

# 空气体积换算因数表

(附换算直线图)

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## 空气体积换算因数表說明

空气的体积是随着气温和气压的升降而变化的。在某些物理实验及空气成分化学分析(包括空气中含毒物质,如苯,氨,铅……等的测定)时往往要把所采集的空气的体积,依当时的气温和气压,换算成为在标准状态(气温为摄氏零度,气压为760毫米汞柱高时)的体积,以为计算的标准。

为了把任何温压下的空气体积,换算成为在标准状态下的空气体积,必须运用克拉伯龙所发现的,由給·呂薩克,波义耳-馬略特和查理等三个定律综合而得的气态方程式,那就是:

$$V_0 = \frac{V_t \cdot P}{(1 + \beta t) 760} \dots\dots\dots (一)$$

式中  $V_0$ ——换算成标准状态下的空气体积

$V_t$ ——采样时所取空气的体积

$P$ ——采样时的大气压力(毫米汞柱高)

$\beta$ ——空气体积的膨胀系数—0.003667(即  $\frac{1}{273}$ )

$t$ ——采样时的空气温度(摄氏)

根据这一公式把采样时的空气体积,换算成为在标准状态下的空气体积,是一个比较繁复的计算过程。但是,若把这一公式改

写为  $V_0 = V_t \cdot \frac{P}{(1 + \beta t) 760}$ ,

並假令  $F = \frac{P}{(1 + \beta t) 760} = \frac{P}{(1 + 0.003667 \times t) 760}$ ,

则又可改写为  $V_0 = V_t \cdot F \dots\dots\dots (二)$

既然式中  $F = \frac{P}{(1 + 0.003667 \times t) 760}$ , 就可以把  $F$  看作

是随采样时的气温( $t$ )及气压( $P$ )而变化的一个变量,並称之为“空气体积换算因数”。如果重生地不同温度及气压,  $F(P)$  的值

代入  $F = \frac{P}{(1 + 0.003667 \times t) 760}$  各种不同

溫度和壓力狀態下的不同的“換算因數”(F 值)。那末,再運用公式(二)把任何溫壓下的空氣體積換算成為在標準狀態下的空氣體積時,計算過程就大為簡化了。這樣,不僅節省了時間,而且可以避免因繁複的計算而帶來的誤差。

這一套空氣體積換算因數表,就是把溫度自攝氏 $-20^{\circ}$ 到 $+50^{\circ}$ 及大氣壓力自 600 到 800 毫米汞柱高範圍以內的各种不同的 F 值計算好了;運用時,只須根據採樣時的氣溫和氣壓,從表中查出 F 值後,以公式(二),就可以很快地把採樣的空氣體積換算成為在標準狀態下的空氣體積了。

例: 設採樣時空氣體積( $V_t$ )為 500 毫升,

氣壓(P)為 768 毫米汞柱,

氣溫( $t$ )為攝氏  $21^{\circ}$ ;

求在標準狀態下的體積。

1. 如運用本表計算:

先根據採樣時的氣壓和氣溫,利用圖表右側的指示標,找出所需要的換算表(第 26)。從該表上排氣溫行中找出“21”,再從表左氣壓行中找出“768”;在此橫直二行交叉處得讀數 0.9383,此即為換算因數(F 值)。將 F 值代入公式(二), $V_0 = V_t \cdot F$ ,得:

$$V_0 = 500 \times 0.9383 = 469.15 \text{ 毫升。}$$

2. 如用氣態方程式  $V_0 = \frac{V_t \cdot P}{(1 + \beta_t) 760}$  計算,則:

$$V_0 = \frac{500 \times 768}{(1 + 0.003667 \times 21) 760} = \frac{384000}{818.5} = 469.15 \text{ 毫升。}$$

兩法計算結果完全相同。

在實際運用中,我們知道大氣壓力對空氣體積的影響,遠較空氣溫度對空氣體積的影響為小(氣壓升降 1 毫米時,空氣體積的變化為  $\frac{1}{760}$ ,氣溫升降攝氏 1 度時,空氣體積的變化為  $\frac{1}{273}$ )。因此,有時,特別是在沒有氣壓計的場合,可以只根據採樣時的氣溫進行換算;那時,僅根據氣溫,從本表氣壓 760 毫米汞柱那一行(粗體字印的)去查換算因數(F 值)即可運算。

本表亦可逆用,即如要將在標準狀態下空氣的體積換算成為在任何溫壓下的體積,也很方便。那時只須先根據所需要的氣溫

和气压, 从表中查出  $F$  值, 除在标准状态下的空气体积, 即将公式

(二) 改为  $V_t = \frac{V_0}{F}$ , 即得。

本書表后所附的“空气体积换算因数直線圖”, 其功用与表相同, 亦可根据不同的气温、气压, 很快地查出  $F$  值来。不过此值只能精确到万分之五, 而从换算表上查出来的, 则精确到十万分之五。这两种办法, 可以根据需要任意选用。

直線圖的使用方法附后。

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空气体积换算因数表(1)

| 气温℃<br>气压<br>mm.Hg. | -20    | -19    | -18    | -17    | -16    | -15    | -14    | -13    | -12    | -11    |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 600                 | 0.8519 | 0.8486 | 0.8453 | 0.8419 | 0.8387 | 0.8354 | 0.8321 | 0.8290 | 0.8258 | 0.8226 |
| 1                   | 34     | 0.8500 | 67     | 33     | 0.8401 | 68     | 35     | 0.8304 | 72     | 40     |
| 2                   | 48     | 14     | 81     | 47     | 15     | 82     | 49     | 18     | 85     | 53     |
| 3                   | 62     | 28     | 95     | 61     | 29     | 96     | 63     | 32     | 99     | 67     |
| 4                   | 76     | 42     | 0.8509 | 75     | 43     | 0.8409 | 77     | 45     | 0.8313 | 81     |
| 5                   | 90     | 57     | 23     | 89     | 57     | 23     | 91     | 59     | 27     | 95     |
| 6                   | 0.8605 | 71     | 37     | 0.8503 | 71     | 37     | 0.8405 | 73     | 40     | 0.8308 |
| 7                   | 19     | 85     | 51     | 17     | 85     | 51     | 18     | 87     | 54     | 22     |
| 8                   | 33     | 99     | 66     | 31     | 99     | 65     | 32     | 0.8401 | 68     | 36     |
| 9                   | 47     | 0.8613 | 80     | 45     | 0.8513 | 79     | 46     | 15     | 82     | 49     |
| 610                 | 61     | 27     | 94     | 60     | 27     | 93     | 60     | 28     | 95     | 63     |
| 1                   | 76     | 41     | 0.8608 | 74     | 41     | 0.8507 | 74     | 42     | 0.8409 | 77     |
| 2                   | 90     | 56     | 22     | 88     | 55     | 21     | 88     | 56     | 23     | 91     |
| 3                   | 0.8704 | 70     | 36     | 0.8602 | 69     | 35     | 0.8501 | 70     | 37     | 0.8404 |
| 4                   | 18     | 84     | 50     | 16     | 82     | 49     | 16     | 84     | 50     | 18     |
| 5                   | 32     | 98     | 64     | 30     | 96     | 63     | 29     | 97     | 64     | 32     |
| 6                   | 47     | 0.8712 | 78     | 44     | 0.8610 | 77     | 43     | 0.8511 | 78     | 45     |
| 7                   | 61     | 26     | 92     | 58     | 24     | 90     | 57     | 25     | 92     | 59     |
| 8                   | 75     | 40     | 0.8706 | 72     | 38     | 0.8604 | 71     | 39     | 0.8506 | 73     |
| 9                   | 89     | 55     | 20     | 86     | 52     | 18     | 85     | 53     | 19     | 86     |
| 620                 | 0.8803 | 69     | 35     | 0.8700 | 66     | 32     | 99     | 67     | 33     | 0.8500 |
| 1                   | 18     | 83     | 49     | 14     | 80     | 46     | 0.8613 | 80     | 47     | 14     |
| 2                   | 32     | 97     | 63     | 28     | 94     | 60     | 27     | 94     | 61     | 28     |
| 3                   | 46     | 0.8811 | 77     | 42     | 0.8708 | 74     | 40     | 0.8608 | 74     | 41     |
| 4                   | 60     | 25     | 91     | 56     | 22     | 88     | 54     | 22     | 88     | 55     |
| 5                   | 74     | 39     | 0.8805 | 70     | 36     | 0.8702 | 68     | 36     | 0.8602 | 69     |
| 6                   | 89     | 54     | 19     | 84     | 50     | 16     | 82     | 49     | 16     | 82     |
| 7                   | 0.8903 | 68     | 33     | 98     | 64     | 30     | 96     | 63     | 29     | 96     |
| 8                   | 17     | 82     | 47     | 0.8812 | 78     | 44     | 0.8710 | 77     | 43     | 0.8610 |
| 9                   | 31     | 96     | 61     | 26     | 92     | 58     | 24     | 91     | 57     | 24     |
| 630                 | 45     | 0.8910 | 75     | 40     | 0.8806 | 71     | 37     | 0.8705 | 71     | 37     |
| 1                   | 60     | 24     | 90     | 54     | 20     | 85     | 51     | 19     | 84     | 51     |
| 2                   | 74     | 38     | 0.8904 | 68     | 34     | 99     | 65     | 32     | 98     | 65     |
| 3                   | 88     | 53     | 18     | 82     | 48     | 0.8813 | 79     | 46     | 0.8712 | 78     |
| 4                   | 0.9002 | 67     | 32     | 96     | 62     | 27     | 93     | 60     | 26     | 92     |
| 5                   | 16     | 81     | 46     | 0.8910 | 76     | 41     | 0.8807 | 74     | 40     | 0.8706 |
| 6                   | 31     | 95     | 60     | 24     | 90     | 55     | 21     | 88     | 53     | 20     |
| 7                   | 45     | 0.9009 | 74     | 38     | 0.8904 | 69     | 35     | 0.8801 | 67     | 33     |
| 8                   | 59     | 23     | 88     | 52     | 18     | 83     | 48     | 15     | 81     | 47     |
| 9                   | 73     | 37     | 0.9002 | 66     | 32     | 97     | 62     | 29     | 95     | 61     |
| 640                 | 87     | 52     | 16     | 80     | 46     | 0.8911 | 76     | 43     | 0.8808 | 74     |
| 1                   | 0.9102 | 66     | 30     | 95     | 60     | 25     | 90     | 57     | 22     | 88     |
| 2                   | 16     | 80     | 44     | 0.9009 | 74     | 39     | 0.8904 | 71     | 36     | 0.8802 |
| 3                   | 30     | 94     | 59     | 23     | 88     | 52     | 18     | 84     | 50     | 16     |
| 4                   | 44     | 0.9108 | 73     | 37     | 0.9002 | 66     | 32     | 98     | 63     | 29     |
| 5                   | 58     | 22     | 87     | 51     | 16     | 80     | 46     | 0.8912 | 77     | 43     |
| 6                   | 73     | 36     | 0.9101 | 65     | 30     | 94     | 59     | 26     | 91     | 57     |
| 7                   | 87     | 51     | 15     | 79     | 44     | 0.9008 | 73     | 40     | 0.8905 | 70     |
| 8                   | 0.9201 | 65     | 29     | 93     | 58     | 22     | 87     | 53     | 18     | 84     |
| 9                   | 15     | 79     | 43     | 0.9107 | 72     | 36     | 0.9001 | 67     | 32     | 98     |

空气体积换算因数表(2)

| 气温°C<br>气压<br>mm.Hg. | -10    | -9     | -8     | -7     | -6     | -5     | -4     | -3     | -2     | -1     |
|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 600                  | 0.8195 | 0.8164 | 0.8133 | 0.8103 | 0.8072 | 0.8042 | 0.8012 | 0.7982 | 0.7953 | 0.7924 |
| 1                    | 0.8209 | 78     | 47     | 17     | 86     | 55     | 26     | 96     | 66     | 37     |
| 2                    | 23     | 91     | 60     | 30     | 99     | 69     | 39     | 0.8009 | 80     | 51     |
| 3                    | 36     | 0.8205 | 74     | 44     | 0.8113 | 82     | 52     | 22     | 93     | 64     |
| 4                    | 50     | 19     | 87     | 57     | 26     | 95     | 66     | 36     | 0.8006 | 77     |
| 5                    | 64     | 32     | 0.8201 | 71     | 40     | 0.8109 | 79     | 49     | 19     | 90     |
| 6                    | 77     | 46     | 14     | 84     | 53     | 22     | 93     | 62     | 33     | 0.8003 |
| 7                    | 91     | 59     | 28     | 98     | 67     | 36     | 0.8106 | 76     | 46     | 17     |
| 8                    | 0.8305 | 73     | 41     | 0.8211 | 80     | 49     | 19     | 89     | 59     | 30     |
| 9                    | 18     | 87     | 55     | 25     | 93     | 62     | 33     | 0.8102 | 72     | 43     |
| 610                  | 32     | 0.8300 | 69     | 38     | 0.8207 | 76     | 46     | 15     | 86     | 56     |
| 1                    | 46     | 14     | 82     | 52     | 20     | 89     | 59     | 29     | 99     | 69     |
| 2                    | 59     | 27     | 96     | 65     | 34     | 0.8203 | 73     | 42     | 0.8112 | 83     |
| 3                    | 73     | 41     | 0.8309 | 79     | 47     | 16     | 86     | 55     | 25     | 96     |
| 4                    | 87     | 55     | 23     | 92     | 61     | 29     | 99     | 69     | 39     | 0.8109 |
| 5                    | 0.8400 | 68     | 36     | 0.8306 | 74     | 43     | 0.8213 | 82     | 52     | 22     |
| 6                    | 14     | 82     | 50     | 19     | 88     | 56     | 26     | 95     | 65     | 36     |
| 7                    | 28     | 96     | 63     | 33     | 0.8301 | 70     | 39     | 0.8209 | 78     | 49     |
| 8                    | 41     | 0.8409 | 77     | 46     | 15     | 83     | 53     | 22     | 92     | 62     |
| 9                    | 55     | 23     | 91     | 60     | 28     | 96     | 66     | 35     | 0.8205 | 75     |
| 620                  | 69     | 36     | 0.8404 | 73     | 41     | 0.8310 | 79     | 48     | 18     | 88     |
| 1                    | 82     | 50     | 18     | 87     | 55     | 23     | 93     | 62     | 31     | 0.8202 |
| 2                    | 96     | 64     | 31     | 0.8400 | 68     | 37     | 0.8306 | 75     | 45     | 15     |
| 3                    | 0.8510 | 77     | 45     | 14     | 82     | 50     | 20     | 88     | 58     | 28     |
| 4                    | 23     | 91     | 58     | 27     | 95     | 63     | 33     | 0.8302 | 71     | 41     |
| 5                    | 37     | 0.8504 | 72     | 41     | 0.8409 | 77     | 46     | 15     | 84     | 54     |
| 6                    | 51     | 18     | 85     | 54     | 22     | 90     | 60     | 28     | 98     | 68     |
| 7                    | 64     | 32     | 99     | 68     | 36     | 0.8404 | 73     | 42     | 0.8311 | 81     |
| 8                    | 78     | 45     | 0.8513 | 81     | 49     | 17     | 86     | 55     | 24     | 94     |
| 9                    | 92     | 59     | 26     | 95     | 63     | 30     | 0.8400 | 68     | 37     | 0.8307 |
| 630                  | 0.8605 | 72     | 40     | 0.8508 | 76     | 44     | 13     | 82     | 51     | 20     |
| 1                    | 19     | 86     | 53     | 22     | 89     | 57     | 26     | 95     | 64     | 34     |
| 2                    | 32     | 0.8600 | 67     | 35     | 0.8503 | 71     | 40     | 0.8408 | 77     | 47     |
| 3                    | 46     | 13     | 80     | 49     | 16     | 84     | 53     | 21     | 90     | 60     |
| 4                    | 60     | 27     | 94     | 62     | 30     | 98     | 66     | 35     | 0.8404 | 73     |
| 5                    | 73     | 40     | 0.8607 | 76     | 43     | 0.8511 | 80     | 48     | 17     | 86     |
| 6                    | 87     | 54     | 21     | 89     | 57     | 24     | 93     | 61     | 30     | 0.8400 |
| 7                    | 0.8701 | 68     | 35     | 0.8603 | 70     | 38     | 0.8506 | 75     | 43     | 13     |
| 8                    | 14     | 81     | 48     | 16     | 84     | 51     | 20     | 88     | 57     | 26     |
| 9                    | 28     | 95     | 62     | 30     | 97     | 65     | 33     | 0.8501 | 70     | 39     |
| 640                  | 42     | 0.8708 | 75     | 43     | 0.8611 | 78     | 47     | 15     | 83     | 52     |
| 1                    | 55     | 22     | 89     | 57     | 24     | 91     | 60     | 28     | 96     | 66     |
| 2                    | 69     | 36     | 0.8702 | 70     | 37     | 0.8605 | 73     | 41     | 0.8510 | 79     |
| 3                    | 83     | 49     | 16     | 84     | 51     | 18     | 87     | 54     | 23     | 92     |
| 4                    | 96     | 63     | 29     | 97     | 64     | 32     | 0.8600 | 68     | 36     | 0.8505 |
| 5                    | 0.8810 | 77     | 43     | 0.8711 | 78     | 45     | 13     | 81     | 49     | 19     |
| 6                    | 24     | 90     | 57     | 24     | 91     | 58     | 27     | 94     | 63     | 32     |
| 7                    | 37     | 0.8804 | 70     | 38     | 0.8705 | 72     | 40     | 0.8608 | 76     | 45     |
| 8                    | 51     | 17     | 84     | 51     | 18     | 85     | 53     | 21     | 89     | 58     |
| 9                    | 65     | 31     | 97     | 65     | 32     | 99     | 67     | 34     | 0.8602 | 71     |

范围:  
气温  
气压  
(mm. Hg.) (°C)  
-20  
-1

600 ——— 640

空 气 体 积 换 算 因 数 表 (3)

| 气温°C<br>气压<br>mm.Hg. | 0      | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      |
|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 600                  | 0.7895 | 0.7865 | 0.7838 | 0.7809 | 0.7780 | 0.7753 | 0.7725 | 0.7697 | 0.7670 | 0.7643 |
| 1                    | 0.7980 | 79     | 51     | 22     | 93     | 66     | 38     | 0.7710 | 83     | 56     |
| 2                    | 21     | 92     | 64     | 35     | 0.7806 | 78     | 51     | 22     | 95     | 68     |
| 3                    | 34     | 0.7905 | 77     | 48     | 19     | 91     | 64     | 35     | 0.7708 | 81     |
| 4                    | 47     | 18     | 80     | 61     | 32     | 0.7804 | 77     | 48     | 21     | 94     |
| 5                    | 61     | 31     | 0.7903 | 74     | 45     | 17     | 89     | 61     | 34     | 0.7706 |
| 6                    | 74     | 44     | 16     | 87     | 58     | 30     | 0.7802 | 74     | 46     | 19     |
| 7                    | 87     | 57     | 29     | 0.7900 | 71     | 43     | 15     | 87     | 59     | 32     |
| 8                    | 0.8000 | 70     | 42     | 13     | 84     | 56     | 28     | 99     | 72     | 45     |
| 9                    | 13     | 83     | 55     | 26     | 97     | 69     | 41     | 0.7812 | 85     | 57     |
| 610                  | 26     | 96     | 68     | 39     | 0.7910 | 82     | 54     | 25     | 98     | 70     |
| 1                    | 40     | 0.8010 | 81     | 52     | 23     | 95     | 67     | 38     | 0.7810 | 83     |
| 2                    | 53     | 23     | 95     | 65     | 36     | 0.7908 | 80     | 51     | 23     | 96     |
| 3                    | 66     | 36     | 0.8008 | 78     | 49     | 21     | 92     | 64     | 36     | 0.7808 |
| 4                    | 79     | 49     | 21     | 91     | 62     | 33     | 0.7905 | 76     | 49     | 21     |
| 5                    | 92     | 62     | 34     | 0.8004 | 75     | 46     | 18     | 89     | 62     | 34     |
| 6                    | 0.8105 | 75     | 47     | 17     | 88     | 59     | 31     | 0.7902 | 74     | 47     |
| 7                    | 18     | 88     | 60     | 30     | 0.8001 | 72     | 44     | 15     | 87     | 59     |
| 8                    | 32     | 0.8101 | 73     | 43     | 14     | 85     | 57     | 28     | 0.7900 | 72     |
| 9                    | 45     | 14     | 86     | 56     | 27     | 98     | 70     | 41     | 13     | 85     |
| 620                  | 58     | 28     | 99     | 69     | 40     | 0.8011 | 83     | 53     | 25     | 98     |
| 1                    | 71     | 41     | 0.8112 | 82     | 53     | 24     | 95     | 66     | 38     | 0.7910 |
| 2                    | 84     | 54     | 25     | 95     | 65     | 37     | 0.8008 | 79     | 51     | 23     |
| 3                    | 97     | 67     | 38     | 0.8108 | 78     | 50     | 21     | 92     | 64     | 36     |
| 4                    | 0.8211 | 80     | 51     | 21     | 91     | 63     | 34     | 0.8005 | 77     | 49     |
| 5                    | 24     | 93     | 64     | 34     | 0.8104 | 76     | 47     | 18     | 89     | 61     |
| 6                    | 37     | 0.8206 | 77     | 47     | 17     | 89     | 60     | 30     | 0.8002 | 74     |
| 7                    | 50     | 19     | 91     | 60     | 30     | 0.8101 | 73     | 43     | 15     | 87     |
| 8                    | 63     | 32     | 0.8204 | 73     | 43     | 14     | 86     | 56     | 28     | 99     |
| 9                    | 76     | 46     | 17     | 86     | 56     | 27     | 98     | 69     | 41     | 0.8012 |
| 630                  | 90     | 59     | 30     | 99     | 69     | 40     | 0.8111 | 82     | 53     | 25     |
| 1                    | 0.8303 | 72     | 43     | 0.8212 | 82     | 53     | 24     | 94     | 66     | 38     |
| 2                    | 16     | 85     | 56     | 25     | 95     | 66     | 37     | 0.8107 | 79     | 50     |
| 3                    | 29     | 98     | 69     | 38     | 0.8208 | 79     | 50     | 20     | 92     | 63     |
| 4                    | 42     | 0.8311 | 82     | 52     | 21     | 92     | 63     | 33     | 0.8104 | 76     |
| 5                    | 55     | 24     | 95     | 65     | 34     | 0.8205 | 76     | 46     | 17     | 89     |
| 6                    | 68     | 37     | 0.8308 | 78     | 47     | 18     | 89     | 59     | 30     | 0.8101 |
| 7                    | 82     | 50     | 21     | 91     | 60     | 31     | 0.8201 | 71     | 43     | 14     |
| 8                    | 95     | 64     | 34     | 0.8304 | 73     | 44     | 14     | 84     | 56     | 27     |
| 9                    | 0.8408 | 77     | 47     | 17     | 86     | 57     | 27     | 97     | 68     | 40     |
| 640                  | 21     | 90     | 60     | 30     | 99     | 69     | 40     | 0.8210 | 81     | 52     |
| 1                    | 34     | 0.8403 | 73     | 43     | 0.8312 | 82     | 53     | 23     | 94     | 65     |
| 2                    | 47     | 16     | 86     | 56     | 25     | 95     | 66     | 36     | 0.8207 | 78     |
| 3                    | 61     | 29     | 0.8400 | 69     | 38     | 0.8308 | 79     | 48     | 19     | 91     |
| 4                    | 74     | 42     | 13     | 82     | 51     | 21     | 92     | 61     | 32     | 0.8203 |
| 5                    | 87     | 55     | 25     | 95     | 64     | 34     | 0.8304 | 74     | 45     | 16     |
| 6                    | 0.8500 | 68     | 39     | 0.8408 | 77     | 47     | 17     | 87     | 58     | 29     |
| 7                    | 13     | 82     | 52     | 21     | 90     | 60     | 30     | 0.8300 | 71     | 41     |
| 8                    | 26     | 95     | 65     | 34     | 0.8403 | 73     | 43     | 13     | 83     | 54     |
| 9                    | 40     | 0.8508 | 78     | 47     | 16     | 86     | 56     | 25     | 96     | 67     |

空气体积换算因数表(4)

| 气温°C<br>气压<br>mm.Hg. | 10     | 11     | 12     | 13     | 14     | 15     | 16     | 17     | 18     | 19     |
|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 600                  | 0.7615 | 0.7589 | 0.7562 | 0.7535 | 0.7510 | 0.7483 | 0.7457 | 0.7432 | 0.7406 | 0.7381 |
| 1                    | 28     | 0.7601 | 74     | 48     | 22     | 96     | 69     | 44     | 18     | 93     |
| 2                    | 41     | 14     | 87     | 61     | 35     | 0.7508 | 82     | 56     | 30     | 0.7405 |
| 3                    | 53     | 27     | 0.7600 | 73     | 47     | 21     | 94     | 69     | 43     | 18     |
| 4                    | 66     | 39     | 12     | 86     | 60     | 33     | 0.7507 | 81     | 55     | 30     |
| 5                    | 79     | 52     | 25     | 98     | 72     | 46     | 19     | 94     | 68     | 42     |
| 6                    | 91     | 65     | 37     | 0.7611 | 85     | 58     | 31     | 0.7506 | 80     | 54     |
| 7                    | 0.7704 | 77     | 50     | 23     | 97     | 71     | 44     | 18     | 92     | 67     |
| 8                    | 17     | 90     | 63     | 36     | 0.7610 | 83     | 56     | 31     | 0.7505 | 79     |
| 9                    | 29     | 0.7703 | 75     | 48     | 22     | 95     | 69     | 43     | 17     | 91     |
| 610                  | 42     | 15     | 88     | 61     | 35     | 0.7608 | 81     | 55     | 29     | 0.7504 |
| 1                    | 55     | 28     | 0.7700 | 74     | 47     | 20     | 94     | 68     | 42     | 16     |
| 2                    | 68     | 41     | 13     | 86     | 60     | 33     | 0.7606 | 80     | 54     | 28     |
| 3                    | 80     | 53     | 26     | 99     | 72     | 45     | 18     | 93     | 66     | 41     |
| 4                    | 93     | 66     | 38     | 0.7711 | 85     | 58     | 31     | 0.7605 | 79     | 53     |
| 5                    | 0.7806 | 79     | 51     | 24     | 97     | 70     | 43     | 17     | 91     | 65     |
| 6                    | 18     | 91     | 63     | 36     | 0.7710 | 83     | 56     | 30     | 0.7603 | 77     |
| 7                    | 31     | 0.7804 | 76     | 49     | 22     | 95     | 68     | 42     | 16     | 90     |
| 8                    | 44     | 16     | 89     | 61     | 35     | 0.7708 | 81     | 55     | 28     | 0.7602 |
| 9                    | 56     | 29     | 0.7801 | 74     | 47     | 20     | 93     | 67     | 40     | 14     |
| 620                  | 69     | 42     | 14     | 87     | 60     | 33     | 0.7705 | 79     | 53     | 27     |
| 1                    | 82     | 54     | 26     | 99     | 72     | 45     | 18     | 92     | 65     | 39     |
| 2                    | 94     | 67     | 39     | 0.7812 | 85     | 58     | 30     | 0.7704 | 77     | 51     |
| 3                    | 0.7907 | 80     | 52     | 24     | 97     | 70     | 43     | 16     | 90     | 64     |
| 4                    | 20     | 92     | 64     | 37     | 0.7810 | 83     | 56     | 29     | 0.7702 | 76     |
| 5                    | 33     | 0.7905 | 77     | 49     | 23     | 95     | 68     | 41     | 14     | 88     |
| 6                    | 45     | 18     | 89     | 62     | 35     | 0.7807 | 80     | 54     | 27     | 0.7700 |
| 7                    | 58     | 30     | 0.7902 | 74     | 48     | 20     | 92     | 66     | 39     | 13     |
| 8                    | 71     | 43     | 15     | 87     | 60     | 32     | 0.7805 | 78     | 51     | 25     |
| 9                    | 83     | 56     | 27     | 0.7900 | 73     | 45     | 17     | 91     | 64     | 37     |
| 630                  | 96     | 68     | 40     | 12     | 85     | 57     | 30     | 0.7803 | 76     | 50     |
| 1                    | 0.8009 | 81     | 52     | 25     | 98     | 70     | 42     | 16     | 88     | 62     |
| 2                    | 21     | 94     | 65     | 37     | 0.7910 | 82     | 54     | 28     | 0.7801 | 74     |
| 3                    | 34     | 0.8006 | 78     | 50     | 23     | 95     | 67     | 40     | 13     | 87     |
| 4                    | 47     | 19     | 90     | 62     | 35     | 0.7907 | 79     | 53     | 25     | 99     |
| 5                    | 59     | 31     | 0.8003 | 75     | 48     | 20     | 92     | 65     | 38     | 0.7811 |
| 6                    | 72     | 44     | 16     | 88     | 60     | 32     | 0.7904 | 77     | 50     | 23     |
| 7                    | 85     | 57     | 28     | 0.8000 | 73     | 45     | 17     | 90     | 62     | 36     |
| 8                    | 97     | 69     | 41     | 13     | 85     | 57     | 29     | 0.7902 | 75     | 48     |
| 9                    | 0.8110 | 82     | 53     | 25     | 98     | 70     | 41     | 15     | 87     | 60     |
| 640                  | 23     | 95     | 66     | 38     | 0.8010 | 82     | 54     | 27     | 0.7900 | 73     |
| 1                    | 36     | 0.8107 | 79     | 50     | 23     | 95     | 66     | 39     | 12     | 85     |
| 2                    | 48     | 20     | 91     | 63     | 35     | 0.8007 | 79     | 52     | 24     | 97     |
| 3                    | 61     | 33     | 0.8104 | 75     | 48     | 19     | 91     | 64     | 37     | 0.7910 |
| 4                    | 74     | 45     | 16     | 88     | 60     | 32     | 0.8004 | 77     | 49     | 22     |
| 5                    | 86     | 58     | 29     | 0.8101 | 73     | 44     | 16     | 89     | 61     | 34     |
| 6                    | 99     | 71     | 42     | 13     | 85     | 57     | 28     | 0.8001 | 74     | 46     |
| 7                    | 0.8212 | 83     | 54     | 26     | 98     | 69     | 41     | 14     | 86     | 59     |
| 8                    | 24     | 96     | 67     | 38     | 0.8110 | 82     | 53     | 26     | 98     | 71     |
| 9                    | 37     | 0.8209 | 79     | 51     | 23     | 94     | 66     | 39     | 0.8011 | 83     |



空气体积换算因数表(5)

| 气温°C<br>气压<br>mm.Hg. |        |        |        |        |        |        |        |        |        |        |
|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                      | 20     | 21     | 22     | 23     | 24     | 25     | 26     | 27     | 28     | 29     |
| 600                  | 0.7355 | 0.7330 | 0.7305 | 0.7281 | 0.7256 | 0.7232 | 0.7208 | 0.7184 | 0.7159 | 0.7136 |
| 1                    | 68     | 42     | 17     | 93     | 68     | 44     | 20     | 96     | 71     | 48     |
| 2                    | 80     | 55     | 29     | 0.7305 | 81     | 56     | 32     | 0.7208 | 83     | 60     |
| 3                    | 92     | 67     | 42     | 17     | 93     | 68     | 44     | 20     | 95     | 72     |
| 4                    | 0.7404 | 79     | 54     | 30     | 0.7305 | 80     | 56     | 32     | 0.7207 | 84     |
| 5                    | 17     | 91     | 66     | 42     | 17     | 92     | 68     | 44     | 19     | 96     |
| 6                    | 29     | 0.7404 | 78     | 54     | 29     | 0.7304 | 80     | 56     | 31     | 0.7208 |
| 7                    | 41     | 16     | 90     | 66     | 41     | 16     | 92     | 68     | 43     | 20     |
| 8                    | 53     | 28     | 0.7402 | 78     | 53     | 28     | 0.7304 | 80     | 55     | 32     |
| 9                    | 66     | 40     | 15     | 90     | 65     | 40     | 16     | 92     | 67     | 43     |
| 610                  | 78     | 52     | 27     | 0.7402 | 77     | 52     | 28     | 0.7304 | 79     | 55     |
| 1                    | 90     | 65     | 39     | 14     | 89     | 64     | 40     | 16     | 90     | 67     |
| 2                    | 0.7503 | 77     | 51     | 27     | 0.7402 | 76     | 52     | 27     | 0.7302 | 79     |
| 3                    | 15     | 89     | 63     | 39     | 14     | 88     | 64     | 39     | 14     | 91     |
| 4                    | 27     | 0.7501 | 75     | 51     | 26     | 0.7401 | 76     | 51     | 26     | 0.7303 |
| 5                    | 39     | 13     | 88     | 63     | 38     | 13     | 88     | 63     | 38     | 15     |
| 6                    | 52     | 26     | 0.7500 | 75     | 50     | 25     | 0.7400 | 75     | 50     | 27     |
| 7                    | 64     | 38     | 12     | 87     | 62     | 37     | 12     | 87     | 62     | 39     |
| 8                    | 76     | 50     | 24     | 99     | 74     | 49     | 24     | 99     | 74     | 50     |
| 9                    | 88     | 62     | 36     | 0.7512 | 86     | 61     | 36     | 0.7411 | 86     | 62     |
| 620                  | 0.7601 | 75     | 49     | 24     | 98     | 73     | 48     | 23     | 98     | 74     |
| 1                    | 13     | 87     | 61     | 36     | 0.7510 | 85     | 60     | 35     | 0.7410 | 86     |
| 2                    | 25     | 99     | 73     | 48     | 22     | 97     | 72     | 47     | 22     | 98     |
| 3                    | 37     | 0.7611 | 85     | 60     | 35     | 0.7509 | 84     | 59     | 34     | 0.7410 |
| 4                    | 50     | 23     | 97     | 72     | 47     | 21     | 96     | 71     | 46     | 22     |
| 5                    | 62     | 36     | 0.7609 | 84     | 59     | 33     | 0.7508 | 83     | 58     | 34     |
| 6                    | 74     | 48     | 22     | 97     | 71     | 45     | 20     | 95     | 69     | 46     |
| 7                    | 86     | 60     | 34     | 0.7609 | 83     | 57     | 32     | 0.7507 | 81     | 58     |
| 8                    | 99     | 72     | 46     | 21     | 95     | 69     | 44     | 19     | 93     | 69     |
| 9                    | 0.7711 | 84     | 58     | 33     | 0.7607 | 81     | 56     | 31     | 0.7505 | 81     |
| 630                  | 23     | 97     | 70     | 45     | 19     | 93     | 68     | 43     | 17     | 93     |
| 1                    | 35     | 0.7709 | 82     | 57     | 31     | 0.7605 | 80     | 55     | 29     | 0.7505 |
| 2                    | 48     | 21     | 95     | 69     | 43     | 17     | 92     | 67     | 41     | 17     |
| 3                    | 60     | 33     | 0.7707 | 81     | 56     | 30     | 0.7604 | 79     | 53     | 29     |
| 4                    | 72     | 46     | 19     | 94     | 68     | 42     | 16     | 91     | 65     | 41     |
| 5                    | 84     | 58     | 31     | 0.7706 | 80     | 54     | 28     | 0.7603 | 77     | 53     |
| 6                    | 97     | 70     | 43     | 18     | 92     | 66     | 40     | 15     | 89     | 65     |
| 7                    | 0.7809 | 82     | 55     | 30     | 0.7704 | 78     | 52     | 27     | 0.7601 | 76     |
| 8                    | 21     | 94     | 68     | 42     | 16     | 90     | 64     | 39     | 13     | 88     |
| 9                    | 34     | 0.7807 | 80     | 54     | 28     | 0.7702 | 76     | 51     | 25     | 0.7600 |
| 640                  | 46     | 19     | 92     | 66     | 40     | 14     | 88     | 63     | 36     | 12     |
| 1                    | 58     | 31     | 0.7804 | 79     | 52     | 26     | 0.7700 | 75     | 48     | 24     |
| 2                    | 70     | 43     | 16     | 91     | 64     | 38     | 12     | 87     | 60     | 36     |
| 3                    | 83     | 56     | 29     | 0.7803 | 76     | 50     | 24     | 99     | 72     | 48     |
| 4                    | 95     | 68     | 41     | 15     | 89     | 62     | 36     | 0.7711 | 84     | 60     |
| 5                    | 0.7907 | 80     | 53     | 27     | 0.7801 | 74     | 48     | 23     | 96     | 72     |
| 6                    | 19     | 92     | 65     | 39     | 13     | 86     | 60     | 35     | 0.7708 | 84     |
| 7                    | 32     | 0.7904 | 77     | 51     | 25     | 98     | 72     | 47     | 20     | 95     |
| 8                    | 44     | 17     | 89     | 63     | 37     | 0.7810 | 84     | 59     | 32     | 0.7707 |
| 9                    | 56     | 29     | 0.7902 | 76     | 49     | 22     | 96     | 70     | 44     | 19     |

空气体积换算因数表(6)

| 气温℃<br>气压<br>mm.Hg | 30     | 31     | 32     | 33     | 34     | 35     | 36     | 37     | 38     | 39     |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 600                | 0.7112 | 0.7089 | 0.7066 | 0.7043 | 0.7019 | 0.6997 | 0.6974 | 0.6952 | 0.6929 | 0.6907 |
| 1                  | 24     | 0.7101 | 78     | 55     | 31     | 0.7009 | 86     | 63     | 41     | 19     |
| 2                  | 36     | 13     | 90     | 66     | 43     | 21     | 98     | 75     | 52     | 30     |
| 3                  | 48     | 24     | 0.7102 | 78     | 54     | 32     | 0.7009 | 86     | 64     | 42     |
| 4                  | 60     | 36     | 13     | 90     | 66     | 44     | 21     | 98     | 76     | 53     |
| 5                  | 72     | 48     | 25     | 0.7101 | 78     | 56     | 33     | 0.7010 | 87     | 65     |
| 6                  | 84     | 60     | 37     | 13     | 90     | 67     | 44     | 21     | 99     | 76     |
| 7                  | 95     | 72     | 49     | 25     | 0.7101 | 79     | 56     | 33     | 0.7010 | 88     |
| 8                  | 0.7207 | 84     | 60     | 37     | 13     | 90     | 67     | 44     | 22     | 99     |
| 9                  | 19     | 95     | 72     | 48     | 25     | 0.7102 | 79     | 56     | 33     | 0.7011 |
| 610                | 31     | 0.7207 | 84     | 60     | 36     | 14     | 91     | 67     | 45     | 22     |
| 1                  | 43     | 19     | 96     | 72     | 48     | 25     | 0.7102 | 79     | 56     | 34     |
| 2                  | 55     | 31     | 0.7208 | 84     | 60     | 37     | 14     | 91     | 68     | 45     |
| 3                  | 67     | 43     | 19     | 95     | 71     | 49     | 26     | 0.7102 | 80     | 57     |
| 4                  | 78     | 54     | 31     | 0.7207 | 83     | 60     | 37     | 14     | 91     | 68     |
| 5                  | 90     | 66     | 43     | 19     | 95     | 72     | 49     | 25     | 0.7103 | 80     |
| 6                  | 0.7302 | 78     | 55     | 31     | 0.7207 | 84     | 60     | 37     | 14     | 91     |
| 7                  | 14     | 90     | 66     | 42     | 18     | 95     | 72     | 49     | 26     | 0.7103 |
| 8                  | 26     | 0.7302 | 78     | 54     | 30     | 0.7207 | 84     | 60     | 37     | 14     |
| 9                  | 38     | 13     | 90     | 66     | 42     | 19     | 95     | 72     | 49     | 26     |
| 620                | 49     | 25     | 0.7302 | 78     | 53     | 30     | 0.7207 | 83     | 60     | 37     |
| 1                  | 61     | 37     | 14     | 89     | 65     | 42     | 19     | 95     | 72     | 49     |
| 2                  | 73     | 49     | 25     | 0.7301 | 77     | 54     | 30     | 0.7206 | 83     | 60     |
| 3                  | 85     | 61     | 37     | 13     | 88     | 65     | 42     | 18     | 95     | 72     |
| 4                  | 97     | 73     | 49     | 25     | 0.7300 | 77     | 53     | 30     | 0.7207 | 83     |
| 5                  | 0.7409 | 84     | 61     | 36     | 12     | 89     | 65     | 41     | 18     | 95     |
| 6                  | 21     | 96     | 72     | 48     | 24     | 0.7300 | 77     | 53     | 30     | 0.7207 |
| 7                  | 32     | 0.7408 | 84     | 60     | 35     | 12     | 88     | 64     | 41     | 18     |
| 8                  | 44     | 20     | 96     | 71     | 47     | 24     | 0.7300 | 76     | 53     | 30     |
| 9                  | 56     | 32     | 0.7408 | 83     | 59     | 35     | 11     | 88     | 64     | 41     |
| 630                | 68     | 43     | 20     | 95     | 70     | 47     | 23     | 99     | 76     | 53     |
| 1                  | 80     | 55     | 31     | 0.7407 | 82     | 59     | 35     | 0.7311 | 87     | 64     |
| 2                  | 92     | 67     | 43     | 18     | 94     | 70     | 46     | 22     | 99     | 76     |
| 3                  | 0.7504 | 79     | 55     | 30     | 0.7405 | 82     | 58     | 34     | 0.7311 | 87     |
| 4                  | 15     | 91     | 67     | 42     | 17     | 94     | 70     | 46     | 22     | 99     |
| 5                  | 27     | 0.7503 | 78     | 54     | 29     | 0.7405 | 81     | 57     | 34     | 0.7310 |
| 6                  | 39     | 14     | 90     | 65     | 41     | 17     | 93     | 69     | 45     | 22     |
| 7                  | 51     | 26     | 0.7502 | 77     | 52     | 29     | 0.7404 | 80     | 57     | 33     |
| 8                  | 63     | 38     | 14     | 89     | 64     | 40     | 16     | 92     | 68     | 45     |
| 9                  | 75     | 50     | 26     | 0.7501 | 76     | 52     | 28     | 0.7403 | 80     | 56     |
| 640                | 87     | 62     | 37     | 12     | 87     | 64     | 39     | 15     | 91     | 68     |
| 1                  | 98     | 73     | 49     | 24     | 99     | 75     | 51     | 27     | 0.7403 | 79     |
| 2                  | 0.7610 | 85     | 61     | 36     | 0.7511 | 87     | 63     | 38     | 14     | 91     |
| 3                  | 22     | 97     | 73     | 48     | 22     | 99     | 74     | 50     | 26     | 0.7402 |
| 4                  | 34     | 0.7609 | 84     | 59     | 34     | 0.7510 | 86     | 61     | 38     | 14     |
| 5                  | 46     | 21     | 96     | 71     | 46     | 22     | 97     | 73     | 49     | 25     |
| 6                  | 58     | 32     | 0.7608 | 83     | 58     | 34     | 0.7509 | 85     | 61     | 37     |
| 7                  | 70     | 44     | 20     | 95     | 69     | 45     | 21     | 96     | 72     | 48     |
| 8                  | 81     | 56     | 31     | 0.7606 | 81     | 57     | 32     | 0.7508 | 84     | 60     |
| 9                  | 93     | 68     | 43     | 18     | 93     | 69     | 44     | 19     | 95     | 71     |

 20  
39

空 气 体 积 换 算 因 数 表 (7)

| 气温°C<br>气压<br>mm.Hg. | 40     | 41     | 42     | 43     | 44     | 45     | 46     | 47     | 48     | 49     |
|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 600                  | 0.6885 | 0.6863 | 0.6841 | 0.6820 | 0.6798 | 0.6776 | 0.6755 | 0.6734 | 0.6713 | 0.6692 |
| 1                    | 96     | 75     | 53     | 31     | 0.6809 | 88     | 67     | 46     | 25     | 0.6704 |
| 2                    | 0.6908 | 86     | 64     | 42     | 21     | 99     | 78     | 57     | 36     | 15     |
| 3                    | 19     | 98     | 75     | 54     | 32     | 0.6810 | 89     | 68     | 47     | 26     |
| 4                    | 31     | 0.6910 | 87     | 65     | 43     | 22     | 0.6800 | 79     | 58     | 37     |
| 5                    | 42     | 21     | 98     | 76     | 55     | 33     | 12     | 91     | 69     | 48     |
| 6                    | 54     | 32     | 0.6910 | 88     | 66     | 44     | 23     | 0.6802 | 81     | 59     |
| 7                    | 65     | 44     | 21     | 99     | 77     | 55     | 34     | 13     | 92     | 70     |
| 8                    | 77     | 55     | 32     | 0.6911 | 89     | 67     | 45     | 24     | 0.6803 | 82     |
| 9                    | 88     | 66     | 44     | 22     | 0.6900 | 78     | 57     | 35     | 14     | 93     |
| 610                  | 0.7000 | 78     | 55     | 33     | 11     | 89     | 68     | 47     | 25     | 0.6804 |
| 1                    | 11     | 89     | 67     | 45     | 23     | 0.6901 | 79     | 58     | 36     | 15     |
| 2                    | 23     | 0.7001 | 78     | 56     | 34     | 12     | 91     | 69     | 48     | 26     |
| 3                    | 34     | 12     | 89     | 67     | 45     | 23     | 0.6902 | 80     | 59     | 37     |
| 4                    | 46     | 24     | 0.7001 | 79     | 57     | 35     | 13     | 92     | 70     | 49     |
| 5                    | 57     | 35     | 12     | 90     | 68     | 46     | 24     | 0.6903 | 81     | 60     |
| 6                    | 69     | 46     | 24     | 0.7001 | 79     | 57     | 36     | 14     | 92     | 71     |
| 7                    | 80     | 58     | 35     | 13     | 91     | 68     | 47     | 25     | 0.6904 | 82     |
| 8                    | 92     | 69     | 46     | 24     | 0.7002 | 80     | 58     | 36     | 15     | 93     |
| 9                    | 0.7103 | 81     | 58     | 36     | 13     | 91     | 69     | 48     | 26     | 0.6904 |
| 620                  | 15     | 92     | 69     | 47     | 25     | 0.7002 | 81     | 59     | 37     | 15     |
| 1                    | 26     | 0.7104 | 81     | 58     | 36     | 14     | 92     | 70     | 48     | 27     |
| 2                    | 37     | 15     | 92     | 70     | 47     | 25     | 0.7003 | 81     | 60     | 38     |
| 3                    | 49     | 26     | 0.7103 | 81     | 59     | 36     | 14     | 93     | 71     | 49     |
| 4                    | 60     | 38     | 15     | 92     | 70     | 47     | 26     | 0.7004 | 82     | 60     |
| 5                    | 72     | 49     | 26     | 0.7104 | 81     | 59     | 37     | 15     | 93     | 71     |
| 6                    | 83     | 61     | 38     | 15     | 93     | 70     | 48     | 26     | 0.7004 | 82     |
| 7                    | 95     | 72     | 49     | 26     | 0.7104 | 81     | 59     | 37     | 16     | 94     |
| 8                    | 0.7206 | 84     | 60     | 38     | 15     | 93     | 71     | 49     | 27     | 0.7005 |
| 9                    | 18     | 95     | 72     | 49     | 27     | 0.7104 | 82     | 60     | 38     | 16     |
| 630                  | 29     | 0.7207 | 83     | 61     | 38     | 15     | 93     | 71     | 49     | 27     |
| 1                    | 41     | 18     | 95     | 72     | 49     | 27     | 0.7104 | 82     | 60     | 38     |
| 2                    | 52     | 29     | 0.7206 | 83     | 61     | 38     | 16     | 94     | 71     | 49     |
| 3                    | 64     | 41     | 17     | 95     | 72     | 49     | 27     | 0.7105 | 83     | 60     |
| 4                    | 75     | 52     | 29     | 0.7206 | 83     | 60     | 38     | 16     | 94     | 72     |
| 5                    | 87     | 64     | 40     | 17     | 95     | 72     | 49     | 27     | 0.7105 | 83     |
| 6                    | 98     | 75     | 52     | 29     | 0.7206 | 83     | 61     | 38     | 16     | 94     |
| 7                    | 0.7310 | 87     | 63     | 40     | 17     | 94     | 72     | 50     | 27     | 0.7105 |
| 8                    | 21     | 98     | 74     | 52     | 29     | 0.7206 | 83     | 61     | 39     | 16     |
| 9                    | 33     | 0.7310 | 86     | 63     | 40     | 17     | 95     | 72     | 50     | 27     |
| 640                  | 44     | 21     | 97     | 74     | 51     | 28     | 0.7206 | 83     | 61     | 39     |
| 1                    | 55     | 32     | 0.7309 | 86     | 63     | 39     | 17     | 95     | 72     | 50     |
| 2                    | 67     | 44     | 20     | 97     | 74     | 51     | 28     | 0.7205 | 83     | 61     |
| 3                    | 78     | 55     | 31     | 0.7308 | 85     | 62     | 40     | 17     | 95     | 72     |
| 4                    | 90     | 67     | 43     | 20     | 97     | 73     | 51     | 28     | 0.7206 | 83     |
| 5                    | 0.7401 | 78     | 54     | 31     | 0.7308 | 85     | 62     | 39     | 17     | 94     |
| 6                    | 13     | 90     | 66     | 42     | 19     | 96     | 73     | 51     | 28     | 0.7205 |
| 7                    | 24     | 0.7401 | 77     | 54     | 31     | 0.7307 | 85     | 62     | 39     | 17     |
| 8                    | 36     | 12     | 88     | 65     | 42     | 19     | 96     | 73     | 50     | 28     |
| 9                    | 47     | 24     | 0.7400 | 77     | 53     | 30     | 0.7307 | 84     | 62     | 39     |

空气体积换算因数表(8)

| 气温°C<br>气压<br>mm.Hg. |  | -20    | -19    | -18    | -17    | -16    | -15    | -14    | -13    | -12    | -11    |
|----------------------|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 650                  |  | 0.9229 | 0.9193 | 0.9157 | 0.9121 | 0.9086 | 0.9050 | 0.9015 | 0.8981 | 0.8946 | 0.8912 |
| 1                    |  | 44     | 0.9207 | 71     | 35     | 0.9100 | 64     | 29     | 95     | 60     | 25     |
| 2                    |  | 58     | 21     | 85     | 49     | 14     | 78     | 43     | 0.9009 | 73     | 39     |
| 3                    |  | 72     | 35     | 99     | 63     | 28     | 92     | 56     | 23     | 87     | 53     |
| 4                    |  | 86     | 50     | 0.9214 | 77     | 42     | 0.9106 | 70     | 36     | 0.9001 | 66     |
| 5                    |  | 0.9300 | 64     | 28     | 91     | 56     | 20     | 84     | 50     | 15     | 80     |
| 6                    |  | 15     | 78     | 42     | 0.9205 | 70     | 33     | 98     | 64     | 29     | 94     |
| 7                    |  | 29     | 92     | 56     | 19     | 84     | 47     | 0.9112 | 78     | 42     | 0.9007 |
| 8                    |  | 43     | 0.9306 | 70     | 33     | 98     | 61     | 26     | 92     | 56     | 21     |
| 9                    |  | 57     | 20     | 84     | 47     | 0.9212 | 75     | 40     | 0.9105 | 70     | 35     |
| 660                  |  | 71     | 34     | 98     | 61     | 25     | 89     | 54     | 19     | 84     | 49     |
| 1                    |  | 86     | 49     | 0.9312 | 75     | 39     | 0.9203 | 67     | 33     | 97     | 62     |
| 2                    |  | 0.9400 | 63     | 26     | 89     | 53     | 17     | 81     | 47     | 0.9111 | 76     |
| 3                    |  | 14     | 77     | 40     | 0.9303 | 67     | 31     | 95     | 61     | 25     | 90     |
| 4                    |  | 28     | 91     | 54     | 17     | 81     | 45     | 0.9209 | 74     | 39     | 0.9103 |
| 5                    |  | 42     | 0.9405 | 69     | 31     | 95     | 59     | 23     | 88     | 52     | 17     |
| 6                    |  | 57     | 19     | 83     | 45     | 0.9309 | 73     | 37     | 0.9202 | 66     | 31     |
| 7                    |  | 71     | 33     | 97     | 59     | 23     | 87     | 51     | 16     | 80     | 45     |
| 8                    |  | 85     | 48     | 0.9411 | 73     | 37     | 0.9301 | 64     | 30     | 94     | 58     |
| 9                    |  | 99     | 62     | 25     | 87     | 51     | 14     | 78     | 44     | 0.9207 | 72     |
| 670                  |  | 0.9513 | 76     | 39     | 0.9401 | 65     | 28     | 92     | 57     | 21     | 86     |
| 1                    |  | 28     | 90     | 53     | 15     | 79     | 42     | 0.9306 | 71     | 35     | 99     |
| 2                    |  | 42     | 0.9504 | 67     | 30     | 93     | 56     | 20     | 85     | 49     | 0.9213 |
| 3                    |  | 56     | 18     | 81     | 44     | 0.9407 | 70     | 34     | 99     | 62     | 27     |
| 4                    |  | 70     | 32     | 95     | 58     | 21     | 84     | 48     | 0.9313 | 76     | 41     |
| 5                    |  | 84     | 47     | 0.9509 | 72     | 35     | 98     | 62     | 26     | 90     | 54     |
| 6                    |  | 99     | 61     | 23     | 86     | 49     | 0.9412 | 75     | 40     | 0.9304 | 68     |
| 7                    |  | 0.9613 | 75     | 38     | 0.9500 | 63     | 26     | 89     | 54     | 18     | 82     |
| 8                    |  | 27     | 89     | 52     | 14     | 77     | 40     | 0.9403 | 68     | 31     | 95     |
| 9                    |  | 41     | 0.9603 | 66     | 28     | 91     | 54     | 17     | 82     | 45     | 0.9309 |
| 680                  |  | 55     | 17     | 80     | 42     | 0.9505 | 68     | 31     | 96     | 59     | 23     |
| 1                    |  | 70     | 31     | 94     | 56     | 19     | 82     | 45     | 0.9409 | 73     | 37     |
| 2                    |  | 84     | 46     | 0.9608 | 70     | 33     | 95     | 59     | 23     | 86     | 50     |
| 3                    |  | 98     | 60     | 22     | 84     | 74     | 0.9509 | 73     | 37     | 0.9400 | 64     |
| 4                    |  | 0.9712 | 74     | 36     | 98     | 61     | 23     | 86     | 51     | 14     | 78     |
| 5                    |  | 26     | 88     | 50     | 0.9612 | 75     | 37     | 0.9500 | 65     | 28     | 91     |
| 6                    |  | 41     | 0.9702 | 64     | 26     | 89     | 51     | 14     | 78     | 41     | 0.9405 |
| 7                    |  | 55     | 16     | 78     | 40     | 0.9603 | 65     | 28     | 92     | 55     | 19     |
| 8                    |  | 69     | 30     | 93     | 54     | 17     | 79     | 42     | 0.9506 | 69     | 32     |
| 9                    |  | 83     | 44     | 0.9707 | 68     | 31     | 93     | 56     | 20     | 83     | 46     |
| 690                  |  | 97     | 59     | 21     | 82     | 45     | 0.9607 | 70     | 34     | 96     | 60     |
| 1                    |  | 0.8912 | 73     | 35     | 96     | 59     | 21     | 83     | 48     | 0.9510 | 74     |
| 2                    |  | 26     | 87     | 49     | 0.9710 | 73     | 35     | 97     | 61     | 24     | 87     |
| 3                    |  | 40     | 0.9801 | 63     | 24     | 87     | 49     | 0.9611 | 75     | 38     | 0.9501 |
| 4                    |  | 54     | 15     | 77     | 38     | 0.9701 | 63     | 25     | 89     | 52     | 15     |
| 5                    |  | 68     | 29     | 91     | 52     | 15     | 76     | 39     | 0.9603 | 65     | 28     |
| 6                    |  | 83     | 44     | 0.9805 | 66     | 29     | 90     | 53     | 17     | 79     | 42     |
| 7                    |  | 97     | 58     | 19     | 80     | 43     | 0.9704 | 67     | 30     | 93     | 56     |
| 8                    |  | 0.9911 | 72     | 33     | 94     | 57     | 18     | 81     | 44     | 0.9607 | 70     |
| 9                    |  | 25     | 86     | 48     | 0.9808 | 71     | 32     | 94     | 58     | 20     | 83     |

40  
49  
-20  
-11  
669

空气体积换算因数表(9)

| 气温℃<br>气压<br>mm.Hg. | -10    | -9     | -8     | -7     | -6     | -5     | -4     | -3     | -2     | -1     |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 650                 | 0.8878 | 0.8845 | 0.8811 | 0.8778 | 0.8745 | 0.8712 | 0.8680 | 0.8648 | 0.8616 | 0.8585 |
| 1                   | 92     | 58     | 24     | 92     | 59     | 25     | 93     | 61     | 29     | 98     |
| 2                   | 0.8906 | 72     | 38     | 0.8805 | 72     | 39     | 0.8707 | 74     | 42     | 0.8611 |
| 3                   | 19     | 85     | 51     | 19     | 85     | 52     | 20     | 88     | 56     | 24     |
| 4                   | 33     | 99     | 65     | 32     | 99     | 66     | 34     | 0.8701 | 69     | 37     |
| 5                   | 47     | 0.8913 | 79     | 46     | 0.8812 | 79     | 47     | 14     | 82     | 51     |
| 6                   | 60     | 26     | 92     | 59     | 26     | 92     | 60     | 27     | 95     | 64     |
| 7                   | 74     | 40     | 0.8906 | 73     | 39     | 0.8806 | 74     | 41     | 0.8709 | 77     |
| 8                   | 88     | 53     | 19     | 86     | 53     | 19     | 87     | 54     | 22     | 90     |
| 9                   | 0.9001 | 67     | 33     | 0.8900 | 66     | 33     | 0.8800 | 67     | 35     | 0.8703 |
| 660                 | 15     | 81     | 46     | 13     | 79     | 46     | 14     | 81     | 48     | 17     |
| 1                   | 29     | 94     | 60     | 27     | 93     | 59     | 27     | 94     | 62     | 30     |
| 2                   | 42     | 0.9008 | 73     | 40     | 0.8907 | 73     | 40     | 0.8807 | 75     | 43     |
| 3                   | 56     | 21     | 87     | 54     | 20     | 86     | 54     | 21     | 88     | 56     |
| 4                   | 70     | 35     | 0.9000 | 67     | 33     | 0.8900 | 67     | 34     | 0.8801 | 69     |
| 5                   | 83     | 49     | 14     | 81     | 47     | 13     | 80     | 47     | 15     | 83     |
| 6                   | 97     | 62     | 28     | 94     | 60     | 26     | 94     | 60     | 28     | 96     |
| 7                   | 0.9111 | 76     | 41     | 0.9008 | 74     | 40     | 0.8907 | 74     | 41     | 0.8809 |
| 8                   | 24     | 89     | 55     | 21     | 87     | 53     | 20     | 87     | 54     | 22     |
| 9                   | 38     | 0.9103 | 68     | 35     | 0.9001 | 67     | 34     | 0.8900 | 68     | 35     |
| 670                 | 52     | 17     | 82     | 48     | 14     | 80     | 47     | 14     | 81     | 49     |
| 1                   | 65     | 30     | 95     | 62     | 28     | 93     | 61     | 27     | 94     | 62     |
| 2                   | 79     | 44     | 0.9109 | 75     | 41     | 0.9007 | 74     | 40     | 0.8907 | 75     |
| 3                   | 93     | 58     | 23     | 89     | 55     | 20     | 87     | 54     | 21     | 88     |
| 4                   | 0.9206 | 71     | 36     | 0.9102 | 68     | 34     | 0.9001 | 67     | 34     | 0.8902 |
| 5                   | 20     | 85     | 50     | 16     | 81     | 47     | 14     | 80     | 47     | 15     |
| 6                   | 33     | 98     | 63     | 29     | 95     | 60     | 27     | 94     | 60     | 28     |
| 7                   | 47     | 0.9212 | 77     | 43     | 0.9108 | 74     | 41     | 0.9007 | 74     | 41     |
| 8                   | 61     | 26     | 90     | 56     | 22     | 87     | 54     | 20     | 87     | 54     |
| 9                   | 74     | 39     | 0.9204 | 70     | 35     | 0.9101 | 67     | 33     | 0.9000 | 68     |
| 680                 | 88     | 53     | 17     | 83     | 49     | 14     | 81     | 47     | 13     | 81     |
| 1                   | 0.9302 | 66     | 31     | 97     | 62     | 27     | 94     | 60     | 27     | 94     |
| 2                   | 15     | 80     | 45     | 0.9210 | 76     | 41     | 0.9107 | 73     | 40     | 0.9007 |
| 3                   | 29     | 94     | 58     | 24     | 89     | 54     | 21     | 87     | 53     | 20     |
| 4                   | 43     | 0.9307 | 72     | 37     | 0.9203 | 68     | 34     | 0.9100 | 66     | 34     |
| 5                   | 56     | 21     | 85     | 51     | 16     | 81     | 47     | 13     | 80     | 47     |
| 6                   | 70     | 34     | 99     | 64     | 29     | 94     | 61     | 27     | 93     | 60     |
| 7                   | 84     | 48     | 0.9312 | 78     | 43     | 0.9208 | 74     | 40     | 0.9106 | 73     |
| 8                   | 97     | 62     | 26     | 91     | 56     | 21     | 88     | 53     | 19     | 86     |
| 9                   | 0.9411 | 75     | 40     | 0.9305 | 70     | 35     | 0.9201 | 66     | 33     | 0.9100 |
| 690                 | 25     | 89     | 53     | 18     | 83     | 48     | 14     | 80     | 46     | 13     |
| 1                   | 38     | 0.9402 | 67     | 32     | 97     | 61     | 28     | 93     | 59     | 26     |
| 2                   | 52     | 16     | 80     | 45     | 0.9310 | 75     | 41     | 0.9206 | 72     | 39     |
| 3                   | 66     | 30     | 94     | 59     | 24     | 88     | 54     | 20     | 86     | 52     |
| 4                   | 79     | 43     | 0.9407 | 72     | 37     | 0.9302 | 68     | 33     | 99     | 66     |
| 5                   | 93     | 57     | 21     | 86     | 51     | 15     | 81     | 46     | 0.9212 | 79     |
| 6                   | 0.9507 | 70     | 34     | 99     | 64     | 28     | 94     | 60     | 25     | 92     |
| 7                   | 20     | 84     | 48     | 0.9413 | 77     | 42     | 0.9308 | 73     | 39     | 0.9205 |
| 8                   | 34     | 98     | 61     | 26     | 91     | 55     | 21     | 86     | 52     | 18     |
| 9                   | 48     | 0.9511 | 75     | 40     | 0.9404 | 69     | 34     | 99     | 65     | 32     |

空气体积换算因数表(10)

| 气温°C<br>气压<br>mm.Hg. | 0      | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      |
|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 650                  | 0.8553 | 0.8521 | 0.8491 | 0.8460 | 0.8429 | 0.8399 | 0.8369 | 0.8338 | 0.8310 | 0.8280 |
| 1                    | 66     | 34     | 0.8504 | 73     | 42     | 0.8412 | 82     | 51     | 22     | 92     |
| 2                    | 79     | 47     | 17     | 86     | 54     | 24     | 95     | 64     | 35     | 0.8305 |
| 3                    | 92     | 60     | 30     | 99     | 67     | 37     | 0.8407 | 77     | 47     | 18     |
| 4                    | 0.8605 | 73     | 43     | 0.8512 | 80     | 50     | 20     | 90     | 60     | 31     |
| 5                    | 18     | 86     | 56     | 25     | 93     | 63     | 33     | 0.8402 | 73     | 43     |
| 6                    | 32     | 0.8600 | 69     | 38     | 0.8506 | 76     | 46     | 15     | 86     | 56     |
| 7                    | 45     | 13     | 82     | 51     | 19     | 89     | 59     | 28     | 98     | 69     |
| 8                    | 58     | 26     | 95     | 64     | 32     | 0.8502 | 72     | 41     | 0.8411 | 82     |
| 9                    | 71     | 39     | 0.8609 | 77     | 45     | 15     | 85     | 54     | 24     | 94     |
| 660                  | 84     | 52     | 22     | 90     | 58     | 28     | 98     | 66     | 37     | 0.8407 |
| 1                    | 97     | 65     | 35     | 0.8603 | 71     | 41     | 0.8510 | 79     | 50     | 20     |
| 2                    | 0.8711 | 78     | 48     | 16     | 84     | 54     | 23     | 92     | 62     | 33     |
| 3                    | 24     | 91     | 61     | 29     | 97     | 67     | 36     | 0.8505 | 75     | 45     |
| 4                    | 37     | 0.8704 | 74     | 42     | 0.8610 | 80     | 49     | 18     | 88     | 58     |
| 5                    | 50     | 17     | 87     | 55     | 23     | 92     | 62     | 31     | 0.8501 | 71     |
| 6                    | 63     | 31     | 0.8700 | 68     | 36     | 0.8605 | 75     | 43     | 13     | 84     |
| 7                    | 76     | 44     | 13     | 81     | 49     | 18     | 88     | 56     | 26     | 96     |
| 8                    | 90     | 57     | 26     | 94     | 62     | 31     | 0.8601 | 69     | 39     | 0.8509 |
| 9                    | 0.8803 | 70     | 39     | 0.8707 | 75     | 44     | 13     | 82     | 52     | 22     |
| 670                  | 16     | 83     | 52     | 20     | 88     | 57     | 26     | 95     | 65     | 34     |
| 1                    | 29     | 96     | 65     | 33     | 0.8701 | 70     | 39     | 0.8608 | 77     | 47     |
| 2                    | 42     | 0.8809 | 78     | 46     | 14     | 83     | 52     | 20     | 90     | 60     |
| 3                    | 55     | 22     | 91     | 59     | 27     | 96     | 65     | 33     | 0.8603 | 73     |
| 4                    | 68     | 35     | 0.8804 | 72     | 40     | 0.8709 | 78     | 46     | 16     | 85     |
| 5                    | 82     | 49     | 18     | 85     | 53     | 22     | 91     | 59     | 29     | 98     |
| 6                    | 95     | 62     | 31     | 98     | 66     | 35     | 0.8704 | 72     | 41     | 0.8611 |
| 7                    | 0.8908 | 75     | 44     | 0.8811 | 79     | 48     | 16     | 85     | 54     | 24     |
| 8                    | 21     | 88     | 57     | 24     | 92     | 60     | 29     | 97     | 67     | 36     |
| 9                    | 34     | 0.8901 | 70     | 37     | 0.8805 | 73     | 42     | 0.8710 | 80     | 49     |
| 680                  | 47     | 14     | 83     | 50     | 18     | 86     | 55     | 23     | 92     | 62     |
| 1                    | 61     | 27     | 96     | 63     | 31     | 99     | 68     | 36     | 0.8705 | 75     |
| 2                    | 74     | 40     | 0.8909 | 76     | 43     | 0.8812 | 81     | 49     | 18     | 87     |
| 3                    | 87     | 53     | 22     | 89     | 56     | 25     | 94     | 62     | 31     | 0.8700 |
| 4                    | 0.9000 | 67     | 35     | 0.8902 | 69     | 38     | 0.8807 | 74     | 44     | 13     |
| 5                    | 13     | 80     | 48     | 15     | 82     | 51     | 19     | 87     | 56     | 26     |
| 6                    | 26     | 93     | 61     | 28     | 95     | 64     | 32     | 0.8800 | 69     | 38     |
| 7                    | 40     | 0.9006 | 74     | 41     | 0.8908 | 77     | 45     | 13     | 82     | 51     |
| 8                    | 53     | 19     | 87     | 54     | 21     | 90     | 58     | 26     | 95     | 64     |
| 9                    | 66     | 32     | 0.9000 | 67     | 34     | 0.8903 | 71     | 38     | 0.8807 | 76     |
| 690                  | 79     | 45     | 13     | 80     | 47     | 15     | 84     | 51     | 20     | 89     |
| 1                    | 92     | 58     | 27     | 93     | 60     | 28     | 97     | 64     | 33     | 0.8802 |
| 2                    | 0.9105 | 71     | 40     | 0.9006 | 73     | 41     | 0.8910 | 77     | 46     | 15     |
| 3                    | 18     | 85     | 53     | 19     | 86     | 54     | 22     | 90     | 59     | 27     |
| 4                    | 32     | 98     | 66     | 32     | 99     | 67     | 35     | 0.8903 | 71     | 40     |
| 5                    | 45     | 0.9111 | 79     | 45     | 0.9012 | 80     | 48     | 15     | 84     | 53     |
| 6                    | 58     | 24     | 92     | 58     | 25     | 93     | 61     | 28     | 97     | 66     |
| 7                    | 71     | 37     | 0.9105 | 71     | 38     | 0.9006 | 74     | 41     | 0.8910 | 78     |
| 8                    | 84     | 50     | 18     | 84     | 51     | 19     | 87     | 54     | 23     | 91     |
| 9                    | 97     | 63     | 31     | 97     | 64     | 32     | 0.9000 | 67     | 35     | 0.8904 |

空气体积换算因数表(11)

| 气温°C<br>气压<br>mm.Hg. |        |        |        |        |        |        |        |        |        |        |
|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                      | 10     | 11     | 12     | 13     | 14     | 15     | 16     | 17     | 18     | 19     |
| 650                  | 0.8250 | 0.8221 | 0.8192 | 0.8163 | 0.8135 | 0.8107 | 0.8078 | 0.8051 | 0.8023 | 0.7996 |
| 1                    | 62     | 34     | 0.8205 | 76     | 48     | 19     | 91     | 63     | 35     | 0.8008 |
| 2                    | 75     | 46     | 17     | 88     | 60     | 32     | 0.8103 | 76     | 48     | 20     |
| 3                    | 88     | 59     | 30     | 0.8201 | 73     | 44     | 15     | 88     | 60     | 33     |
| 4                    | 0.8301 | 72     | 42     | 14     | 85     | 57     | 28     | 0.8100 | 72     | 45     |
| 5                    | 13     | 84     | 55     | 26     | 98     | 69     | 40     | 13     | 85     | 57     |
| 6                    | 26     | 97     | 68     | 39     | 0.8210 | 82     | 53     | 25     | 97     | 69     |
| 7                    | 39     | 0.8310 | 80     | 51     | 23     | 94     | 65     | 38     | 0.8109 | 82     |
| 8                    | 51     | 22     | 93     | 64     | 36     | 0.8207 | 78     | 50     | 22     | 94     |
| 9                    | 64     | 35     | 0.8305 | 76     | 48     | 19     | 90     | 62     | 34     | 0.8106 |
| 660                  | 77     | 48     | 18     | 89     | 61     | 32     | 0.8202 | 75     | 46     | 19     |
| 1                    | 89     | 60     | 31     | 0.8301 | 73     | 44     | 15     | 87     | 59     | 31     |
| 2                    | 0.8402 | 73     | 43     | 14     | 86     | 56     | 27     | 0.8200 | 71     | 43     |
| 3                    | 15     | 86     | 56     | 27     | 98     | 69     | 40     | 12     | 83     | 56     |
| 4                    | 27     | 98     | 68     | 39     | 0.8311 | 81     | 52     | 24     | 96     | 68     |
| 5                    | 40     | 0.8411 | 81     | 52     | 23     | 94     | 65     | 37     | 0.8208 | 80     |
| 6                    | 53     | 24     | 94     | 64     | 36     | 0.8306 | 77     | 49     | 20     | 92     |
| 7                    | 66     | 36     | 0.8406 | 77     | 48     | 19     | 89     | 61     | 33     | 0.8205 |
| 8                    | 78     | 49     | 19     | 89     | 61     | 31     | 0.8302 | 74     | 45     | 17     |
| 9                    | 91     | 62     | 31     | 0.8402 | 73     | 44     | 14     | 86     | 57     | 29     |
| 670                  | 0.8504 | 74     | 44     | 15     | 86     | 56     | 27     | 99     | 70     | 42     |
| 1                    | 16     | 87     | 57     | 27     | 98     | 69     | 39     | 0.8311 | 82     | 54     |
| 2                    | 29     | 99     | 69     | 40     | 0.8411 | 81     | 52     | 23     | 94     | 66     |
| 3                    | 42     | 0.8512 | 82     | 52     | 23     | 94     | 64     | 36     | 0.8307 | 79     |
| 4                    | 54     | 25     | 94     | 65     | 36     | 0.8406 | 76     | 48     | 19     | 91     |
| 5                    | 67     | 37     | 0.8507 | 77     | 48     | 19     | 89     | 61     | 32     | 0.8303 |
| 6                    | 80     | 50     | 20     | 90     | 61     | 31     | 0.8401 | 73     | 44     | 15     |
| 7                    | 92     | 63     | 32     | 0.8502 | 73     | 44     | 14     | 85     | 56     | 28     |
| 8                    | 0.8605 | 75     | 45     | 15     | 86     | 56     | 26     | 98     | 69     | 40     |
| 9                    | 18     | 88     | 57     | 28     | 98     | 68     | 39     | 0.8410 | 81     | 52     |
| 680                  | 31     | 0.8601 | 70     | 40     | 0.8511 | 81     | 51     | 22     | 93     | 65     |
| 1                    | 43     | 13     | 83     | 53     | 23     | 93     | 63     | 35     | 0.8406 | 77     |
| 2                    | 56     | 26     | 95     | 65     | 36     | 0.8506 | 76     | 47     | 18     | 89     |
| 3                    | 69     | 39     | 0.8608 | 78     | 48     | 18     | 88     | 60     | 30     | 0.8402 |
| 4                    | 81     | 51     | 20     | 90     | 61     | 31     | 0.8501 | 72     | 43     | 14     |
| 5                    | 94     | 64     | 33     | 0.8603 | 73     | 43     | 13     | 84     | 55     | 26     |
| 6                    | 0.8707 | 77     | 46     | 15     | 86     | 56     | 26     | 97     | 67     | 38     |
| 7                    | 19     | 89     | 58     | 28     | 98     | 68     | 38     | 0.8509 | 80     | 51     |
| 8                    | 32     | 0.8702 | 71     | 41     | 0.8611 | 81     | 50     | 22     | 92     | 63     |
| 9                    | 45     | 14     | 83     | 53     | 24     | 93     | 63     | 34     | 0.8504 | 75     |
| 690                  | 57     | 27     | 96     | 66     | 36     | 0.8606 | 75     | 46     | 17     | 88     |
| 1                    | 70     | 40     | 0.8709 | 78     | 49     | 18     | 88     | 59     | 29     | 0.8500 |
| 2                    | 83     | 52     | 21     | 91     | 61     | 31     | 0.8600 | 71     | 41     | 12     |
| 3                    | 96     | 65     | 34     | 0.8703 | 74     | 43     | 13     | 83     | 54     | 25     |
| 4                    | 0.8808 | 78     | 46     | 16     | 86     | 56     | 25     | 96     | 66     | 37     |
| 5                    | 21     | 90     | 59     | 29     | 99     | 68     | 37     | 0.8608 | 78     | 49     |
| 6                    | 34     | 0.8803 | 72     | 41     | 0.8711 | 81     | 50     | 21     | 91     | 61     |
| 7                    | 46     | 16     | 84     | 54     | 24     | 93     | 62     | 33     | 0.8603 | 74     |
| 8                    | 59     | 28     | 97     | 66     | 36     | 0.8705 | 75     | 45     | 15     | 86     |
| 9                    | 72     | 41     | 0.8809 | 79     | 49     | 18     | 87     | 58     | 28     | 98     |

空气体积换算因数表(12)

| 气温°C<br>气压<br>mm Hg. | 20     | 21     | 22     | 23     | 24     | 25     | 26     | 27     | 28     | 29     |
|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 650                  | 0.7968 | 0.7941 | 0.7914 | 0.7888 | 0.7861 | 0.7834 | 0.7808 | 0.7782 | 0.7756 | 0.7731 |
| 1                    | 81     | 53     | 26     | 0.7800 | 73     | 47     | 20     | 91     | 65     | 43     |
| 2                    | 93     | 65     | 38     | 11     | 85     | 59     | 32     | 0.7806 | 86     | 55     |
| 3                    | 0.8005 | 78     | 50     | 24     | 97     | 71     | 44     | 18     | 92     | 67     |
| 4                    | 17     | 90     | 62     | 36     | 0.7909 | 83     | 57     | 30     | 0.7804 | 79     |
| 5                    | 30     | 0.8002 | 75     | 48     | 22     | 95     | 69     | 42     | 15     | 91     |
| 6                    | 42     | 14     | 87     | 61     | 34     | 0.7907 | 81     | 54     | 27     | 0.7802 |
| 7                    | 54     | 27     | 99     | 73     | 46     | 19     | 93     | 66     | 39     | 14     |
| 8                    | 66     | 39     | 0.8011 | 85     | 58     | 31     | 0.7905 | 78     | 51     | 26     |
| 9                    | 79     | 51     | 23     | 97     | 70     | 43     | 17     | 90     | 63     | 38     |
| 660                  | 91     | 63     | 36     | 0.8009 | 82     | 55     | 29     | 0.7902 | 75     | 50     |
| 1                    | 0.8103 | 75     | 48     | 21     | 94     | 67     | 41     | 14     | 87     | 62     |
| 2                    | 15     | 88     | 60     | 33     | 0.8006 | 79     | 53     | 26     | 99     | 74     |
| 3                    | 28     | 0.8100 | 72     | 46     | 18     | 91     | 65     | 38     | 0.7911 | 86     |
| 4                    | 40     | 12     | 84     | 58     | 30     | 0.8003 | 77     | 50     | 23     | 98     |
| 5                    | 52     | 24     | 96     | 70     | 43     | 15     | 89     | 62     | 35     | 0.7910 |
| 6                    | 64     | 37     | 0.8109 | 82     | 55     | 27     | 0.8001 | 74     | 47     | 21     |
| 7                    | 77     | 49     | 21     | 94     | 67     | 39     | 13     | 86     | 59     | 33     |
| 8                    | 89     | 61     | 33     | 0.8106 | 79     | 51     | 25     | 98     | 71     | 45     |
| 9                    | 0.8201 | 73     | 45     | 18     | 91     | 63     | 37     | 0.8010 | 83     | 57     |
| 670                  | 14     | 85     | 57     | 30     | 0.8103 | 76     | 49     | 22     | 94     | 69     |
| 1                    | 26     | 98     | 69     | 43     | 15     | 88     | 61     | 34     | 0.8006 | 81     |
| 2                    | 38     | 0.8210 | 82     | 55     | 27     | 0.8100 | 73     | 46     | 18     | 93     |
| 3                    | 50     | 22     | 94     | 67     | 39     | 12     | 85     | 58     | 30     | 0.8005 |
| 4                    | 63     | 34     | 0.8206 | 79     | 51     | 24     | 97     | 70     | 42     | 17     |
| 5                    | 75     | 46     | 18     | 91     | 63     | 36     | 0.8109 | 82     | 54     | 28     |
| 6                    | 87     | 59     | 30     | 0.8203 | 76     | 48     | 21     | 94     | 66     | 40     |
| 7                    | 99     | 71     | 42     | 15     | 88     | 60     | 33     | 0.8106 | 78     | 52     |
| 8                    | 0.8312 | 83     | 55     | 28     | 0.8200 | 72     | 45     | 18     | 90     | 64     |
| 9                    | 24     | 95     | 67     | 40     | 12     | 84     | 57     | 30     | 0.8102 | 76     |
| 680                  | 36     | 0.8308 | 79     | 52     | 24     | 96     | 69     | 42     | 14     | 88     |
| 1                    | 48     | 20     | 91     | 64     | 36     | 0.8208 | 81     | 54     | 26     | 0.8100 |
| 2                    | 61     | 32     | 0.8303 | 76     | 48     | 20     | 93     | 66     | 38     | 12     |
| 3                    | 73     | 44     | 16     | 88     | 60     | 32     | 0.8205 | 78     | 50     | 24     |
| 4                    | 85     | 56     | 28     | 0.8300 | 72     | 44     | 17     | 90     | 61     | 35     |
| 5                    | 97     | 69     | 40     | 12     | 84     | 56     | 29     | 0.8202 | 73     | 47     |
| 6                    | 0.8410 | 81     | 52     | 25     | 96     | 68     | 41     | 13     | 85     | 59     |
| 7                    | 22     | 93     | 64     | 37     | 0.8309 | 80     | 53     | 25     | 97     | 71     |
| 8                    | 34     | 0.8405 | 76     | 49     | 21     | 92     | 65     | 37     | 0.8209 | 83     |
| 9                    | 46     | 18     | 89     | 61     | 33     | 0.8305 | 77     | 49     | 21     | 95     |
| 690                  | 59     | 30     | 0.8401 | 73     | 45     | 17     | 89     | 61     | 33     | 0.8207 |
| 1                    | 71     | 42     | 13     | 85     | 57     | 29     | 0.8301 | 73     | 45     | 19     |
| 2                    | 83     | 54     | 25     | 97     | 69     | 41     | 13     | 85     | 57     | 31     |
| 3                    | 95     | 66     | 37     | 0.8410 | 81     | 53     | 25     | 97     | 69     | 43     |
| 4                    | 0.8508 | 79     | 49     | 22     | 93     | 65     | 37     | 0.8309 | 81     | 54     |
| 5                    | 20     | 91     | 62     | 34     | 0.8405 | 77     | 49     | 21     | 93     | 66     |
| 6                    | 32     | 0.8503 | 74     | 46     | 17     | 89     | 61     | 33     | 0.8305 | 78     |
| 7                    | 45     | 15     | 86     | 58     | 30     | 0.8401 | 73     | 45     | 17     | 90     |
| 8                    | 57     | 27     | 98     | 70     | 42     | 13     | 85     | 57     | 29     | 0.8302 |
| 9                    | 69     | 40     | 0.8510 | 82     | 54     | 25     | 97     | 69     | 40     | 14     |



空气体积换算因数表(13)

| 气温°C<br>气压<br>mm.Hg. | 30     | 31     | 32     | 33     | 34     | 35     | 36     | 37     | 38     | 39     |
|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 650                  | 0.7705 | 0.7680 | 0.7655 | 0.7630 | 0.7604 | 0.7580 | 0.7556 | 0.7531 | 0.7507 | 0.7483 |
| 1                    | 17     | 92     | 67     | 41     | 16     | 92     | 67     | 42     | 18     | 94     |
| 2                    | 29     | 0.7703 | 79     | 53     | 28     | 0.7604 | 79     | 54     | 30     | 0.7506 |
| 3                    | 41     | 15     | 90     | 65     | 39     | 15     | 90     | 66     | 41     | 17     |
| 4                    | 53     | 27     | 0.7702 | 77     | 51     | 27     | 0.7602 | 77     | 53     | 29     |
| 5                    | 64     | 39     | 14     | 88     | 63     | 39     | 14     | 89     | 65     | 40     |
| 6                    | 76     | 51     | 26     | 0.7700 | 75     | 50     | 25     | 0.7600 | 76     | 52     |
| 7                    | 88     | 62     | 37     | 12     | 86     | 62     | 37     | 12     | 88     | 63     |
| 8                    | 0.7800 | 74     | 49     | 24     | 98     | 74     | 49     | 24     | 99     | 75     |
| 9                    | 12     | 86     | 61     | 35     | 0.7710 | 85     | 60     | 35     | 0.7611 | 86     |
| 660                  | 24     | 98     | 73     | 47     | 21     | 97     | 72     | 47     | 22     | 98     |
| 1                    | 35     | 0.7810 | 85     | 59     | 33     | 0.7709 | 83     | 58     | 34     | 0.7609 |
| 2                    | 47     | 22     | 96     | 71     | 45     | 20     | 95     | 70     | 45     | 21     |
| 3                    | 59     | 33     | 0.7808 | 82     | 56     | 32     | 0.7707 | 82     | 57     | 32     |
| 4                    | 71     | 45     | 20     | 94     | 68     | 44     | 18     | 93     | 69     | 44     |
| 5                    | 83     | 57     | 32     | 0.7806 | 80     | 55     | 30     | 0.7705 | 80     | 55     |
| 6                    | 95     | 69     | 43     | 18     | 92     | 67     | 42     | 19     | 92     | 67     |
| 7                    | 0.7907 | 81     | 55     | 29     | 0.7803 | 79     | 53     | 28     | 0.7703 | 79     |
| 8                    | 18     | 92     | 67     | 41     | 15     | 90     | 65     | 39     | 15     | 90     |
| 9                    | 30     | 0.7901 | 79     | 53     | 27     | 0.7802 | 76     | 51     | 26     | 0.7702 |
| 670                  | 42     | 16     | 91     | 64     | 38     | 14     | 88     | 63     | 38     | 13     |
| 1                    | 54     | 28     | 0.7902 | 76     | 50     | 25     | 0.7800 | 74     | 49     | 25     |
| 2                    | 66     | 40     | 14     | 88     | 62     | 37     | 11     | 86     | 61     | 36     |
| 3                    | 78     | 51     | 26     | 0.7900 | 73     | 49     | 23     | 97     | 72     | 48     |
| 4                    | 90     | 63     | 38     | 11     | 85     | 60     | 35     | 0.7809 | 84     | 59     |
| 5                    | 0.8001 | 75     | 49     | 23     | 97     | 72     | 46     | 21     | 96     | 71     |
| 6                    | 13     | 87     | 61     | 35     | 0.7909 | 84     | 58     | 32     | 0.7807 | 82     |
| 7                    | 25     | 99     | 73     | 47     | 50     | 95     | 69     | 44     | 19     | 94     |
| 8                    | 37     | 0.8011 | 85     | 58     | 32     | 0.7907 | 81     | 55     | 30     | 0.7805 |
| 9                    | 49     | 22     | 97     | 70     | 44     | 18     | 93     | 67     | 42     | 17     |
| 680                  | 61     | 34     | 0.8008 | 82     | 55     | 30     | 0.7904 | 78     | 53     | 28     |
| 1                    | 73     | 46     | 20     | 94     | 67     | 42     | 16     | 90     | 65     | 40     |
| 2                    | 84     | 58     | 32     | 0.8005 | 79     | 53     | 28     | 0.7902 | 76     | 51     |
| 3                    | 96     | 70     | 44     | 17     | 91     | 65     | 39     | 13     | 88     | 63     |
| 4                    | 0.8108 | 81     | 55     | 29     | 0.8002 | 77     | 51     | 25     | 0.7900 | 74     |
| 5                    | 20     | 93     | 67     | 41     | 14     | 88     | 62     | 36     | 11     | 86     |
| 6                    | 32     | 0.8105 | 79     | 52     | 26     | 0.8000 | 74     | 48     | 23     | 97     |
| 7                    | 44     | 17     | 91     | 64     | 37     | 12     | 86     | 60     | 34     | 0.7909 |
| 8                    | 56     | 29     | 0.8103 | 76     | 49     | 23     | 97     | 71     | 46     | 20     |
| 9                    | 67     | 41     | 14     | 87     | 61     | 35     | 0.8009 | 83     | 57     | 32     |
| 690                  | 79     | 52     | 26     | 99     | 72     | 47     | 21     | 94     | 69     | 43     |
| 1                    | 91     | 64     | 38     | 0.8111 | 84     | 58     | 32     | 0.8006 | 80     | 55     |
| 2                    | 0.8203 | 76     | 50     | 23     | 96     | 70     | 44     | 18     | 92     | 66     |
| 3                    | 15     | 88     | 61     | 34     | 0.8107 | 82     | 55     | 29     | 0.8003 | 78     |
| 4                    | 27     | 0.8200 | 73     | 46     | 19     | 93     | 67     | 41     | 15     | 89     |
| 5                    | 39     | 11     | 85     | 58     | 31     | 0.8105 | 79     | 52     | 27     | 0.8001 |
| 6                    | 50     | 23     | 97     | 70     | 43     | 17     | 90     | 64     | 38     | 12     |
| 7                    | 62     | 35     | 0.8209 | 81     | 54     | 28     | 0.8102 | 75     | 50     | 24     |
| 8                    | 74     | 47     | 20     | 93     | 66     | 40     | 14     | 87     | 61     | 35     |
| 9                    | 86     | 59     | 32     | 0.8205 | 78     | 52     | 25     | 99     | 73     | 47     |