

# PRESSURE-TEMPERATURE CHART

## Suva® refrigerants

| Saturated Conditions—Pressure (psig) |                        |                         |                           |                           |                                     |                                    |                         |       |
|--------------------------------------|------------------------|-------------------------|---------------------------|---------------------------|-------------------------------------|------------------------------------|-------------------------|-------|
| °F                                   | Freon®<br>22<br>(R-22) | Suva®<br>123<br>(R-123) | Suva®<br>134a<br>(R-134a) | Suva®<br>HP62<br>(R-404A) | Suva®<br>410A<br>(9100)<br>(R-410A) | Suva®<br>507<br>(AZ-50)<br>(R-507) | Suva®<br>95<br>(R-508B) | °C    |
| -120                                 |                        |                         |                           |                           |                                     |                                    | 3.0                     | -84.8 |
| -115                                 |                        |                         |                           |                           |                                     |                                    | 5.9                     | -81.7 |
| -110                                 |                        |                         |                           |                           |                                     |                                    | 9.2                     | -78.9 |
| -105                                 |                        |                         |                           |                           |                                     |                                    | 12.8                    | -76.1 |
| -100                                 |                        |                         |                           |                           |                                     |                                    | 16.9                    | -73.3 |
| -95                                  |                        |                         |                           |                           |                                     |                                    | 21.4                    | -70.6 |
| -90                                  |                        |                         |                           |                           |                                     |                                    | 26.4                    | -67.8 |
| -85                                  |                        |                         |                           |                           |                                     |                                    | 31.9                    | -65.0 |
| -80                                  |                        |                         |                           |                           |                                     |                                    | 37.9                    | -62.2 |
| -75                                  |                        |                         |                           |                           | 10.2"                               |                                    | 44.5                    | -59.4 |
| -70                                  |                        |                         |                           |                           | 7.0"                                |                                    | 51.5                    | -56.7 |
| -65                                  |                        |                         |                           |                           | 3.4"                                |                                    | 59.6                    | -53.9 |
| -60                                  | 12.4"                  |                         |                           |                           | 0.3                                 |                                    | 68.1                    | -51.1 |
| -55                                  | 9.7"                   |                         |                           |                           | 2.5                                 |                                    | 77.3                    | -48.3 |
| -50                                  | 6.6"                   |                         | 19.1"                     | 0.2                       | 5.0                                 | 0.9                                | 87.3                    | -45.6 |
| -48                                  | 5.3"                   |                         | 18.4"                     | 1.0                       | 6.1                                 | 1.8                                | 91.5                    | -44.4 |
| -46                                  | 3.9"                   |                         | 17.7"                     | 1.8                       | 7.2                                 | 2.7                                | 95.8                    | -43.3 |
| -44                                  | 2.5"                   |                         | 16.9"                     | 2.7                       | 8.3                                 | 3.6                                | 100                     | -42.2 |
| -42                                  | 1.0"                   |                         | 16.1"                     | 3.6                       | 9.5                                 | 4.6                                | 105                     | -41.1 |
| -40                                  | 0.5"                   |                         | 15.2"                     | 4.6                       | 10.8                                | 5.6                                | 109                     | -40.0 |
| -38                                  | 1.1                    |                         | 14.3"                     | 5.6                       | 12.1                                | 6.6                                | 114                     | -38.9 |
| -36                                  | 1.9                    |                         | 13.4"                     | 6.6                       | 13.4                                | 7.7                                | 119                     | -37.8 |
| -34                                  | 2.8                    |                         | 12.4"                     | 7.7                       | 14.9                                | 8.8                                | 124                     | -36.7 |
| -32                                  | 3.7                    |                         | 11.3"                     | 8.8                       | 16.3                                | 10.0                               | 129                     | -35.6 |
| -30                                  | 4.7                    |                         | 10.2"                     | 9.9                       | 17.8                                | 11.2                               | 135                     | -34.4 |
| -28                                  | 5.7                    |                         | 9.1"                      | 11.1                      | 19.4                                | 12.5                               | 140                     | -33.3 |
| -26                                  | 6.7                    |                         | 7.9"                      | 12.4                      | 21.0                                | 13.8                               | 146                     | -32.2 |
| -24                                  | 7.8                    |                         | 6.6"                      | 13.7                      | 22.7                                | 15.1                               | 152                     | -31.1 |
| -22                                  | 8.9                    |                         | 5.3"                      | 15.0                      | 24.5                                | 16.5                               | 158                     | -30.0 |
| -20                                  | 10.0                   |                         | 4.0"                      | 16.4                      | 26.3                                | 18.0                               | 164                     | -28.9 |
| -18                                  | 11.2                   |                         | 2.5"                      | 17.8                      | 28.2                                | 19.5                               | 170                     | -27.8 |
| -16                                  | 12.4                   |                         | 1.1"                      | 19.3                      | 30.1                                | 21.0                               | 177                     | -26.7 |
| -14                                  | 13.7                   |                         | 0.2                       | 20.8                      | 32.1                                | 22.6                               | 184                     | -25.6 |
| -12                                  | 15.0                   |                         | 1.0                       | 22.4                      | 34.2                                | 24.3                               | 191                     | -24.4 |
| -10                                  | 16.4                   |                         | 1.9                       | 24.0                      | 36.4                                | 26.0                               | 198                     | -23.3 |
| -8                                   | 17.8                   |                         | 2.7                       | 25.7                      | 38.6                                | 27.8                               | 205                     | -22.2 |
| -6                                   | 19.3                   |                         | 3.6                       | 27.4                      | 40.9                                | 29.6                               | 212                     | -21.1 |
| -4                                   | 20.8                   |                         | 4.5                       | 29.2                      | 43.3                                | 31.4                               | 220                     | -20.0 |
| -2                                   | 22.4                   |                         | 5.5                       | 31.1                      | 45.7                                | 33.4                               | 227                     | -18.9 |
| 0                                    | 24                     |                         | 6.5                       | 33.0                      | 48.2                                | 35.4                               | 235                     | -17.8 |
| 2                                    | 25.7                   |                         | 7.5                       | 35.0                      | 50.8                                | 37.4                               | 244                     | -16.7 |
| 4                                    | 27.4                   |                         | 8.6                       | 37.0                      | 53.5                                | 39.5                               | 252                     | -15.6 |
| 6                                    | 29.2                   |                         | 9.7                       | 39.1                      | 56.3                                | 41.7                               | 260                     | -14.4 |
| 8                                    | 31.0                   |                         | 10.8                      | 41.3                      | 59.2                                | 44.0                               | 269                     | -13.3 |
| 10                                   | 32.9                   |                         | 12.0                      | 43.5                      | 62.1                                | 46.3                               | 278                     | -12.2 |
| 12                                   | 34.8                   |                         | 13.2                      | 45.8                      | 65.2                                | 48.6                               | 287                     | -11.1 |
| 14                                   | 36.8                   |                         | 14.5                      | 48.2                      | 68.3                                | 51.1                               | 297                     | -10.0 |
| 16                                   | 38.9                   |                         | 15.8                      | 50.6                      | 71.5                                | 53.6                               | 307                     | -8.9  |
| 18                                   | 41.0                   |                         | 17.2                      | 53.1                      | 74.8                                | 56.2                               | 316                     | -7.8  |
| 20                                   | 43.2                   | 22.8"                   | 18.6                      | 55.7                      | 78.2                                | 58.8                               | 326                     | -6.7  |

| Saturated Conditions—Pressure (psig) |                        |                         |                           |                           |                                     |                                    |                         |      |
|--------------------------------------|------------------------|-------------------------|---------------------------|---------------------------|-------------------------------------|------------------------------------|-------------------------|------|
| °F                                   | Freon®<br>22<br>(R-22) | Suva®<br>123<br>(R-123) | Suva®<br>134a<br>(R-134a) | Suva®<br>HP62<br>(R-404A) | Suva®<br>410A<br>(9100)<br>(R-410A) | Suva®<br>507<br>(AZ-50)<br>(R-507) | Suva®<br>95<br>(R-508B) | °C   |
| 22                                   | 45.5                   | 22.4"                   | 20.0                      | 58.4                      | 81.7                                | 61.6                               | 336                     | -5.6 |
| 24                                   | 47.8                   | 22.0"                   | 21.5                      | 61.1                      | 85.3                                | 64.4                               | 346                     | -4.4 |
| 26                                   | 50.2                   | 21.6"                   | 23.1                      | 63.9                      | 89.1                                | 67.3                               | 357                     | -3.3 |
| 28                                   | 52.6                   | 21.2"                   | 24.7                      | 66.8                      | 92.9                                | 70.2                               | 368                     | -2.2 |
| 30                                   | 55.1                   | 20.8"                   | 26.3                      | 69.7                      | 96.8                                | 73.3                               | 379                     | -1.1 |
| 32                                   | 57.7                   | 20.3"                   | 28.0                      | 72.8                      | 101                                 | 76.4                               | 390                     | 0    |
| 34                                   | 60.4                   | 19.9"                   | 29.7                      | 75.9                      | 105                                 | 79.6                               | 402                     | 1.1  |
| 36                                   | 63.1                   | 19.4"                   | 31.5                      | 79.1                      | 109                                 | 82.9                               | 414                     | 2    |
| 38                                   | 65.9                   | 18.8"                   | 33.4                      | 82.4                      | 114                                 | 86.2                               | 426                     | 3.3  |
| 40                                   | 68.7                   | 18.3"                   | 35.3                      | 85.7                      | 118                                 | 89.7                               | 438                     | 4.4  |
| 42                                   | 71.7                   | 17.7"                   | 37.3                      | 89.2                      | 123                                 | 93.2                               | 451                     | 5.6  |
| 44                                   | 74.7                   | 17.1"                   | 39.3                      | 92.7                      | 127                                 | 96.9                               | 464                     | 6.7  |
| 46                                   | 77.8                   | 16.5"                   | 41.4                      | 96.4                      | 132                                 | 100.6                              | 477                     | 7.8  |
| 48                                   | 81.0                   | 15.9"                   | 43.5                      | 100.1                     | 137                                 | 104.4                              | 490                     | 8.9  |
| 50                                   | 84.2                   | 15.2"                   | 45.7                      | 103.9                     | 142                                 | 108.3                              | 504                     | 10.0 |
| 55                                   | 92.7                   | 13.4"                   | 51.5                      | 114                       | 156                                 | 119                                | 539                     | 12.8 |
| 60                                   | 102                    | 11.4"                   | 57.7                      | 124                       | 170                                 | 129                                |                         | 15.6 |
| 65                                   | 111                    | 9.3"                    | 64.3                      | 136                       | 185                                 | 141                                |                         | 18.3 |
| 70                                   | 122                    | 6.9"                    | 71.3                      | 148                       | 200                                 | 153                                |                         | 21.1 |
| 75                                   | 132                    | 4.3"                    | 78.9                      | 160                       | 217                                 | 166                                |                         | 23.9 |
| 80                                   | 144                    | 1.5"                    | 86.9                      | 174                       | 235                                 | 180                                |                         | 26.7 |
| 85                                   | 156                    | 0.8                     | 95.4                      | 188                       | 254                                 | 194                                |                         | 29.4 |
| 90                                   | 168                    | 2.4                     | 104                       | 203                       | 274                                 | 210                                |                         | 32.2 |
| 95                                   | 182                    | 4.2                     | 114                       | 218                       | 295                                 | 226                                |                         | 35.0 |
| 100                                  | 196                    | 6.1                     | 124                       | 235                       | 317                                 | 243                                |                         | 37.8 |
| 105                                  | 210                    | 8.1                     | 135                       | 252                       | 340                                 | 261                                |                         | 40.6 |
| 110                                  | 226                    | 10.3                    | 146                       | 270                       | 364                                 | 280                                |                         | 43.3 |
| 115                                  | 242                    | 12.7                    | 158                       | 290                       | 390                                 | 300                                |                         | 46.1 |
| 120                                  | 260                    | 15.2                    | 171                       | 310                       | 417                                 | 322                                |                         | 48.9 |
| 125                                  | 278                    | 17.8                    | 184                       | 331                       | 445                                 | 344                                |                         | 51.7 |
| 130                                  | 296                    | 20.7                    | 199                       | 353                       | 475                                 | 368                                |                         | 54.4 |
| 135                                  | 316                    | 23.7                    | 213                       | 376                       | 506                                 | 392                                |                         | 57.2 |
| 140                                  | 337                    | 27.0                    | 229                       | 401                       | 538                                 | 418                                |                         | 60.0 |
| 145                                  | 359                    | 30.4                    | 246                       | 426                       | 573                                 | 446                                |                         | 62.8 |
| 150                                  | 381                    | 34.0                    | 263                       | 453                       | 608                                 | 475                                |                         | 65.6 |

"Denotes inches of mercury ("Hg)

### Eight Easy Steps to Retrofit

From CFC-12 to Suva® MP39, Suva® 409A, or Suva® MP66  
From R-502 to Suva® HP80, Suva® 408A, or Suva® HP81

1. Establish baseline performance with CFC.
2. Remove CFC from the system into a recovery cylinder.  
Weigh the amount removed if possible.
3. Drain mineral oil from the system and measure the volume removed. (Skip steps 3 and 4 if alkylbenzene is already in the system or you are not changing the mineral oil.) Field experience has shown that Suva® MP39, 409A, MP66, and HP81 work successfully with the existing mineral oil in many unitary and other close-coupled systems where oil return is not a concern.
4. Add alkylbenzene lubricant; use the same volume as removed in step 3.
5. Replace filter/drier.
6. Evacuate system and check for leaks.
7. Charge with Suva® refrigerant.
  - Remove liquid only from charging cylinder
  - Typical charge is 75–90% of CFC charge
8. Start up the system.
  - Adjust charge size
  - Label system for the refrigerant and lubricant used

# PRESSURE-TEMPERATURE CHART

## Suva® refrigerants

**Superheat —  
Saturated Vapor  
Pressures**

Typical  
pH Diagram  
Superheat—  
Reference Point



**Dew Point—Saturated Vapor (psig)**

| °F  | Suva®<br>MP39<br>(R-401A) | Suva®<br>MP66<br>(R-401B) | Suva®<br>HP80<br>(R-402A) | Suva®<br>HP81<br>(R-402B) | Suva®<br>9000<br>(R-407C) | Suva®<br>408A<br>(R-408A) | Suva®<br>409A<br>(R-409A) | °C  |
|-----|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|-----|
| -50 | 18.4"                     | 17.2"                     | 1.0                       | 1.1"                      | 11.2"                     | 2.5"                      | 18.6"                     | -46 |
| -48 | 17.6"                     | 16.4"                     | 1.8                       | 0.3                       | 10.0"                     | 1.0"                      | 17.9"                     | -44 |
| -46 | 16.9"                     | 15.5"                     | 2.7                       | 1.1                       | 8.9"                      | 0.3                       | 17.1"                     | -43 |
| -44 | 16.1"                     | 14.7"                     | 3.7                       | 1.9                       | 7.6"                      | 1.1                       | 16.4"                     | -42 |
| -42 | 15.2"                     | 13.8"                     | 4.6                       | 2.8                       | 6.3"                      | 1.9                       | 15.6"                     | -41 |
| -40 | 14.3"                     | 12.8"                     | 5.6                       | 3.7                       | 4.9"                      | 2.8                       | 14.7"                     | -40 |
| -38 | 13.4"                     | 11.8"                     | 6.7                       | 4.7                       | 3.5"                      | 3.7                       | 13.8"                     | -39 |
| -36 | 12.4"                     | 10.7"                     | 7.8                       | 5.7                       | 2.0"                      | 4.6                       | 12.9"                     | -38 |
| -34 | 11.4"                     | 9.6"                      | 8.9                       | 6.7                       | 0.4"                      | 5.6                       | 11.9"                     | -37 |
| -32 | 10.3"                     | 8.5"                      | 10.0                      | 7.8                       | 0.6                       | 6.6                       | 10.9"                     | -36 |
| -30 | 9.2"                      | 7.3"                      | 11.3                      | 8.9                       | 1.4                       | 7.6                       | 9.9"                      | -34 |
| -28 | 8.1"                      | 6.0"                      | 12.5                      | 10.1                      | 2.3                       | 8.7                       | 8.8"                      | -33 |
| -26 | 6.9"                      | 4.7"                      | 13.8                      | 11.3                      | 3.2                       | 9.8                       | 7.6"                      | -32 |
| -24 | 5.6"                      | 3.3"                      | 15.2                      | 12.5                      | 4.2                       | 11.0                      | 6.4"                      | -31 |
| -22 | 4.3"                      | 1.9"                      | 16.6                      | 13.8                      | 5.2                       | 12.2                      | 5.2"                      | -30 |
| -20 | 2.9"                      | 0.4"                      | 18.0                      | 15.2                      | 6.2                       | 13.4                      | 3.8"                      | -29 |
| -18 | 1.5"                      | 0.6                       | 19.5                      | 16.6                      | 7.3                       | 14.7                      | 2.5"                      | -28 |
| -16 | 0.0                       | 1.3                       | 21.1                      | 18.0                      | 8.4                       | 16.1                      | 1.1"                      | -27 |
| -14 | 0.8                       | 2.2                       | 22.7                      | 19.5                      | 9.5                       | 17.5                      | 0.2                       | -26 |
| -12 | 1.6                       | 3.0                       | 24.4                      | 21.0                      | 10.7                      | 18.9                      | 0.9                       | -24 |
| -10 | 2.4                       | 3.9                       | 26.1                      | 22.6                      | 12.0                      | 20.4                      | 1.7                       | -23 |
| -8  | 3.2                       | 4.8                       | 27.9                      | 24.3                      | 13.3                      | 22.0                      | 2.5                       | -22 |
| -6  | 4.1                       | 5.8                       | 29.7                      | 26.0                      | 14.6                      | 23.6                      | 3.4                       | -21 |
| -4  | 5.0                       | 6.8                       | 31.6                      | 27.7                      | 16.0                      | 25.2                      | 4.3                       | -20 |
| -2  | 6.0                       | 7.8                       | 33.5                      | 29.5                      | 17.4                      | 26.9                      | 5.2                       | -19 |
| 0   | 7.0                       | 8.9                       | 35.6                      | 31.4                      | 18.9                      | 28.7                      | 6.1                       | -18 |
| 2   | 8.0                       | 10.0                      | 37.6                      | 33.3                      | 20.5                      | 30.5                      | 7.1                       | -17 |
| 4   | 9.1                       | 11.1                      | 39.8                      | 35.3                      | 22.1                      | 32.3                      | 8.1                       | -16 |
| 6   | 10.2                      | 12.3                      | 42.0                      | 37.4                      | 23.7                      | 34.3                      | 9.2                       | -14 |
| 8   | 11.3                      | 13.5                      | 44.3                      | 39.5                      | 25.4                      | 36.3                      | 10.3                      | -13 |
| 10  | 12.5                      | 14.8                      | 46.6                      | 41.7                      | 27.2                      | 38.3                      | 11.4                      | -12 |
| 12  | 13.7                      | 16.1                      | 49.0                      | 43.9                      | 29.0                      | 40.4                      | 12.6                      | -11 |
| 14  | 15.0                      | 17.4                      | 51.5                      | 46.2                      | 30.9                      | 42.6                      | 13.8                      | -10 |
| 16  | 16.3                      | 18.8                      | 54.0                      | 48.6                      | 32.9                      | 44.9                      | 15.0                      | -9  |
| 18  | 17.6                      | 20.3                      | 56.7                      | 51.1                      | 34.9                      | 47.2                      | 16.3                      | -8  |
| 20  | 19.0                      | 21.8                      | 59.4                      | 53.6                      | 37.0                      | 49.5                      | 17.6                      | -7  |
| 22  | 20.5                      | 23.3                      | 62.2                      | 56.2                      | 39.1                      | 52.0                      | 19.0                      | -6  |
| 24  | 22.0                      | 24.9                      | 65.0                      | 58.8                      | 41.3                      | 54.5                      | 20.5                      | -4  |
| 26  | 23.5                      | 26.5                      | 68.0                      | 61.6                      | 43.6                      | 57.1                      | 21.9                      | -3  |
| 28  | 25.1                      | 28.2                      | 71.0                      | 64.4                      | 46.0                      | 59.8                      | 23.4                      | -2  |
| 30  | 26.7                      | 30.0                      | 74.1                      | 67.3                      | 48.4                      | 62.5                      | 25.0                      | -1  |
| 32  | 28.4                      | 31.8                      | 77.3                      | 70.3                      | 50.9                      | 65.3                      | 26.6                      | 0   |
| 34  | 30.1                      | 33.5                      | 80.5                      | 73.3                      | 53.5                      | 68.2                      | 28.3                      | 1   |
| 36  | 31.9                      | 35.5                      | 83.9                      | 76.4                      | 56.2                      | 71.2                      | 30.0                      | 2   |
| 38  | 33.7                      | 37.5                      | 87.3                      | 79.7                      | 58.9                      | 74.2                      | 31.8                      | 3   |
| 40  | 35.6                      | 39.5                      | 90.9                      | 83.0                      | 61.7                      | 77.4                      | 33.6                      | 4   |
| 42  | 37.6                      | 41.6                      | 94.5                      | 86.4                      | 64.6                      | 80.6                      | 35.5                      | 6   |
| 44  | 39.6                      | 43.7                      | 98.2                      | 89.8                      | 67.6                      | 83.9                      | 37.5                      | 7   |
| 46  | 41.7                      | 45.9                      | 102.0                     | 93.4                      | 70.7                      | 87.3                      | 39.5                      | 8   |
| 48  | 43.8                      | 48.2                      | 106.0                     | 97.1                      | 73.8                      | 90.7                      | 41.5                      | 9   |
| 50  | 46.0                      | 50.5                      | 110.0                     | 100.8                     | 77.1                      | 94.3                      | 43.6                      | 10  |

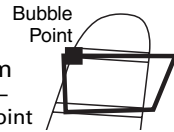
"Denotes inches of mercury ("Hg)

To obtain the Dew Point of saturated refrigerants above 50°F (10°C), use its Bubble Point temperature *plus* the value listed below:

MP series use 10°F (5°C), 9000 use 11°F (6°C), HP80 and HP81 use 2°F (1°C), 409A use 15°F (8°C), 408A use 1°F (0.6°C).

**Subcooling  
Saturated Liquid  
Pressures**

Typical  
pH Diagram  
Subcooling—  
Reference Point



**Bubble Point—Saturated Liquid (psig)**

| °F  | Suva®<br>MP39<br>(R-401A) | Suva®<br>MP66<br>(R-401B) | Suva®<br>HP80<br>(R-402A) | Suva®<br>HP81<br>(R-402B) | Suva®<br>9000<br>(R-407C) | Suva®<br>408A<br>(R-408A) | Suva®<br>409A<br>(R-409A) | °C |
|-----|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|----|
| 50  | 58                        | 62                        | 114                       | 106                       | 96                        | 96                        | 61                        | 10 |
| 55  | 64                        | 69                        | 125                       | 116                       | 106                       | 105                       | 67                        | 13 |
| 60  | 71                        | 76                        | 136                       | 126                       | 116                       | 115                       | 74                        | 16 |
| 65  | 78                        | 84                        | 148                       | 138                       | 127                       | 126                       | 82                        | 18 |
| 70  | 86                        | 92                        | 161                       | 150                       | 139                       | 137                       | 90                        | 21 |
| 75  | 94                        | 101                       | 174                       | 162                       | 151                       | 149                       | 98                        | 24 |
| 80  | 103                       | 110                       | 188                       | 175                       | 163                       | 161                       | 107                       | 27 |
| 85  | 112                       | 119                       | 203                       | 189                       | 177                       | 174                       | 116                       | 29 |
| 90  | 122                       | 130                       | 218                       | 204                       | 191                       | 188                       | 126                       | 32 |
| 95  | 132                       | 140                       | 235                       | 220                       | 206                       | 203                       | 137                       | 35 |
| 100 | 143                       | 152                       | 252                       | 236                       | 222                       | 219                       | 148                       | 38 |
| 105 | 154                       | 164                       | 270                       | 253                       | 239                       | 235                       | 159                       | 41 |
| 110 | 166                       | 176                       | 289                       | 271                       | 257                       | 252                       | 172                       | 43 |
| 115 | 179                       | 190                       | 309                       | 290                       | 275                       | 270                       | 184                       | 46 |
| 120 | 192                       | 203                       | 330                       | 310                       | 294                       | 289                       | 198                       | 49 |
| 125 | 206                       | 218                       | 353                       | 330                       | 315                       | 309                       | 212                       | 52 |
| 130 | 220                       | 233                       | 376                       | 352                       | 336                       | 330                       | 227                       | 54 |
| 135 | 236                       | 249                       | 400                       | 375                       | 358                       | 351                       | 242                       | 57 |
| 140 | 252                       | 266                       | 425                       | 399                       | 381                       | 374                       | 258                       | 60 |
| 145 | 268                       | 284                       | 451                       | 423                       | 405                       | 398                       | 275                       | 63 |
| 150 | 286                       | 302                       | 479                       | 449                       | 430                       | 423                       | 293                       | 66 |

To obtain the Bubble Point of saturated refrigerants below 50°F (10°C), use its Dew Point temperature *minus* the value listed below:

MP series use 10°F (5°C), 9000 use 11°F (6°C), HP80 and HP81 use 2°F (1°C), 409A use 15°F (8°C), 408A use 1°F (0.6°C).

Suva® is a registered trademark of DuPont.

# PRESSURE-TEMPERATURE CHART

## R-414B

\* = Inches of mercury below atmospheric

Bubble Point = Sat. Liquid

Dew Point = Sat. Vapor

| °F  | R-414B<br>Bubble / Dew | R-12 |
|-----|------------------------|------|
| -40 | 7.7* / 15.3*           | 11   |
| -35 | 4.7* / 13.2*           | 8.4  |
| -30 | 1.4* / 10.7*           | 5.5  |
| -25 | 1.1 / 8.1*             | 2.3  |
| -20 | 2.7 / 5.1*             | 0.6  |
| -18 | 3.6 / 3.8*             | 1.3  |
| -16 | 4.5 / 2.6*             | 2.1  |
| -14 | 5.4 / 1.8*             | 2.8  |
| -12 | 6.5 / 1.0*             | 3.7  |
| -10 | 7.6 / 0.8*             | 4.5  |
| -8  | 8.6 / 1.6              | 5.4  |
| -6  | 9.6 / 2.4              | 6.3  |
| -4  | 10.7 / 3.2             | 7.2  |
| -2  | 11.8 / 4.1             | 78.2 |
| 0   | 13.0 / 4.9             | 9.2  |
| 2   | 14.3 / 5.9             | 10.2 |
| 4   | 15.6 / 6.9             | 11.2 |
| 6   | 16.9 / 7.9             | 12.3 |
| 8   | 18.2 / 8.9             | 13.5 |
| 10  | 19.5 / 9.9             | 14.6 |
| 12  | 21.0 / 11.1            | 15.8 |
| 14  | 22.5 / 12.3            | 17.1 |
| 16  | 24.0 / 13.5            | 18.4 |
| 18  | 25.5 / 14.7            | 19.7 |
| 20  | 26.9 / 15.8            | 21   |
| 22  | 28.6 / 17.3            | 22.4 |
| 24  | 30.3 / 18.8            | 23.9 |
| 26  | 32.1 / 20.2            | 25.4 |
| 28  | 33.8 / 21.7            | 26.9 |

| °F  | R-414B<br>Bubble / Dew | R-12  |
|-----|------------------------|-------|
| 30  | 35.6 / 23.1            | 28.5  |
| 32  | 37.6 / 24.7            | 30.1  |
| 34  | 39.6 / 26.3            | 31.7  |
| 36  | 41.6 / 27.9            | 33.4  |
| 38  | 43.6 / 29.5            | 35.2  |
| 40  | 45.6 / 30.9            | 37    |
| 42  | 47.9 / 32.8            | 38.8  |
| 44  | 50.2 / 34.7            | 40.7  |
| 46  | 52.5 / 36.6            | 42.7  |
| 48  | 54.8 / 38.5            | 44.7  |
| 50  | 57.0 / 40.3            | 46.7  |
| 55  | 63.9 / 45.9            | 52    |
| 60  | 70.0 / 51.2            | 57.7  |
| 65  | 77.8 / 57.2            | 63.8  |
| 70  | 84.6 / 63.6            | 70.2  |
| 75  | 92.7 / 70.5            | 77    |
| 80  | 101.1 / 77.8           | 84.2  |
| 85  | 110.0 / 85.6           | 91.8  |
| 90  | 119.5 / 93.8           | 99.8  |
| 95  | 129.4 / 102.5          | 108.3 |
| 100 | 139.9 / 111.8          | 117.2 |
| 105 | 150.9 / 121.6          | 126.6 |
| 110 | 162.5 / 132.0          | 136.4 |
| 115 | 174.6 / 142.9          | 146.8 |
| 120 | 187.4 / 154.5          | 157.7 |
| 125 | 200.7 / 166.7          | 169.1 |
| 130 | 214.7 / 179.5          | 181   |
| 135 | 230.1 / 194.1          | 193.5 |
| 140 | 245.3 / 208.3          | 206.6 |