 | 1263.6 | 1276.7 | 1289.4 |
| | S | 0.6413 | 1.4697 | ..... | 1.4865 | 1.5025 | 1.5173 | 1.5311 | 1.5441 | 1.5564 |
| | V | 0.0197 | 0.9668 | ..... | 1.002 | 1.041 | 1.078 | 1.113 | 1.147 | 1.180 |
| 480 | U | 443.00 | 1118.9 | ..... | 1129.8 | 1141.7 | 1152.9 | 1163.6 | 1173.8 | 1183.7 |
| (462.82) | H | 444.75 | 1204.8 | ..... | 1218.8 | 1234.1 | 1248.6 | 1262.4 | 1275.7 | 1288.5 |
| | S | 0.6439 | 1.4677 | ..... | 1.4828 | 1.4990 | 1.5139 | 1.5279 | 1.5410 | 1.5534 |
| | V | 0.0197 | 0.9468 | ..... | 0.9774 | 1.016 | 1.052 | 1.087 | 1.121 | 1.153 |
| 490 | U | 445.36 | 1118.9 | ..... | 1128.5 | 1140.6 | 1151.9 | 1162.7 | 1173.1 | 1183.0 |
| (464.93) | H | 447.15 | 1204.7 | ..... | 1217.1 | 1232.7 | 1247.4 | 1261.3 | 1274.7 | 1287.5 |
| | S | 0.6465 | 1.4658 | ..... | 1.4791 | 1.4955 | 1.5106 | 1.5247 | 1.5380 | 1.5504 |
| | V | 0.0197 | 0.9276 | ..... | 0.9537 | 0.9919 | 1.028 | 1.062 | 1.095 | 1.127 |
| 500 | U | 447.70 | 1118.8 | ..... | 1127.2 | 1139.5 | 1151.0 | 1161.9 | 1172.3 | 1182.3 |
| (467.01) | H | 449.52 | 1204.7 | ..... | 1215.5 | 1231.2 | 1246.1 | 1260.2 | 1273.6 | 1286.6 |
| | S | 0.6490 | 1.4639 | ..... | 1.4755 | 1.4921 | 1.5074 | 1.5216 | 1.5349 | 1.5475 |
| | V | 0.0198 | 0.9091 | ..... | 0.9310 | 0.9688 | 1.005 | 1.039 | 1.071 | 1.103 |
| 510 | U | 450.00 | 1118.8 | ..... | 1126.0 | 1138.4 | 1150.0 | 1161.0 | 1171.5 | 1181.6 |
| (469.05) | H | 451.87 | 1204.6 | ..... | 1213.8 | 1229.8 | 1244.8 | 1259.0 | 1272.6 | 1285.7 |
| | S | 0.6515 | 1.4620 | ..... | 1.4718 | 1.4886 | 1.5041 | 1.5185 | 1.5319 | 1.5446 |
| | V | 0.0198 | 0.8914 | ..... | 0.9090 | 0.9466 | 0.9820 | 1.016 | 1.048 | 1.079 |
| 520 | U | 452.27 | 1118.8 | ..... | 1124.7 | 1137.2 | 1149.0 | 1160.1 | 1170.7 | 1180.9 |
| (471.07) | H | 454.18 | 1204.5 | ..... | 1212.1 | 1228.3 | 1243.5 | 1257.8 | 1271.5 | 1284.7 |
| | S | 0.6539 | 1.4601 | ..... | 1.4682 | 1.4853 | 1.5009 | 1.5154 | 1.5290 | 1.5418 |
| | V | 0.0199 | 0.8742 | ..... | 0.8878 | 0.9252 | 0.9603 | 0.9937 | 1.026 | 1.056 |
| 530 | U | 454.51 | 1118.7 | ..... | 1123.4 | 1136.1 | 1148.0 | 1159.2 | 1169.9 | 1180.1 |
| (473.05) | H | 456.46 | 1204.5 | ..... | 1210.4 | 1226.8 | 1242.2 | 1256.7 | 1270.5 | 1283.8 |
| | S | 0.6564 | 1.4583 | ..... | 1.4646 | 1.4819 | 1.4977 | 1.5124 | 1.5261 | 1.5390 |

## Tabla F.4. Vapor sobrecalentado, unidades inglesas (*Continúa*)

| *P*(psia) ($t^{sat}$ / °F) | | liq. sat. | vap. sat. | TEMPERATURA: *t* (°F) 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 |
|---|---|---|---|---|---|---|---|---|---|---|
| | *V* | 0.0192 | 1.2546 | 1.605 | 1.790 | 1.967 | 2.140 | 2.310 | 2.478 | 2.645 |
| 370 | *U* | 414.41 | 1118.4 | 1199.9 | 1242.5 | 1283.6 | 1324.6 | 1366.0 | 1408.0 | 1450.7 |
| (437.04) | *H* | 415.73 | 1204.3 | 1309.8 | 1365.1 | 1418.3 | 1471.1 | 1524.1 | 1577.7 | 1631.8 |
| | *S* | 0.6125 | 1.4918 | 1.6004 | 1.6503 | 1.6943 | 1.7346 | 1.7723 | 1.8077 | 1.8414 |
| | *V* | 0.0193 | 1.2218 | 1.560 | 1.741 | 1.914 | 2.082 | 2.248 | 2.412 | 2.575 |
| 380 | *U* | 417.24 | 1118.5 | 1199.3 | 1242.1 | 1283.3 | 1324.3 | 1365.7 | 1407.8 | 1450.6 |
| (439.61) | *H* | 418.59 | 1204.4 | 1309.0 | 1364.5 | 1417.9 | 1470.8 | 1523.8 | 1577.4 | 1631.6 |
| | *S* | 0.6156 | 1.4894 | 1.5969 | 1.6470 | 1.6911 | 1.7315 | 1.7692 | 1.8047 | 1.8384 |
| | *V* | 0.0193 | 1.1906 | 1.517 | 1.694 | 1.863 | 2.028 | 2.190 | 2.350 | 2.508 |
| 390 | *U* | 420.01 | 1118.6 | 1198.8 | 1241.7 | 1283.0 | 1324.1 | 1365.5 | 1407.6 | 1450.4 |
| (442.13) | *H* | 421.40 | 1204.5 | 1308.2 | 1364.0 | 1417.5 | 1470.4 | 1523.5 | 1577.2 | 1631.4 |
| | *S* | 0.6187 | 1.4870 | 1.5935 | 1.6437 | 1.6880 | 1.7285 | 1.7662 | 1.8017 | 1.8354 |
| | *V* | 0.0193 | 1.1610 | 1.476 | 1.650 | 1.815 | 1.976 | 2.134 | 2.290 | 2.445 |
| 400 | *U* | 422.74 | 1118.7 | 1198.2 | 1241.3 | 1282.7 | 1323.8 | 1365.3 | 1407.4 | 1450.2 |
| (444.60) | *H* | 424.17 | 1204.6 | 1307.4 | 1363.4 | 1417.0 | 1470.1 | 1523.3 | 1576.9 | 1631.2 |
| | *S* | 0.6217 | 1.4847 | 1.5901 | 1.6406 | 1.6850 | 1.7255 | 1.7632 | 1.7988 | 1.8325 |
| | *V* | 0.0194 | 1.1327 | 1.438 | 1.608 | 1.769 | 1.926 | 2.081 | 2.233 | 2.385 |
| 410 | *U* | 425.41 | 1118.7 | 1197.6 | 1240.8 | 1282.4 | 1323.6 | 1365.1 | 1407.2 | 1450.1 |
| (447.02) | *H* | 426.89 | 1204.7 | 1306.6 | 1362.8 | 1416.6 | 1469.7 | 1523.0 | 1576.7 | 1631.0 |
| | *S* | 0.6247 | 1.4825 | 1.5868 | 1.6375 | 1.6820 | 1.7226 | 1.7603 | 1.7959 | 1.8297 |
| | *V* | 0.0194 | 1.1057 | 1.401 | 1.568 | 1.726 | 1.879 | 2.030 | 2.180 | 2.327 |
| 420 | *U* | 428.05 | 1118.8 | 1196.9 | 1240.4 | 1282.0 | 1323.3 | 1364.9 | 1407.0 | 1449.9 |
| (449.40) | *H* | 429.56 | 1204.7 | 1305.8 | 1362.3 | 1416.2 | 1469.4 | 1522.7 | 1576.4 | 1630.8 |
| | *S* | 0.6276 | 1.4802 | 1.5835 | 1.6345 | 1.6791 | 1.7197 | 1.7575 | 1.7932 | 1.8269 |
| | *V* | 0.0195 | 1.0800 | 1.366 | 1.529 | 1.684 | 1.835 | 1.982 | 2.128 | 2.273 |
| 430 | *U* | 430.64 | 1118.8 | 1196.3 | 1240.0 | 1281.7 | 1323.0 | 1364.6 | 1406.8 | 1449.7 |
| (451.74) | *H* | 432.19 | 1204.8 | 1305.0 | 1361.7 | 1415.7 | 1469.0 | 1522.4 | 1576.2 | 1630.6 |
| | *S* | 0.6304 | 1.4781 | 1.5804 | 1.6315 | 1.6762 | 1.7169 | 1.7548 | 1.7904 | 1.8242 |
| | *V* | 0.0195 | 1.0554 | 1.332 | 1.493 | 1.644 | 1.792 | 1.936 | 2.079 | 2.220 |
| 440 | *U* | 433.19 | 1118.8 | 1195.7 | 1239.6 | 1281.4 | 1322.8 | 1364.4 | 1406.6 | 1449.6 |
| (454.03) | *H* | 434.77 | 1204.8 | 1304.2 | 1361.1 | 1415.3 | 1468.7 | 1522.1 | 1575.9 | 1630.4 |
| | *S* | 0.6332 | 1.4759 | 1.5772 | 1.6286 | 1.6734 | 1.7142 | 1.7521 | 1.7878 | 1.8216 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | V | 0.0195 | 1.0318 | 1.300 | 1.458 | 1.607 | 1.751 | 1.892 | 2.032 | 2.170 |
| 450 | U | 435.69 | 1118.9 | 1195.1 | 1239.2 | 1281.1 | 1322.5 | 1364.2 | 1406.5 | 1449.4 |
| (456.28) | H | 437.32 | 1204.8 | 1303.3 | 1360.6 | 1414.9 | 1468.3 | 1521.8 | 1575.7 | 1630.1 |
| | S | 0.6360 | 1.4738 | 1.5742 | 1.6258 | 1.6707 | 1.7115 | 1.7495 | 1.7852 | 1.8190 |
| | V | 0.0196 | 1.0092 | 1.269 | 1.424 | 1.570 | 1.712 | 1.850 | 1.987 | 2.123 |
| 460 | U | 438.17 | 1118.9 | 1194.5 | 1238.8 | 1280.8 | 1322.3 | 1364.0 | 1406.3 | 1449.3 |
| (458.50) | H | 439.83 | 1204.8 | 1302.5 | 1360.0 | 1414.4 | 1468.0 | 1521.5 | 1575.4 | 1629.9 |
| | S | 0.6387 | 1.4718 | 1.5711 | 1.6230 | 1.6680 | 1.7089 | 1.7469 | 1.7826 | 1.8165 |
| | V | 0.0196 | 0.9875 | 1.240 | 1.392 | 1.536 | 1.674 | 1.810 | 1.944 | 2.077 |
| 470 | U | 440.60 | 1118.9 | 1193.9 | 1238.3 | 1280.4 | 1322.0 | 1363.8 | 1406.1 | 1449.1 |
| (460.68) | H | 442.31 | 1204.8 | 1301.7 | 1359.4 | 1414.0 | 1467.6 | 1521.2 | 1575.2 | 1629.7 |
| | S | 0.6413 | 1.4697 | 1.5681 | 1.6202 | 1.6654 | 1.7064 | 1.7444 | 1.7802 | 1.8141 |
| | V | 0.0197 | 0.9668 | 1.211 | 1.361 | 1.502 | 1.638 | 1.772 | 1.903 | 2.033 |
| 480 | U | 443.00 | 1118.9 | 1193.2 | 1237.9 | 1280.1 | 1321.7 | 1363.5 | 1405.9 | 1448.9 |
| (462.82) | H | 444.75 | 1204.8 | 1300.8 | 1358.8 | 1413.6 | 1467.3 | 1520.9 | 1574.9 | 1629.5 |
| | S | 0.6439 | 1.4677 | 1.5652 | 1.6176 | 1.6628 | 1.7038 | 1.7419 | 1.7777 | 1.8116 |
| | V | 0.0197 | 0.9468 | 1.184 | 1.332 | 1.470 | 1.604 | 1.735 | 1.864 | 1.991 |
| 490 | U | 445.36 | 1118.9 | 1192.6 | 1237.5 | 1279.8 | 1321.5 | 1363.3 | 1405.7 | 1448.8 |
| (464.93) | H | 447.15 | 1204.7 | 1300.0 | 1358.3 | 1413.1 | 1466.9 | 1520.6 | 1574.7 | 1629.3 |
| | S | 0.6465 | 1.4658 | 1.5623 | 1.6149 | 1.6603 | 1.7014 | 1.7395 | 1.7753 | 1.8093 |
| | V | 0.0197 | 0.9276 | 1.158 | 1.304 | 1.440 | 1.571 | 1.699 | 1.826 | 1.951 |
| 500 | U | 447.70 | 1118.8 | 1192.0 | 1237.1 | 1279.5 | 1321.2 | 1363.1 | 1405.5 | 1448.6 |
| (467.01) | H | 449.52 | 1204.7 | 1299.1 | 1357.7 | 1412.7 | 1466.6 | 1520.3 | 1574.4 | 1629.1 |
| | S | 0.6490 | 1.4639 | 1.5595 | 1.6123 | 1.6578 | 1.6990 | 1.7371 | 1.7730 | 1.8069 |
| | V | 0.0198 | 0.9091 | 1.133 | 1.277 | 1.410 | 1.539 | 1.665 | 1.789 | 1.912 |
| 510 | U | 450.00 | 1118.8 | 1191.3 | 1236.6 | 1279.2 | 1321.0 | 1362.9 | 1405.3 | 1448.4 |
| (469.05) | H | 451.87 | 1204.6 | 1298.3 | 1357.1 | 1412.2 | 1466.2 | 1520.0 | 1574.2 | 1628.9 |
| | S | 0.6515 | 1.4620 | 1.5567 | 1.6097 | 1.6554 | 1.6966 | 1.7348 | 1.7707 | 1.8047 |
| | V | 0.0198 | 0.8914 | 1.109 | 1.250 | 1.382 | 1.509 | 1.632 | 1.754 | 1.875 |
| 520 | U | 452.27 | 1118.8 | 1190.7 | 1236.2 | 1278.8 | 1320.7 | 1362.7 | 1405.1 | 1448.3 |
| (471.07) | H | 454.18 | 1204.5 | 1297.4 | 1356.5 | 1411.8 | 1465.9 | 1519.7 | 1573.9 | 1628.7 |
| | S | 0.6539 | 1.4601 | 1.5539 | 1.6072 | 1.6530 | 1.6943 | 1.7325 | 1.7684 | 1.8024 |
| | V | 0.0199 | 0.8742 | 1.086 | 1.225 | 1.355 | 1.479 | 1.601 | 1.720 | 1.839 |
| 530 | U | 454.51 | 1118.7 | 1190.0 | 1235.8 | 1278.5 | 1320.4 | 1362.4 | 1404.9 | 1448.1 |
| (473.05) | H | 456.46 | 1204.5 | 1296.5 | 1355.9 | 1411.4 | 1465.5 | 1519.4 | 1573.7 | 1628.4 |
| | S | 0.6564 | 1.4583 | 1.5512 | 1.6047 | 1.6506 | 1.6920 | 1.7302 | 1.7662 | 1.8002 |

## Tabla F.4. Vapor sobrecalentado, unidades inglesas (*Continúa*)

| $P$(psia) ($t^{sat}$ / °F) | | liq. sat. | vap. sat. | TEMPERATURA: $t$ (°F) 500 | 520 | 540 | 560 | 580 | 600 | 650 |
|---|---|---|---|---|---|---|---|---|---|---|
| | *V* | 0.0199 | 0.8577 | 0.9045 | 0.9394 | 0.9725 | 1.004 | 1.035 | 1.064 | 1.134 |
| 540 | *U* | 456.72 | 1118.7 | 1134.9 | 1147.0 | 1158.3 | 1169.1 | 1179.4 | 1189.4 | 1213.0 |
| (475.01) | *H* | 458.71 | 1204.4 | 1225.3 | 1240.8 | 1255.5 | 1269.4 | 1282.8 | 1295.7 | 1326.3 |
| | *S* | 0.6587 | 1.4565 | 1.4786 | 1.4946 | 1.5094 | 1.5232 | 1.5362 | 1.5484 | 1.5767 |
| | *V* | 0.0199 | 0.8418 | 0.8846 | 0.9192 | 0.9520 | 0.9833 | 1.013 | 1.042 | 1.112 |
| 550 | *U* | 458.91 | 1118.6 | 1133.8 | 1145.9 | 1157.4 | 1168.3 | 1178.7 | 1188.7 | 1212.4 |
| (476.94) | *H* | 460.94 | 1204.3 | 1223.8 | 1239.5 | 1254.3 | 1268.4 | 1281.8 | 1294.8 | 1325.6 |
| | *S* | 0.6611 | 1.4547 | 1.4753 | 1.4915 | 1.5064 | 1.5203 | 1.5334 | 1.5458 | 1.5742 |
| | *V* | 0.0200 | 0.8264 | 0.8653 | 0.8997 | 0.9322 | 0.9632 | 0.9930 | 1.022 | 1.090 |
| 560 | *U* | 461.07 | 1118.5 | 1132.6 | 1144.9 | 1156.5 | 1167.5 | 1178.0 | 1188.0 | 1211.9 |
| (478.84) | *H* | 463.14 | 1204.2 | 1222.2 | 1238.1 | 1253.1 | 1267.3 | 1280.9 | 1293.9 | 1324.9 |
| | *S* | 0.6634 | 1.4529 | 1.4720 | 1.4884 | 1.5035 | 1.5175 | 1.5307 | 1.5431 | 1.5717 |
| | *V* | 0.0200 | 0.8115 | 0.8467 | 0.8808 | 0.9131 | 0.9438 | 0.9733 | 1.002 | 1.069 |
| 570 | *U* | 463.20 | 1118.5 | 1131.4 | 1143.9 | 1155.6 | 1166.6 | 1177.2 | 1187.4 | 1211.4 |
| (480.72) | *H* | 465.32 | 1204.1 | 1220.7 | 1236.8 | 1251.9 | 1266.2 | 1279.9 | 1293.0 | 1324.2 |
| | *S* | 0.6657 | 1.4512 | 1.4687 | 1.4853 | 1.5005 | 1.5147 | 1.5280 | 1.5405 | 1.5693 |
| | *V* | 0.0201 | 0.7971 | 0.8287 | 0.8626 | 0.8946 | 0.9251 | 0.9542 | 0.9824 | 1.049 |
| 580 | *U* | 465.31 | 1118.4 | 1130.2 | 1142.8 | 1154.6 | 1165.8 | 1176.5 | 1186.7 | 1210.8 |
| (482.57) | *H* | 467.47 | 1203.9 | 1219.1 | 1235.4 | 1250.7 | 1265.1 | 1278.9 | 1292.1 | 1323.4 |
| | *S* | 0.6679 | 1.4495 | 1.4654 | 1.4822 | 1.4976 | 1.5120 | 1.5254 | 1.5380 | 1.5668 |
| | *V* | 0.0201 | 0.7832 | 0.8112 | 0.8450 | 0.8768 | 0.9069 | 0.9358 | 0.9637 | 1.030 |
| 590 | *U* | 467.40 | 1118.3 | 1129.0 | 1141.7 | 1153.7 | 1165.0 | 1175.7 | 1186.0 | 1210.3 |
| (484.40) | *H* | 469.59 | 1203.8 | 1217.5 | 1234.0 | 1249.4 | 1264.0 | 1277.9 | 1291.2 | 1322.7 |
| | *S* | 0.6701 | 1.4478 | 1.4622 | 1.4792 | 1.4948 | 1.5092 | 1.5227 | 1.5354 | 1.5645 |
| | *V* | 0.0201 | 0.7697 | 0.7944 | 0.8279 | 0.8595 | 0.8894 | 0.9180 | 0.9456 | 1.011 |
| 600 | *U* | 469.46 | 1118.2 | 1127.7 | 1140.7 | 1152.8 | 1164.1 | 1175.0 | 1185.3 | 1209.8 |
| (486.20) | *H* | 471.70 | 1203.7 | 1215.9 | 1232.6 | 1248.2 | 1262.9 | 1276.9 | 1290.3 | 1322.0 |
| | *S* | 0.6723 | 1.4461 | 1.4590 | 1.4762 | 1.4919 | 1.5065 | 1.5201 | 1.5329 | 1.5621 |
| | *V* | 0.0202 | 0.7567 | 0.7780 | 0.8114 | 0.8427 | 0.8724 | 0.9008 | 0.9281 | 0.9927 |
| 610 | *U* | 471.50 | 1118.1 | 1126.5 | 1139.6 | 1151.8 | 1163.3 | 1174.2 | 1184.7 | 1209.2 |
| (487.98) | *H* | 473.78 | 1203.5 | 1214.3 | 1231.2 | 1246.9 | 1261.8 | 1275.9 | 1289.4 | 1321.3 |
| | *S* | 0.6745 | 1.4445 | 1.4558 | 1.4732 | 1.4891 | 1.5038 | 1.5175 | 1.5304 | 1.5598 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | V | 0.0202 | 0.7441 | 0.7621 | 0.7954 | 0.8265 | 0.8560 | 0.8841 | 0.9112 | 0.9751 |
| 620 | U | 473.52 | 1118.0 | 1125.2 | 1138.5 | 1150.8 | 1162.4 | 1173.5 | 1184.0 | 1208.7 |
| (489.74) | H | 475.84 | 1203.4 | 1212.7 | 1229.7 | 1245.7 | 1260.7 | 1274.9 | 1288.5 | 1320.5 |
| | S | 0.6766 | 1.4428 | 1.4526 | 1.4702 | 1.4863 | 1.5011 | 1.5150 | 1.5279 | 1.5575 |
| | V | 0.0202 | 0.7318 | 0.7467 | 0.7798 | 0.8108 | 0.8401 | 0.8680 | 0.8948 | 0.9580 |
| 630 | U | 475.52 | 1117.9 | 1123.9 | 1137.4 | 1149.9 | 1161.6 | 1172.7 | 1183.3 | 1208.1 |
| (491.48) | H | 477.88 | 1203.2 | 1211.0 | 1228.3 | 1244.4 | 1259.5 | 1273.9 | 1287.6 | 1319.8 |
| | S | 0.6787 | 1.4412 | 1.4494 | 1.4672 | 1.4835 | 1.4985 | 1.5124 | 1.5255 | 1.5552 |
| | V | 0.0203 | 0.7200 | 0.7318 | 0.7648 | 0.7956 | 0.8246 | 0.8523 | 0.8788 | 0.9415 |
| 640 | U | 477.49 | 1117.8 | 1122.7 | 1136.3 | 1148.9 | 1160.7 | 1171.9 | 1182.6 | 1207.6 |
| (493.19) | H | 479.89 | 1203.0 | 1209.3 | 1226.8 | 1243.1 | 1258.4 | 1272.8 | 1286.7 | 1319.1 |
| | S | 0.6808 | 1.4396 | 1.4462 | 1.4643 | 1.4807 | 1.4959 | 1.5099 | 1.5231 | 1.5530 |
| | V | 0.0203 | 0.7084 | 0.7173 | 0.7501 | 0.7808 | 0.8096 | 0.8371 | 0.8634 | 0.9254 |
| 650 | U | 479.45 | 1117.6 | 1121.3 | 1135.1 | 1147.9 | 1159.8 | 1171.1 | 1181.9 | 1207.0 |
| (494.89) | H | 481.89 | 1202.8 | 1207.6 | 1225.4 | 1241.8 | 1257.2 | 1271.8 | 1285.7 | 1318.3 |
| | S | 0.6828 | 1.4381 | 1.4430 | 1.4614 | 1.4780 | 1.4932 | 1.5074 | 1.5207 | 1.5507 |
| | V | 0.0204 | 0.6972 | 0.7031 | 0.7359 | 0.7664 | 0.7951 | 0.8224 | 0.8485 | 0.9098 |
| 660 | U | 481.38 | 1117.5 | 1120.0 | 1134.0 | 1146.9 | 1159.0 | 1170.3 | 1181.2 | 1206.5 |
| (496.57) | H | 483.87 | 1202.7 | 1205.9 | 1223.9 | 1240.5 | 1256.1 | 1270.8 | 1284.8 | 1317.6 |
| | S | 0.6849 | 1.4365 | 1.4399 | 1.4584 | 1.4752 | 1.4907 | 1.5049 | 1.5183 | 1.5485 |
| | V | 0.0204 | 0.6864 | 0.6894 | 0.7221 | 0.7525 | 0.7810 | 0.8080 | 0.8339 | 0.8947 |
| 670 | U | 483.30 | 1117.4 | 1118.7 | 1132.8 | 1145.9 | 1158.1 | 1169.6 | 1180.5 | 1205.9 |
| (498.22) | H | 485.83 | 1202.5 | 1204.2 | 1222.4 | 1239.2 | 1254.9 | 1269.7 | 1283.9 | 1316.8 |
| | S | 0.6869 | 1.4350 | 1.4367 | 1.4555 | 1.4725 | 1.4881 | 1.5025 | 1.5159 | 1.5463 |
| | V | 0.0204 | 0.6758 | 0.6760 | 0.7087 | 0.7389 | 0.7673 | 0.7941 | 0.8198 | 0.8801 |
| 680 | U | 485.20 | 1117.2 | 1117.3 | 1131.7 | 1144.9 | 1157.2 | 1168.8 | 1179.8 | 1205.3 |
| (499.86) | H | 487.77 | 1202.3 | 1202.4 | 1220.8 | 1237.9 | 1253.7 | 1268.7 | 1282.9 | 1316.1 |
| | S | 0.6889 | 1.4334 | 1.4336 | 1.4526 | 1.4698 | 1.4855 | 1.5000 | 1.5136 | 1.5442 |
| | V | 0.0205 | 0.6655 | ..... | 0.6956 | 0.7257 | 0.7539 | 0.7806 | 0.8061 | 0.8658 |
| 690 | U | 487.08 | 1117.1 | ..... | 1130.5 | 1143.9 | 1156.3 | 1168.0 | 1179.0 | 1204.8 |
| (501.48) | H | 489.70 | 1202.1 | ..... | 1219.3 | 1236.5 | 1252.5 | 1267.6 | 1282.0 | 1315.3 |
| | S | 0.6908 | 1.4319 | ..... | 1.4497 | 1.4671 | 1.4830 | 1.4976 | 1.5113 | 1.5421 |
| | V | 0.0205 | 0.6556 | ..... | 0.6829 | 0.7129 | 0.7409 | 0.7675 | 0.7928 | 0.8520 |
| 700 | U | 488.95 | 1116.9 | ..... | 1129.3 | 1142.8 | 1155.4 | 1167.1 | 1178.3 | 1204.2 |
| (503.08) | H | 491.60 | 1201.8 | ..... | 1217.8 | 1235.2 | 1251.3 | 1266.6 | 1281.0 | 1314.6 |
| | S | 0.6928 | 1.4304 | ..... | 1.4468 | 1.4644 | 1.4805 | 1.4952 | 1.5090 | 1.5399 |

## Tabla F.4. Vapor sobrecalentado, unidades inglesas (Continúa)

| $P$(psia) ($t_{sat}$ / °F) | | liq. sat. | vap. sat. | TEMPERATURA: $t$ (°F) 700 | 750 | 800 | 900 | 1000 | 1100 | 1200 |
|---|---|---|---|---|---|---|---|---|---|---|
| 540 (475.01) | $V$ | 0.0199 | 0.8577 | 1.201 | 1.266 | 1.328 | 1.451 | 1.570 | 1.688 | 1.804 |
| | $U$ | 456.72 | 1118.7 | 1235.3 | 1257.0 | 1278.2 | 1320.2 | 1362.2 | 1404.8 | 1447.9 |
| | $H$ | 458.71 | 1204.4 | 1355.3 | 1383.4 | 1410.9 | 1465.1 | 1519.1 | 1573.4 | 1628.2 |
| | $S$ | 0.6587 | 1.4565 | 1.6023 | 1.6260 | 1.6483 | 1.6897 | 1.7280 | 1.7640 | 1.7981 |
| 550 (476.94) | $V$ | 0.0199 | 0.8418 | 1.178 | 1.241 | 1.303 | 1.424 | 1.541 | 1.657 | 1.771 |
| | $U$ | 458.91 | 1118.6 | 1234.9 | 1256.6 | 1277.9 | 1319.9 | 1362.0 | 1404.6 | 1447.8 |
| | $H$ | 460.94 | 1204.3 | 1354.7 | 1382.9 | 1410.5 | 1464.8 | 1518.9 | 1573.2 | 1628.0 |
| | $S$ | 0.6611 | 1.4547 | 1.5999 | 1.6237 | 1.6460 | 1.6875 | 1.7259 | 1.7619 | 1.7959 |
| 560 (478.84) | $V$ | 0.0200 | 0.8264 | 1.155 | 1.218 | 1.279 | 1.397 | 1.513 | 1.627 | 1.739 |
| | $U$ | 461.07 | 1118.5 | 1234.4 | 1256.2 | 1277.5 | 1319.6 | 1361.8 | 1404.4 | 1447.6 |
| | $H$ | 463.14 | 1204.2 | 1354.2 | 1382.4 | 1410.0 | 1464.4 | 1518.6 | 1572.9 | 1627.8 |
| | $S$ | 0.6634 | 1.4529 | 1.5975 | 1.6214 | 1.6438 | 1.6853 | 1.7237 | 1.7598 | 1.7939 |
| 570 (480.72) | $V$ | 0.0200 | 0.8115 | 1.133 | 1.195 | 1.255 | 1.372 | 1.486 | 1.597 | 1.708 |
| | $U$ | 463.20 | 1118.5 | 1234.0 | 1255.8 | 1277.2 | 1319.4 | 1361.6 | 1404.2 | 1447.5 |
| | $H$ | 465.32 | 1204.1 | 1353.6 | 1381.9 | 1409.6 | 1464.1 | 1518.3 | 1572.7 | 1627.6 |
| | $S$ | 0.6657 | 1.4512 | 1.5952 | 1.6191 | 1.6415 | 1.6832 | 1.7216 | 1.7577 | 1.7918 |
| 580 (482.57) | $V$ | 0.0201 | 0.7971 | 1.112 | 1.173 | 1.232 | 1.347 | 1.459 | 1.569 | 1.678 |
| | $U$ | 465.31 | 1118.4 | 1233.6 | 1255.5 | 1276.9 | 1319.1 | 1361.3 | 1404.0 | 1447.3 |
| | $H$ | 467.47 | 1203.9 | 1353.0 | 1381.4 | 1409.2 | 1463.7 | 1518.0 | 1572.4 | 1627.4 |
| | $S$ | 0.6679 | 1.4495 | 1.5929 | 1.6169 | 1.6394 | 1.6811 | 1.7196 | 1.7556 | 1.7898 |
| 590 (484.40) | $V$ | 0.0201 | 0.7832 | 1.092 | 1.152 | 1.210 | 1.324 | 1.434 | 1.542 | 1.649 |
| | $U$ | 467.40 | 1118.3 | 1233.1 | 1255.1 | 1276.5 | 1318.9 | 1361.1 | 1403.8 | 1447.1 |
| | $H$ | 469.59 | 1203.8 | 1352.4 | 1380.9 | 1408.7 | 1463.4 | 1517.7 | 1572.2 | 1627.2 |
| | $S$ | 0.6701 | 1.4478 | 1.5906 | 1.6147 | 1.6372 | 1.6790 | 1.7175 | 1.7536 | 1.7878 |
| 600 (486.20) | $V$ | 0.0201 | 0.7697 | 1.073 | 1.132 | 1.189 | 1.301 | 1.409 | 1.516 | 1.621 |
| | $U$ | 469.46 | 1118.2 | 1232.7 | 1254.7 | 1276.2 | 1318.6 | 1360.9 | 1403.6 | 1447.0 |
| | $H$ | 471.70 | 1203.7 | 1351.8 | 1380.4 | 1408.3 | 1463.0 | 1517.4 | 1571.9 | 1627.0 |
| | $S$ | 0.6723 | 1.4461 | 1.5884 | 1.6125 | 1.6351 | 1.6769 | 1.7155 | 1.7517 | 1.7859 |
| 610 (487.98) | $V$ | 0.0202 | 0.7567 | 1.054 | 1.112 | 1.169 | 1.279 | 1.386 | 1.491 | 1.594 |
| | $U$ | 471.50 | 1118.1 | 1232.2 | 1254.3 | 1275.9 | 1318.3 | 1360.7 | 1403.4 | 1446.8 |
| | $H$ | 473.78 | 1203.5 | 1351.2 | 1379.9 | 1407.8 | 1462.7 | 1517.1 | 1571.7 | 1626.7 |
| | $S$ | 0.6745 | 1.4445 | 1.5861 | 1.6104 | 1.6330 | 1.6749 | 1.7135 | 1.7497 | 1.7839 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | *V* | 0.0202 | 0.7441 | 1.035 | 1.093 | 1.149 | 1.257 | 1.363 | 1.466 | 1.568 |
| 620 | *U* | 473.52 | 1118.0 | 1231.8 | 1253.9 | 1275.6 | 1318.1 | 1360.5 | 1403.2 | 1446.6 |
| (489.74) | *H* | 475.84 | 1203.4 | 1350.6 | 1379.3 | 1407.4 | 1462.3 | 1516.8 | 1571.4 | 1626.5 |
| | *S* | 0.6766 | 1.4428 | 1.5839 | 1.6082 | 1.6310 | 1.6729 | 1.7116 | 1.7478 | 1.7820 |
| | *V* | 0.0202 | 0.7318 | 1.017 | 1.074 | 1.130 | 1.236 | 1.340 | 1.442 | 1.543 |
| 630 | *U* | 475.52 | 1117.9 | 1231.3 | 1253.6 | 1275.2 | 1317.8 | 1360.2 | 1403.1 | 1446.5 |
| (491.48) | *H* | 477.88 | 1203.2 | 1350.0 | 1378.8 | 1406.9 | 1461.9 | 1516.5 | 1571.2 | 1626.3 |
| | *S* | 0.6787 | 1.4412 | 1.5818 | 1.6062 | 1.6289 | 1.6710 | 1.7097 | 1.7459 | 1.7802 |
| | *V* | 0.0203 | 0.7200 | 1.000 | 1.056 | 1.111 | 1.216 | 1.319 | 1.419 | 1.518 |
| 640 | *U* | 477.49 | 1117.8 | 1230.9 | 1253.2 | 1274.9 | 1317.5 | 1360.0 | 1402.9 | 1446.3 |
| (493.19) | *H* | 479.89 | 1203.0 | 1349.3 | 1378.3 | 1406.5 | 1461.6 | 1516.2 | 1570.9 | 1626.1 |
| | *S* | 0.6808 | 1.4396 | 1.5797 | 1.6041 | 1.6269 | 1.6690 | 1.7078 | 1.7441 | 1.7783 |
| | *V* | 0.0203 | 0.7084 | 0.9835 | 1.039 | 1.093 | 1.197 | 1.298 | 1.397 | 1.494 |
| 650 | *U* | 479.45 | 1117.6 | 1230.4 | 1252.8 | 1274.6 | 1317.3 | 1359.8 | 1402.7 | 1446.1 |
| (494.89) | *H* | 481.89 | 1202.8 | 1348.7 | 1377.8 | 1406.0 | 1461.2 | 1515.9 | 1570.7 | 1625.9 |
| | *S* | 0.6828 | 1.4381 | 1.5775 | 1.6021 | 1.6249 | 1.6671 | 1.7059 | 1.7422 | 1.7765 |
| | *V* | 0.0204 | 0.6972 | 0.9673 | 1.022 | 1.075 | 1.178 | 1.278 | 1.375 | 1.471 |
| 660 | *U* | 481.38 | 1117.5 | 1230.0 | 1252.4 | 1274.2 | 1317.0 | 1359.6 | 1402.5 | 1446.0 |
| (496.57) | *H* | 483.87 | 1202.7 | 1348.1 | 1377.3 | 1405.6 | 1460.9 | 1515.6 | 1570.4 | 1625.7 |
| | *S* | 0.6849 | 1.4365 | 1.5755 | 1.6001 | 1.6230 | 1.6652 | 1.7041 | 1.7404 | 1.7748 |
| | *V* | 0.0204 | 0.6864 | 0.9516 | 1.006 | 1.058 | 1.160 | 1.258 | 1.354 | 1.449 |
| 670 | *U* | 483.30 | 1117.4 | 1229.5 | 1252.0 | 1273.9 | 1316.7 | 1359.3 | 1402.3 | 1445.8 |
| (498.22) | *H* | 485.83 | 1202.5 | 1347.5 | 1376.7 | 1405.1 | 1460.5 | 1515.3 | 1570.2 | 1625.5 |
| | *S* | 0.6869 | 1.4350 | 1.5734 | 1.5981 | 1.6211 | 1.6634 | 1.7023 | 1.7387 | 1.7730 |
| | *V* | 0.0204 | 0.6758 | 0.9364 | 0.9900 | 1.042 | 1.142 | 1.239 | 1.334 | 1.427 |
| 680 | *U* | 485.20 | 1117.2 | 1229.1 | 1251.6 | 1273.6 | 1316.5 | 1359.1 | 1402.1 | 1445.7 |
| (499.86) | *H* | 487.77 | 1202.3 | 1346.9 | 1376.2 | 1404.7 | 1460.2 | 1515.0 | 1569.9 | 1625.3 |
| | *S* | 0.6889 | 1.4334 | 1.5714 | 1.5961 | 1.6192 | 1.6616 | 1.7005 | 1.7369 | 1.7713 |
| | *V* | 0.0205 | 0.6655 | 0.9216 | 0.9746 | 1.026 | 1.125 | 1.220 | 1.314 | 1.406 |
| 690 | *U* | 487.08 | 1117.1 | 1228.6 | 1251.3 | 1273.2 | 1316.2 | 1358.9 | 1401.9 | 1445.5 |
| (501.48) | *H* | 489.70 | 1202.1 | 1346.3 | 1375.7 | 1404.2 | 1459.8 | 1514.7 | 1569.7 | 1625.0 |
| | *S* | 0.6908 | 1.4319 | 1.5693 | 1.5942 | 1.6173 | 1.6598 | 1.6987 | 1.7352 | 1.7696 |
| | *V* | 0.0205 | 0.6556 | 0.9072 | 0.9596 | 1.010 | 1.108 | 1.202 | 1.295 | 1.386 |
| 700 | *U* | 488.95 | 1116.9 | 1228.1 | 1250.9 | 1272.9 | 1315.9 | 1358.7 | 1401.7 | 1445.3 |
| (503.08) | *H* | 491.60 | 1201.8 | 1345.6 | 1375.2 | 1403.7 | 1459.4 | 1514.4 | 1569.4 | 1624.8 |
| | *S* | 0.6928 | 1.4304 | 1.5673 | 1.5923 | 1.6154 | 1.6580 | 1.6970 | 1.7335 | 1.7679 |

## Tabla F.4. Vapor sobrecalentado, unidades inglesas (Continúa)

| $P$(psia) ($t^{sat}$ / °F) | | liq. sat. | vap. sat. | TEMPERATURA: $t$ (°F) 520 | 540 | 560 | 580 | 600 | 620 | 650 |
|---|---|---|---|---|---|---|---|---|---|---|
| | *V* | 0.0206 | 0.6318 | 0.6525 | 0.6823 | 0.7100 | 0.7362 | 0.7610 | 0.7848 | 0.8190 |
| 725 | *U* | 493.5 | 1116.5 | 1126.3 | 1140.2 | 1153.1 | 1165.1 | 1176.5 | 1187.3 | 1202.8 |
| (507.01) | *H* | 496.3 | 1201.3 | 1213.8 | 1231.7 | 1248.3 | 1263.9 | 1278.6 | 1292.6 | 1312.6 |
| | *S* | 0.6975 | 1.4268 | 1.4396 | 1.4578 | 1.4742 | 1.4893 | 1.5033 | 1.5164 | 1.5347 |
| | *V* | 0.0207 | 0.6095 | 0.6240 | 0.6536 | 0.6811 | 0.7069 | 0.7313 | 0.7547 | 0.7882 |
| 750 | *U* | 498.0 | 1116.1 | 1123.1 | 1137.5 | 1150.7 | 1163.0 | 1174.6 | 1185.6 | 1201.3 |
| (510.84) | *H* | 500.9 | 1200.7 | 1209.7 | 1228.2 | 1245.2 | 1261.1 | 1276.1 | 1290.4 | 1310.7 |
| | *S* | 0.7022 | 1.4232 | 1.4325 | 1.4511 | 1.4680 | 1.4835 | 1.4977 | 1.5111 | 1.5296 |
| | *V* | 0.0208 | 0.5886 | 0.5971 | 0.6267 | 0.6539 | 0.6794 | 0.7035 | 0.7265 | 0.7594 |
| 775 | *U* | 502.4 | 1115.6 | 1119.9 | 1134.7 | 1148.3 | 1160.9 | 1172.7 | 1183.9 | 1199.9 |
| (514.57) | *H* | 505.4 | 1200.1 | 1205.6 | 1224.6 | 1242.1 | 1258.3 | 1273.6 | 1288.1 | 1308.8 |
| | *S* | 0.7067 | 1.4197 | 1.4253 | 1.4446 | 1.4619 | 1.4777 | 1.4923 | 1.5058 | 1.5247 |
| | *V* | 0.0209 | 0.5690 | 0.5717 | 0.6013 | 0.6283 | 0.6536 | 0.6774 | 0.7000 | 0.7323 |
| 800 | *U* | 506.7 | 1115.2 | 1116.6 | 1131.9 | 1145.9 | 1158.8 | 1170.8 | 1182.2 | 1198.4 |
| (518.21) | *H* | 509.8 | 1199.4 | 1201.2 | 1220.9 | 1238.9 | 1255.5 | 1271.1 | 1285.9 | 1306.8 |
| | *S* | 0.7111 | 1.4163 | 1.4782 | 1.4381 | 1.4558 | 1.4720 | 1.4868 | 1.5007 | 1.5198 |
| | *V* | 0.0210 | 0.5505 | ..... | 0.5773 | 0.6042 | 0.6293 | 0.6528 | 0.6751 | 0.7069 |
| 825 | *U* | 510.9 | 1114.6 | ..... | 1129.0 | 1143.4 | 1156.6 | 1168.9 | 1180.5 | 1196.9 |
| (521.76) | *H* | 514.1 | 1198.7 | ..... | 1217.1 | 1235.6 | 1252.6 | 1268.5 | 1283.6 | 1304.8 |
| | *S* | 0.7155 | 1.4129 | ..... | 1.4315 | 1.4498 | 1.4664 | 1.4815 | 1.4956 | 1.5150 |
| | *V* | 0.0211 | 0.5330 | ..... | 0.5546 | 0.5815 | 0.6063 | 0.6296 | 0.6516 | 0.6829 |
| 850 | *U* | 515.1 | 1114.1 | ..... | 1126.0 | 1140.8 | 1154.3 | 1166.9 | 1178.7 | 1195.3 |
| (525.24) | *H* | 518.4 | 1198.0 | ..... | 1213.3 | 1232.2 | 1249.7 | 1265.9 | 1281.2 | 1302.8 |
| | *S* | 0.7197 | 1.4096 | ..... | 1.4250 | 1.4439 | 1.4608 | 1.4763 | 1.4906 | 1.5102 |
| | *V* | 0.0211 | 0.5165 | ..... | 0.5330 | 0.5599 | 0.5846 | 0.6077 | 0.6294 | 0.6602 |
| 875 | *U* | 519.2 | 1113.6 | ..... | 1123.0 | 1138.2 | 1152.0 | 1164.9 | 1176.9 | 1193.8 |
| (528.63) | *H* | 522.6 | 1197.2 | ..... | 1209.3 | 1228.8 | 1246.7 | 1263.3 | 1278.8 | 1300.7 |
| | *S* | 0.7238 | 1.4064 | ..... | 1.4185 | 1.4379 | 1.4553 | 1.4711 | 1.4856 | 1.5056 |
| | *V* | 0.0212 | 0.5009 | ..... | 0.5126 | 0.5394 | 0.5640 | 0.5869 | 0.6084 | 0.6388 |
| 900 | *U* | 523.2 | 1113.0 | ..... | 1119.8 | 1135.5 | 1149.7 | 1162.8 | 1175.1 | 1192.2 |
| (531.95) | *H* | 526.7 | 1196.4 | ..... | 1205.2 | 1225.3 | 1243.6 | 1260.6 | 1276.4 | 1298.6 |
| | *S* | 0.7279 | 1.4032 | ..... | 1.4120 | 1.4320 | 1.4498 | 1.4659 | 1.4807 | 1.5010 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | V | 0.0213 | 0.4861 | ..... | 0.4930 | 0.5200 | 0.5445 | 0.5672 | 0.5885 | 0.6186 |
| 925 | U | 527.1 | 1112.4 | ..... | 1116.5 | 1132.7 | 1147.3 | 1160.8 | 1173.2 | 1190.7 |
| (535.21) | H | 530.8 | 1195.6 | ..... | 1200.9 | 1221.7 | 1240.5 | 1257.8 | 1274.0 | 1296.6 |
| | S | 0.7319 | 1.4001 | ..... | 1.4054 | 1.4260 | 1.4443 | 1.4608 | 1.4759 | 1.4965 |
| | V | 0.0214 | 0.4721 | ..... | 0.4744 | 0.5014 | 0.5259 | 0.5485 | 0.5696 | 0.5993 |
| 950 | U | 531.0 | 1111.7 | ..... | 1113.2 | 1129.9 | 1144.9 | 1158.6 | 1171.4 | 1189.1 |
| (538.39) | H | 534.7 | 1194.7 | ..... | 1196.6 | 1218.0 | 1237.4 | 1255.1 | 1271.5 | 1294.4 |
| | S | 0.7358 | 1.3970 | ..... | 1.3988 | 1.4201 | 1.4389 | 1.4557 | 1.4711 | 1.4921 |
| | V | 0.0215 | 0.4587 | ..... | ..... | 0.4837 | 0.5082 | 0.5307 | 0.5517 | 0.5810 |
| 975 | U | 534.8 | 1111.1 | ..... | ..... | 1127.0 | 1142.4 | 1156.5 | 1169.5 | 1187.5 |
| (541.52) | H | 538.7 | 1193.8 | ..... | ..... | 1214.3 | 1234.1 | 1252.2 | 1269.0 | 1292.3 |
| | S | 0.7396 | 1.3940 | ..... | ..... | 1.4142 | 1.4335 | 1.4507 | 1.4664 | 1.4877 |
| v | V | 0.0216 | 0.4460 | ..... | ..... | 0.4668 | 0.4913 | 0.5137 | 0.5346 | 0.5636 |
| 1000 | U | 538.6 | 1110.4 | ..... | ..... | 1124.0 | 1139.9 | 1154.3 | 1167.5 | 1185.8 |
| (544.58) | H | 542.6 | 1192.9 | ..... | ..... | 1210.4 | 1230.8 | 1249.3 | 1266.5 | 1290.1 |
| | S | 0.7434 | 1.3910 | ..... | ..... | 1.4082 | 1.4281 | 1.4457 | 1.4617 | 1.4833 |
| | V | 0.0217 | 0.4338 | ..... | ..... | 0.4506 | 0.4752 | 0.4975 | 0.5183 | 0.5471 |
| 1025 | U | 542.3 | 1109.7 | ..... | ..... | 1120.9 | 1137.3 | 1152.0 | 1165.6 | 1184.2 |
| (547.58) | H | 546.4 | 1192.0 | ..... | ..... | 1206.4 | 1227.4 | 1246.4 | 1263.9 | 1287.9 |
| | S | 0.7471 | 1.3880 | ..... | ..... | 1.4022 | 1.4227 | 1.4407 | 1.4571 | 1.4791 |
| | V | 0.0218 | 0.4222 | ..... | ..... | 0.4350 | 0.4597 | 0.4821 | 0.5027 | 0.5312 |
| 1050 | U | 545.9 | 1109.0 | ..... | ..... | 1117.8 | 1134.7 | 1149.8 | 1163.6 | 1182.5 |
| (550.53) | H | 550.1 | 1191.0 | ..... | ..... | 1202.3 | 1224.0 | 1243.4 | 1261.2 | 1285.7 |
| | S | 0.7507 | 1.3851 | ..... | ..... | 1.3962 | 1.4173 | 1.4358 | 1.4524 | 1.4748 |
| | V | 0.0219 | 0.4112 | ..... | ..... | 0.4200 | 0.4449 | 0.4673 | 0.4878 | 0.5161 |
| 1075 | U | 549.5 | 1108.3 | ..... | ..... | 1114.5 | 1131.9 | 1147.4 | 1161.5 | 1180.8 |
| (553.43) | H | 553.9 | 1190.1 | ..... | ..... | 1198.1 | 1220.4 | 1240.4 | 1258.6 | 1283.5 |
| | S | 0.7543 | 1.3822 | ..... | ..... | 1.3901 | 1.4118 | 1.4308 | 1.4479 | 1.4706 |
| | V | 0.0220 | 0.4006 | ..... | ..... | 0.4056 | 0.4307 | 0.4531 | 0.4735 | 0.5017 |
| 1100 | U | 553.1 | 1107.5 | ..... | ..... | 1111.2 | 1129.1 | 1145.1 | 1159.5 | 1179.1 |
| (556.28) | H | 557.5 | 1189.1 | ..... | ..... | 1193.7 | 1216.8 | 1237.3 | 1255.9 | 1281.2 |
| | S | 0.7578 | 1.3794 | ..... | ..... | 1.3840 | 1.4064 | 1.4259 | 1.4433 | 1.4664 |
| | V | 0.0220 | 0.3904 | ..... | ..... | 0.3917 | 0.4170 | 0.4394 | 0.4599 | 0.4879 |
| 1125 | U | 556.6 | 1106.8 | ..... | ..... | 1107.7 | 1126.3 | 1142.6 | 1157.4 | 1177.3 |
| (559.07) | H | 561.2 | 1188.0 | ..... | ..... | 1189.2 | 1213.1 | 1234.1 | 1253.1 | 1278.9 |
| | S | 0.7613 | 1.3766 | ..... | ..... | 1.3778 | 1.4009 | 1.4210 | 1.4387 | 1.4623 |

## Tabla F.4. Vapor sobrecalentado, unidades inglesas (Continúa)

| $P$(psia) ($t^{sat}$ / °F) | | liq. sat. | vap. sat. | TEMPERATURA: $t$ (°F) 700 | 750 | 800 | 900 | 1000 | 1100 | 1200 |
|---|---|---|---|---|---|---|---|---|---|---|
| 725 (507.01) | $V$ | 0.0206 | 0.6318 | 0.8729 | 0.9240 | 0.9732 | 1.068 | 1.159 | 1.249 | 1.337 |
| | $U$ | 493.5 | 1116.5 | 1227.0 | 1249.9 | 1272.0 | 1315.3 | 1358.1 | 1401.3 | 1444.9 |
| | $H$ | 496.3 | 1201.3 | 1344.1 | 1373.8 | 1402.6 | 1458.5 | 1513.7 | 1568.8 | 1624.3 |
| | $S$ | 0.6975 | 1.4268 | 1.5624 | 1.5876 | 1.6109 | 1.6536 | 1.6927 | 1.7293 | 1.7638 |
| 750 (510.84) | $V$ | 0.0207 | 0.6095 | 0.8409 | 0.8907 | 0.9386 | 1.031 | 1.119 | 1.206 | 1.292 |
| | $U$ | 498.0 | 1116.1 | 1225.8 | 1248.9 | 1271.2 | 1314.6 | 1357.6 | 1400.8 | 1444.5 |
| | $H$ | 500.9 | 1200.7 | 1342.5 | 1372.5 | 1401.5 | 1457.6 | 1512.9 | 1568.2 | 1623.8 |
| | $S$ | 0.7022 | 1.4232 | 1.5577 | 1.5830 | 1.6065 | 1.6494 | 1.6886 | 1.7252 | 1.7598 |
| 775 (514.57) | $V$ | 0.0208 | 0.5886 | 0.8109 | 0.8595 | 0.9062 | 0.9957 | 1.082 | 1.166 | 1.249 |
| | $U$ | 502.4 | 1115.6 | 1224.6 | 1247.9 | 1270.3 | 1313.9 | 1357.0 | 1400.3 | 1444.1 |
| | $H$ | 505.4 | 1200.1 | 1340.9 | 1371.2 | 1400.3 | 1456.7 | 1512.2 | 1567.6 | 1623.2 |
| | $S$ | 0.7067 | 1.4197 | 1.5530 | 1.5786 | 1.6022 | 1.6453 | 1.6846 | 1.7213 | 1.7559 |
| 800 (518.21) | $V$ | 0.0209 | 0.5690 | 0.7828 | 0.8303 | 0.8759 | 0.9631 | 1.047 | 1.129 | 1.209 |
| | $U$ | 506.7 | 1115.2 | 1223.4 | 1246.9 | 1269.5 | 1313.2 | 1356.4 | 1399.8 | 1443.7 |
| | $H$ | 509.8 | 1199.4 | 1339.3 | 1369.8 | 1399.1 | 1455.8 | 1511.4 | 1566.9 | 1622.7 |
| | $S$ | 0.7111 | 1.4163 | 1.5484 | 1.5742 | 1.5980 | 1.6413 | 1.6807 | 1.7175 | 1.7522 |
| 825 (521.76) | $V$ | 0.0210 | 0.5505 | 0.7564 | 0.8029 | 0.8473 | 0.9323 | 1.014 | 1.094 | 1.172 |
| | $U$ | 510.9 | 1114.6 | 1222.2 | 1245.9 | 1268.6 | 1312.6 | 1355.9 | 1399.3 | 1443.3 |
| | $H$ | 514.1 | 1198.7 | 1337.7 | 1368.5 | 1398.0 | 1454.9 | 1510.7 | 1566.3 | 1622.2 |
| | $S$ | 0.7155 | 1.4129 | 1.5440 | 1.5700 | 1.5939 | 1.6374 | 1.6770 | 1.7138 | 1.7485 |
| 850 (525.24) | $V$ | 0.0211 | 0.5330 | 0.7315 | 0.7770 | 0.8205 | 0.9034 | 0.9830 | 1.061 | 1.137 |
| | $U$ | 515.1 | 1114.1 | 1221.0 | 1244.9 | 1267.7 | 1311.9 | 1355.3 | 1398.9 | 1442.9 |
| | $H$ | 518.4 | 1198.0 | 1336.0 | 1367.1 | 1396.8 | 1454.0 | 1510.0 | 1565.7 | 1621.6 |
| | $S$ | 0.7197 | 1.4096 | 1.5396 | 1.5658 | 1.5899 | 1.6336 | 1.6733 | 1.7102 | 1.7450 |
| 875 (528.63) | $V$ | 0.0211 | 0.5165 | 0.7080 | 0.7526 | 0.7952 | 0.8762 | 0.9538 | 1.029 | 1.103 |
| | $U$ | 519.2 | 1113.6 | 1219.7 | 1243.9 | 1266.9 | 1311.2 | 1354.8 | 1398.4 | 1442.5 |
| | $H$ | 522.6 | 1197.2 | 1334.4 | 1365.7 | 1395.6 | 1453.1 | 1509.2 | 1565.1 | 1621.1 |
| | $S$ | 0.7238 | 1.4064 | 1.5353 | 1.5618 | 1.5860 | 1.6299 | 1.6697 | 1.7067 | 1.7416 |
| 900 (531.95) | $V$ | 0.0212 | 0.5009 | 0.6858 | 0.7296 | 0.7713 | 0.8504 | 0.9262 | 0.9998 | 1.072 |
| | $U$ | 523.2 | 1113.0 | 1218.5 | 1242.8 | 1266.0 | 1310.5 | 1354.2 | 1397.9 | 1442.0 |
| | $H$ | 526.7 | 1196.4 | 1332.7 | 1364.3 | 1394.4 | 1452.2 | 1508.5 | 1564.4 | 1620.6 |
| | $S$ | 0.7279 | 1.4032 | 1.5311 | 1.5578 | 1.5822 | 1.6263 | 1.6662 | 1.7033 | 1.7382 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | *V* | 0.0213 | 0.4861 | 0.6648 | 0.7078 | 0.7486 | 0.8261 | 0.9001 | 0.9719 | 1.042 |
| 925 | *U* | 527.1 | 1112.4 | 1217.2 | 1241.8 | 1265.1 | 1309.8 | 1353.6 | 1397.4 | 1441.6 |
| (535.21) | *H* | 530.8 | 1195.6 | 1331.0 | 1362.9 | 1393.2 | 1451.2 | 1507.7 | 1563.8 | 1620.0 |
| | *S* | 0.7319 | 1.4001 | 1.5269 | 1.5539 | 1.5784 | 1.6227 | 1.6628 | 1.7000 | 1.7349 |
| | *V* | 0.0214 | 0.4721 | 0.6449 | 0.6871 | 0.7272 | 0.8030 | 0.8753 | 0.9455 | 1.014 |
| 950 | *U* | 531.0 | 1111.7 | 1216.0 | 1240.7 | 1264.2 | 1309.1 | 1353.1 | 1397.0 | 1441.2 |
| (538.39) | *H* | 534.7 | 1194.7 | 1329.3 | 1361.5 | 1392.0 | 1450.3 | 1507.0 | 1563.2 | 1619.5 |
| | *S* | 0.7358 | 1.3970 | 1.5228 | 1.5500 | 1.5748 | 1.6193 | 1.6595 | 1.6967 | 1.7317 |
| | *V* | 0.0215 | 0.4587 | 0.6259 | 0.6675 | 0.7068 | 0.7811 | 0.8518 | 0.9204 | 0.9875 |
| 975 | *U* | 534.8 | 1111.1 | 1214.7 | 1239.7 | 1263.3 | 1308.5 | 1352.5 | 1396.5 | 1440.8 |
| (541.52) | *H* | 538.7 | 1193.8 | 1327.6 | 1360.1 | 1390.8 | 1449.4 | 1506.2 | 1562.5 | 1619.0 |
| | *S* | 0.7396 | 1.3940 | 1.5188 | 1.5463 | 1.5712 | 1.6159 | 1.6562 | 1.6936 | 1.7286 |
| | *V* | 0.0216 | 0.4460 | 0.6080 | 0.6489 | 0.6875 | 0.7603 | 0.8295 | 0.8966 | 0.9621 |
| 1000 | *U* | 538.6 | 1110.4 | 1213.4 | 1238.6 | 1262.4 | 1307.8 | 1351.9 | 1396.0 | 1440.4 |
| (544.58) | *H* | 542.6 | 1192.9 | 1325.9 | 1358.7 | 1389.6 | 1448.5 | 1505.4 | 1561.9 | 1618.4 |
| | *S* | 0.7434 | 1.3910 | 1.5149 | 1.5426 | 1.5677 | 1.6126 | 1.6530 | 1.6905 | 1.7256 |
| | *V* | 0.0217 | 0.4338 | 0.5908 | 0.6311 | 0.6690 | 0.7405 | 0.8083 | 0.8739 | 0.9380 |
| 1025 | *U* | 542.3 | 1109.7 | 1212.1 | 1237.5 | 1261.5 | 1307.1 | 1351.4 | 1395.5 | 1440.0 |
| (547.58) | *H* | 546.4 | 1192.0 | 1324.2 | 1357.3 | 1388.4 | 1447.5 | 1504.7 | 1561.3 | 1617.9 |
| | *S* | 0.7471 | 1.3880 | 1.5110 | 1.5389 | 1.5642 | 1.6094 | 1.6499 | 1.6874 | 1.7226 |
| | *V* | 0.0218 | 0.4222 | 0.5745 | 0.6142 | 0.6515 | 0.7216 | 0.7881 | 0.8524 | 0.9151 |
| 1050 | *U* | 545.9 | 1109.0 | 1210.8 | 1236.5 | 1260.6 | 1306.4 | 1350.8 | 1395.0 | 1439.6 |
| (550.53) | *H* | 550.1 | 1191.0 | 1322.4 | 1355.8 | 1387.2 | 1446.6 | 1503.9 | 1560.7 | 1617.4 |
| | *S* | 0.7507 | 1.3851 | 1.5072 | 1.5354 | 1.5608 | 1.6062 | 1.6469 | 1.6845 | 1.7197 |
| | *V* | 0.0219 | 0.4112 | 0.5589 | 0.5981 | 0.6348 | 0.7037 | 0.7688 | 0.8318 | 0.8932 |
| 1075 | *U* | 549.5 | 1108.3 | 1209.4 | 1235.4 | 1259.7 | 1305.7 | 1350.2 | 1394.6 | 1439.2 |
| (553.43) | *H* | 553.9 | 1190.1 | 1320.6 | 1354.4 | 1386.0 | 1445.7 | 1503.2 | 1560.0 | 1616.8 |
| | *S* | 0.7543 | 1.3822 | 1.5034 | 1.5319 | 1.5575 | 1.6031 | 1.6439 | 1.6816 | 1.7169 |
| | *V* | 0.0220 | 0.4006 | 0.5440 | 0.5826 | 0.6188 | 0.6865 | 0.7505 | 0.8121 | 0.8723 |
| 1100 | *U* | 553.1 | 1107.5 | 1208.1 | 1234.3 | 1258.8 | 1305.0 | 1349.7 | 1394.1 | 1438.7 |
| (556.28) | *H* | 557.5 | 1189.1 | 1318.8 | 1352.9 | 1384.7 | 1444.7 | 1502.4 | 1559.4 | 1616.3 |
| | *S* | 0.7578 | 1.3794 | 1.4996 | 1.5284 | 1.5542 | 1.6000 | 1.6410 | 1.6787 | 1.7141 |
| | *V* | 0.0220 | 0.3904 | 0.5298 | 0.5679 | 0.6035 | 0.6701 | 0.7329 | 0.7934 | 0.8523 |
| 1125 | *U* | 556.6 | 1106.8 | 1206.7 | 1233.2 | 1257.8 | 1304.3 | 1349.1 | 1393.6 | 1438.3 |
| (559.07) | *H* | 561.2 | 1188.0 | 1317.0 | 1351.4 | 1383.5 | 1443.8 | 1501.7 | 1558.8 | 1615.8 |
| | *S* | 0.7613 | 1.3766 | 1.4959 | 1.5250 | 1.5509 | 1.5970 | 1.6381 | 1.6759 | 1.7114 |