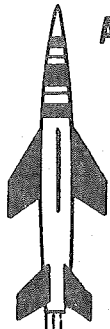


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TABLES OF THERMODYNAMIC PROPERTIES  
OF AIR FROM 90 TO 1500°K

By

R. L. Humphrey, VKF

and

C. A. Neel, Scientific Computing Services

ARO, Inc.

August 1961

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## ABSTRACT

Tables are presented for the thermodynamic properties of air from 90 to 1500°K using (1) temperature and pressure and (2) temperature and density as independent variables. The pressure tables range from 1 to 1200 atmospheres, whereas the density tables extend from  $10^{-7}$  to 400 relative atmospheres (or amagat units). The tabulated properties are the compressibility factor  $Z$ , the dimensionless functions  $E/RT$ ,  $H/RT$  and  $S/R$ , together with pressure and density. The tables account for the so-called real gas effects, i. e., van der Waals' effects, at high pressures, but do not include the effects of the small amounts of dissociation at low pressures and high temperatures. The sources for the tables as well as the final tables are discussed.

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## NOMENCLATURE

$C_p$	Specific heat at constant pressure
$C_v$	Specific heat at constant volume
$E$	Internal energy in dimensionless function $E/RT$
$H$	Enthalpy in dimensionless function $H/RT$
$\ln$	Natural logarithm
$\log$	Logarithm to the base 10
$p$	Pressure, atm
$R$	Gas constant (cf. Appendix)
$S$	Entropy in dimensionless function $S/R$
$T$	Temperature, °K
$v$	Reciprocal density, $v = ZRT/p$
$Z$	Compressibility factor, $Z = p/(\rho/\rho_0)RT$
$\rho/\rho_0$	Density in amagat units, based on density at 0°C and 1 atm of pressure (cf. Appendix)



## INTRODUCTION

The purpose of this work is to provide tables of the thermodynamic properties of air at temperatures below 1500°K which, together with the high temperature tables of Hilsenrath, Klein, and Woolley (Ref. 1), would cover the widest possible range of thermodynamic conditions in a uniform manner. The tables of Ref. 1 afford great convenience in that the dimensionless parameters  $Z$ ,  $E/RT$ ,  $H/RT$ , and  $S/R$  and the pressure (in atm) are tabulated in terms of the absolute temperature (°K) and the common logarithm of relative density (amagats) as independent variables.

The tables of Ref. 1 are based mainly on theoretical calculations, and they extend from 1500 to 15,000°K. Although they provide for the effects of dissociation and ionization, they have no regard for intermolecular forces and other van der Waals' effects. This lack is partially met by the tables of Gilmore (Ref. 2) which allow for gas imperfections, using second and third virial coefficients based on the Lennard-Jones potential. However, these latter tables provide entries only at 1000-deg intervals from 2000°K upwards and only at densities from 10 to about 300 amagats.

The tables presented herein are based on those of Hilsenrath, Beckett, et al. (Ref. 3) and of Din (Ref. 4) whose entries are converted by machine-computed interpolation in compliance with the convenient format of Refs. 1 and 2. The tables of Ref. 3 are constructed in terms of temperature and pressure as independent variables and with rather large intervals of pressure from  $10^{-2}$  to  $10^2$  atm. The tables of Ref. 4 extend from 90 to 450°K, with pressures ranging from 1 to 1200 atm. However, the latter tables express thermal quantities in dimensional form, and they reckon entropy and internal energy from the state of the boiling liquid at one atm. On the other hand, in this country it is generally customary to use the internal energy of the ideal gas at absolute zero as the corresponding reference level. The earlier tables of Benedict and Hilsenrath (Ref. 5) for which the dimensionless form had not yet been adopted, also offer data not conveniently found elsewhere.

Two sets of tables are provided. \* In the first set, temperature and pressure are adopted as independent variables. The second set are

---

\*Grateful acknowledgments are due Mrs. Homer Stooksbury and Mrs. Wanda Little who participated in the final preparation and checking of these tables.

expressed in terms of the temperature and of the common logarithm of the relative density.

In the first set (Table 2), the range of temperatures extends from 90 to 1500°K and the pressures from 1 to 1200 atm. The tabulated thermodynamic properties are the compressibility factor,  $Z$ , the dimensionless internal energy and enthalpy functions,  $E/RT$  and  $H/RT$ , the dimensionless entropy,  $S/R$ , and the density,  $\rho/\rho_0$ , in amagats. The numbers following the tabulated values of  $\rho/\rho_0$  are the powers of 10 by which the tabulated values before them must be multiplied.

In the second set (Table 3), the range of temperatures is the same as above, and the values of  $\rho/\rho_0$  (tabulated logarithmically) extend from  $10^{-7}$  amagat to various upper limits from 6 to 400 amagats. The tabulated thermodynamic properties are the same as in Table 2, except that the pressure (in atm) is substituted for the density.

Values of  $\rho_0$  and of the gas constant,  $R$ , in different units are given in the Appendix.

#### CONVERSION OF THE SOURCE DATA

The different units and reference levels of the source tables are shown in Table 1. In the tables of Hilsenrath, Beckett, et al. (Ref. 3), enthalpy is given in the form  $(H - E_0^\circ)/RT_0$ . The quantity  $E_0^\circ$  is defined as the internal energy of the ideal gas at absolute zero, and  $T_0$  is taken as 273.16°K.  $E_0^\circ$  is also taken as the reference point for enthalpy. When the function  $(H - E_0^\circ)/RT_0$  is multiplied by  $T_0/T$ , the product is equal to  $H/RT$  as tabulated in Hilsenrath, Klein, and Woolley (Ref. 1).

The units used in the tables of Din (Ref. 4) and his reference levels are shown in Table 1. It was necessary to convert these to the desired dimensionless quantities and to compensate for the different reference levels of entropy and enthalpy. The following relationships were used for the conversion of units and the change in reference levels:

$$\rho/\rho_0 = \frac{2.24014 \times 10^4}{\text{tabulated volume in cm}^3/\text{mole}} \quad (1)$$

$$Z = \frac{P}{RT(\rho/\rho_0)} \quad (2)$$

in which the gas constant  $R$  is equal to  $3.661 \times 10^{-3}$  atm/amagat °K and

is numerically equal to  $1/273.16$ , the pressure being expressed in atmospheres, the temperature in  $^{\circ}\text{K}$ , and the density,  $\rho/\rho_0$ , in amagat units.

$$H/RT = \frac{(\text{tabulated enthalpy in joules/mole} \times 0.12027) - 443.7}{T} \quad (3)$$

$$E/RT = (H/RT) - Z \quad (4)$$

Equation (4) is an adaptation of the definition of enthalpy ( $H = E + pV$ ) where  $ZRT$  is substituted for  $pV$  and a division by  $RT$  is made.

$$S/R = (\text{tabulated entropy in joules/mole} - ^{\circ}\text{K} \times 0.12027) + 10.374 \quad (5)$$

The constants in Eqs. (3) and (5) are averages of numerous comparisons of pairs of check points in Hilsenrath, Beckett, et al. (Ref. 3) and Din (Ref. 4). Variations of the constants from one pair of check points to another appeared only in the last significant figures.

$$p = \text{tabulated pressure in atmospheres} \quad (6)$$

The entries of Hilsenrath, Beckett, et al. (Ref. 3) already have the desired form with the exception of the enthalpy function which is converted by the relation

$$H/RT = \frac{(H - E_0^{\circ})}{RT_0} \times \frac{T_0}{T} \quad (7)$$

#### ENTRIES AT CONSTANT DENSITY

The construction of Table 3 (constant density) naturally divides itself into two parts, viz: the perfect and real gas domains. In the perfect gas domain, extrapolations to low pressures utilize the facts that enthalpy is a function only of temperature and that isothermal changes of entropy depend only on pressure. The values of  $H/RT$  and  $S/R$  at a pressure of  $10^{-2}$  atm given in Ref. 3 are used as points of departure. The extrapolations devolve from the following relations:

At given values of  $\rho/\rho_0$  and  $T$

$$p = RT (\rho/\rho_0) \quad (8)$$

$$H/RT = H/RT \text{ at } 10^{-2} \text{ atm} \quad (9)$$

$$E/RT = (H/RT) - 1 \quad (10)$$

$$S/R = S/R \text{ at } 10^{-2} \text{ atm} - \ln(p/10^{-2}) \quad (11)$$

where Eq. (11) is an adaptation of the classical expression for the entropy of a perfect gas.

In the real gas domain, the entries of Table 3 are derived from those of Table 2, with the addition of data in the range of pressures from one to  $10^{-2}$  atm in Ref. 3. The isothermal loci of  $Z$ ,  $E/RT$ ,  $S/R$  and  $\log p$ , plotted as functions of  $\log \rho/\rho_0$ , exhibit so little curvature in any given region that interpolations can safely be made with the ratio

$$\frac{\log (\rho/\rho_0)_m - \log (\rho/\rho_0)_n}{\log (\rho/\rho_0)_h - \log (\rho/\rho_0)_n}$$

in which the subscript  $m$  denotes the desired value of  $\rho/\rho_0$ , the subscript  $n$  refers to the value of  $\rho/\rho_0$  nearest to and less than  $(\rho/\rho_0)_m$ , and the subscript  $h$  identifies the value of  $\rho/\rho_0$  nearest to and greater than  $(\rho/\rho_0)_m$ . This simple procedure is admissible because entries are available for close intervals of density. The real-gas interpolations were carried down (in density) as far as possible, and then ideal gas data were added to bring the density-entries down to  $10^{-7}$  amagats. No adjustments are necessary to smooth the transitions from one set of data to the other.

#### CHECKING AND INTERNAL CONSISTENCY OF THE TABLES

The checking of Table 2 consisted of two parts. The first was the comparison of numerous pairs of points in the converted tables and Hilsenrath, Beckett, et al. (Ref. 3). The agreement proved to be excellent; differences occurred only in the last significant figures. Then each thermodynamic property was plotted as an isothermal function of pressure. This provided a check on the smoothness of the data and occasionally revealed errors of conversion, and in a few instances, errors in the original data.

Checks for internal consistency were made in both sets of tables. The internal consistency was taken as the ability of the tabulated values

to reproduce other thermodynamic properties at the same conditions. For instance, the consistency of  $Z$ ,  $p$ , and  $\rho/\rho_0$  may be found by use of the equation of state,  $p = Z(\rho/\rho_0)RT$ . Using any two of the parameters the third may be calculated and compared with the tabulated value. Similarly for  $E/RT$ ,  $H/RT$ , and  $Z$  the equation  $E/RT = (H/RT) - Z$  may be used. The internal consistency of Table 2 must of necessity be quite good, as  $Z$  was calculated from  $\rho/\rho_0$  and  $p$ , and  $E/RT$  was found from  $H/RT$  and  $Z$ .

In Table 3 each entry was found individually by interpolation, so that many checks for internal consistency had to be made. The interrelations among  $Z$ ,  $H/RT$ , and  $E/RT$  were found to be consistent to one or two numbers in the fifth significant figures. The interrelations among  $Z$ ,  $p$ , and  $\rho/\rho_0$  were generally consistent to 0.02 percent throughout the entire range. At the highest densities and lowest temperatures the greatest inconsistency found was 0.2 percent, this being the region in which  $Z$  changes most rapidly.

Finally, the entries in Table 2 at 1500°K were compared with the corresponding ones in Hilsenrath, Klein, and Woolley (Ref. 1). The greatest differences occur at  $\log \rho/\rho_0 = -7.0$  where the values of  $Z$  differ by 0.1 percent, the values of  $H/RT$  and  $E/RT$  by 2 percent, of  $S/R$  by 0.1 percent, and of  $p$  by 0.2 percent. At these conditions the tables of Hilsenrath, Klein, and Woolley (Ref. 1) include a small amount of oxygen dissociation. Since it was assumed in Table 3 that no dissociation took place, most of the differences between the two tables may be attributed to this omission.

### NEGATIVE INTERNAL ENERGIES AND ENTHALPIES

The occurrence of negative internal energies and enthalpies in Table 2 is a real gas effect stemming from the fact that the internal energy is assumed to be zero at 0°K. In general, an increase in temperature at constant pressure raises the internal energy, whereas an increase in pressure at constant temperature has the opposite effect. However, the relative magnitudes of these two effects differ greatly in different parts of the thermodynamic domain. A transition from absolute zero to an arbitrary point in the  $p$ - $T$  plane generally entails an increase of internal energy because the positive effect of temperature usually outweighs the negative effect of pressure. However, this situation may be reversed at temperatures below about 175°K. In this small region the effect of pressure may be greater than that of temperature. It is then possible to define a line in the  $p$ - $T$  plane along

which the internal energy is zero (cf. Fig. 1), and this line rises very steeply as the temperature is raised to 170°K and higher.

Being a real gas effect, this phenomenon may be better understood with reference to the derivatives of the compressibility factor at low temperatures. Internal energy is a function of pressure and temperature so that

$$E = f(p, T) \quad (12)$$

Taking the total derivative,

$$dE = \left( \frac{\partial E}{\partial p} \right)_T dp + \left( \frac{\partial E}{\partial T} \right)_p dT \quad (13)$$

Expanding each term by formulas from Bridgman's tables of thermodynamic formulas (Ref. 6),

$$\left( \frac{\partial E}{\partial p} \right)_T = -T \left( \frac{\partial v}{\partial T} \right)_p - p \left( \frac{\partial v}{\partial p} \right)_T \quad (14)$$

and

$$\left( \frac{\partial E}{\partial T} \right)_p = C_p - p \left( \frac{\partial v}{\partial T} \right)_p \quad (15)$$

Since for a real gas

$$v = \frac{ZRT}{p} \quad (16)$$

Eqs. (14) and (15) become:

$$\left( \frac{\partial E}{\partial p} \right)_T = -T \left[ \frac{v}{Z} \left( \frac{\partial Z}{\partial T} \right)_p + R \left( \frac{\partial Z}{\partial p} \right)_T \right] \quad (17)$$

$$\left( \frac{\partial E}{\partial T} \right)_p = C_p - R \left[ Z + T \left( \frac{\partial Z}{\partial T} \right)_p \right] \quad (18)$$

Substituting Eqs. (17) and (18) into Eq. (13),

$$\begin{aligned} dE = & -T \left[ \frac{v}{Z} \left( \frac{\partial Z}{\partial T} \right)_p + R \left( \frac{\partial Z}{\partial p} \right)_T \right] dp \\ & + \left[ C_p - R \left\{ Z + T \left( \frac{\partial Z}{\partial T} \right)_p \right\} \right] dT \end{aligned} \quad (19)$$



For a perfect gas, Eq. (19) reduces to the ideal gas relationship:

$$dE = (C_p - R)dT = C_vdT \quad (20)$$

The partial derivatives of  $Z$  in Eq. (19) govern the behavior of the internal energy. Figure 2 shows  $Z$  as a constant-pressure function of temperature, whereas Fig. 3 gives  $Z$  as an isothermal function of pressure. From these it may be seen that the derivatives of  $Z$  may be positive, negative, or zero, depending upon the conditions of pressure and temperature. It is instructive to examine the numerical magnitude of these derivatives.

In Fig. 2, the curve for  $p = 50$  atm has the steepest slope. At  $140^\circ\text{K}$ ,  $(\partial Z/\partial T)_p$  has a value of  $0.025/^\circ\text{K}$  which is a maximum for  $p = 50$  atm. This slope rapidly decreases and for temperatures greater than  $400^\circ\text{K}$ , where it is  $8 \times 10^{-5}/^\circ\text{K}$ , is almost zero and at very high temperatures assumes a slight negative value. For pressures above  $300$  atm the derivatives are negative at all temperatures. For  $p = 500$  atm and  $T = 200^\circ\text{K}$  the partial derivative is equal to  $-1.75 \times 10^{-3}/^\circ\text{K}$ .

In Fig. 3 the line for  $T = 130^\circ\text{K}$  displays the steepest slopes. For  $p = 30$  to  $35$  atm  $(\partial Z/\partial p)_T$  is  $-0.077/\text{atm}$ , whereas at  $p = 50$  to  $60$  atm a positive slope of  $0.004/\text{atm}$  is found; this positive slope is nearly constant for higher pressures. At  $1000^\circ\text{K}$  the slope had decreased to  $3.4 \times 10^{-4}/\text{atm}$ . As the temperature increases, the slopes of the curves in Fig. 3 approach zero.

Examining the first term of Eq. (19) and assuming that the temperature is held constant, the effect of pressure on the internal energy may be seen. At a constant temperature, the internal energy will increase or decrease with an increase in pressure, depending upon the magnitudes and signs of the partial derivatives of  $Z$ . If the portion of the term in brackets is positive, the internal energy will decrease with increasing pressure and increase when the bracketed portion is negative.

At low pressures,  $(\partial Z/\partial T)_p$  is positive, and  $(\partial Z/\partial p)_T$  is negative. When combined with the other terms within the bracketed quantity, the result is a positive quantity because  $-\frac{v}{Z} \left( \frac{\partial Z}{\partial T} \right)_p$  is numerically greater than  $R \left( \frac{\partial Z}{\partial p} \right)_T$ .

At moderate pressures both derivatives become positive and will add, thereby causing the internal energy to decrease rapidly with an increase in pressure. Between the low and moderate pressure regions  $(\partial Z/\partial p)_T$  decreases from its negative value to zero and then to increasing positive

values.  $(\partial Z/\partial T)_p$  remains positive but will change its values as the pressure increases. The result is the addition of the effects of the two terms and a rapid decrease in internal energy.

At high pressures,  $(\partial Z/\partial p)_T$  remains constant and is positive, whereas  $(\partial Z/\partial T)_p$  decreases in value, goes through zero, and assumes negative values. Since  $v$  decreases with increasing pressure, and  $Z$  at high pressures is greater than unity, the quantity  $-\frac{v}{Z} \left( \frac{\partial Z}{\partial T} \right)_p$  becomes smaller. Furthermore with its change in sign from positive to negative and by being added to the larger but constant quantity  $R(\partial Z/\partial p)_T$ , there results a less rapid decrease of internal energy with increasing pressure.

From the results of several numerical evaluations, the magnitudes of the quantities  $-\frac{v}{Z} \left( \frac{\partial Z}{\partial T} \right)_p$  and  $R \left( \frac{\partial Z}{\partial p} \right)_T$  appear to vary in such a manner that their sum always remains positive within the range of the data of Table 2. Figure 4 shows the isothermal variation of internal energy with pressure. The data for this figure were taken from Table 2. From this analysis it appears that at constant temperature an increase in pressure causes a decrease in the internal energy of air.

If the pressure is kept constant in Eq. (19) the variation of the internal energy of real air with temperature may be seen. The specific heat at constant pressure,  $C_p$ , is a function of temperature and is an important term in this equation. The variation of  $C_p$  with temperature is seen in the tables of Din (Ref. 4) and Hilsenrath, Beckett, et al. (Ref. 3). At low temperatures  $C_p$  is high and decreases slowly with increasing temperature until it reaches a minimum value, which at moderate pressures is only about 10 percent lower than its largest value, and then it increases slowly as the temperature is raised further. The usual variation of  $C_p$  is small, and it is generally a relatively large number.

For low to moderate pressure,  $(\partial Z/\partial T)_p$  is positive, and  $Z$  is less than unity. At low temperatures,  $(\partial Z/\partial T)_p$  is large, and the sum of  $Z$  and  $T(\partial Z/\partial T)_p$  will be greater than unity. Combined with  $R$  this tends to reduce the effects of the larger value of  $C_p$  which prevails at low temperatures. At higher temperatures,  $Z$  is near unity, and  $(\partial Z/\partial T)_p$  approaches zero and small negative values, thereby causing the sum of  $Z$  and  $T(\partial Z/\partial T)_p$  to be near unity.

At high pressures,  $Z$  is greater than unity, and  $(\partial Z/\partial T)_p$  is negative. The sum of  $Z$  and  $T(\partial Z/\partial T)_p$  is then less than  $Z$  by itself. Again at high temperatures,  $Z$  approaches unity, and  $(\partial Z/\partial T)_p$  approaches zero, causing the sum of  $Z$  and  $T(\partial Z/\partial T)_p$  to approach unity.

The tendency at all pressures for the sum of  $Z$  and  $T(\partial Z/\partial T)_p$  to approach unity as the temperature increases has the effect of reducing the temperature term of Eq. (19) to  $(C_p - R)dT$ .  $C_p$  is always positive and greater than  $R$ , making  $(C_p - R)dT$  a positive quantity. Thus an increase in temperature at constant pressure results in an increase in internal energy.

Combining the effects of pressure and temperature on the internal energy of the real gas it is found that a rise in temperature increases the internal energy of the gas, whereas an increase in pressure reduces the internal energy. At high pressures the depressing effect of pressure may become larger than the increase in internal energy caused by temperature alone. Under these conditions negative values of internal energy result. The necessary conditions for this effect may be seen in Fig. 1. All points to the left of the curve in Fig. 1 represent negative values of internal energy, whereas those to the right give positive internal energy. As pressure and temperature both decrease to zero the internal energy will always approach zero. This is to be expected as the zero reference point for internal energy was chosen at  $0^\circ\text{K}$  and zero pressure. As the temperature increases the pressure required to attain the state of zero internal energy becomes very large and appears to increase exponentially.

At low temperatures the pressures necessary to obtain the negative internal energies are moderate, and negative values appear in Table 2. As the temperature increases this pressure becomes greater, and the negative values begin to disappear from the tables. At temperatures above  $170^\circ\text{K}$  the range of pressures in the tables is not great enough to generate negative values of internal energy.

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## APPENDIX

## CONSTANTS

Density at 0°C and p = 1 atm

$$\begin{aligned}\rho_0 &= 4.46400 \cdot 10^{-5} \text{ moles/cm}^3 \\ &1.29304 \cdot 10^{-3} \text{ g/cm}^3 \\ &8.07223 \cdot 10^{-2} \text{ lb/ft}^3\end{aligned}$$

Gas Constant

$$\begin{aligned}R &= 1.98719 \text{ cal/mole-}^\circ\text{K} \\ &0.06860 \text{ cal/g-}^\circ\text{K} \\ &1.98719 \text{ Btu/lb-mole-}^\circ\text{R} \\ &3092.15 \text{ ft}^2/\text{sec}^2\text{-}^\circ\text{K} \\ &3.661 \cdot 10^{-3} \text{ atm/amagat-}^\circ\text{K}\end{aligned}$$



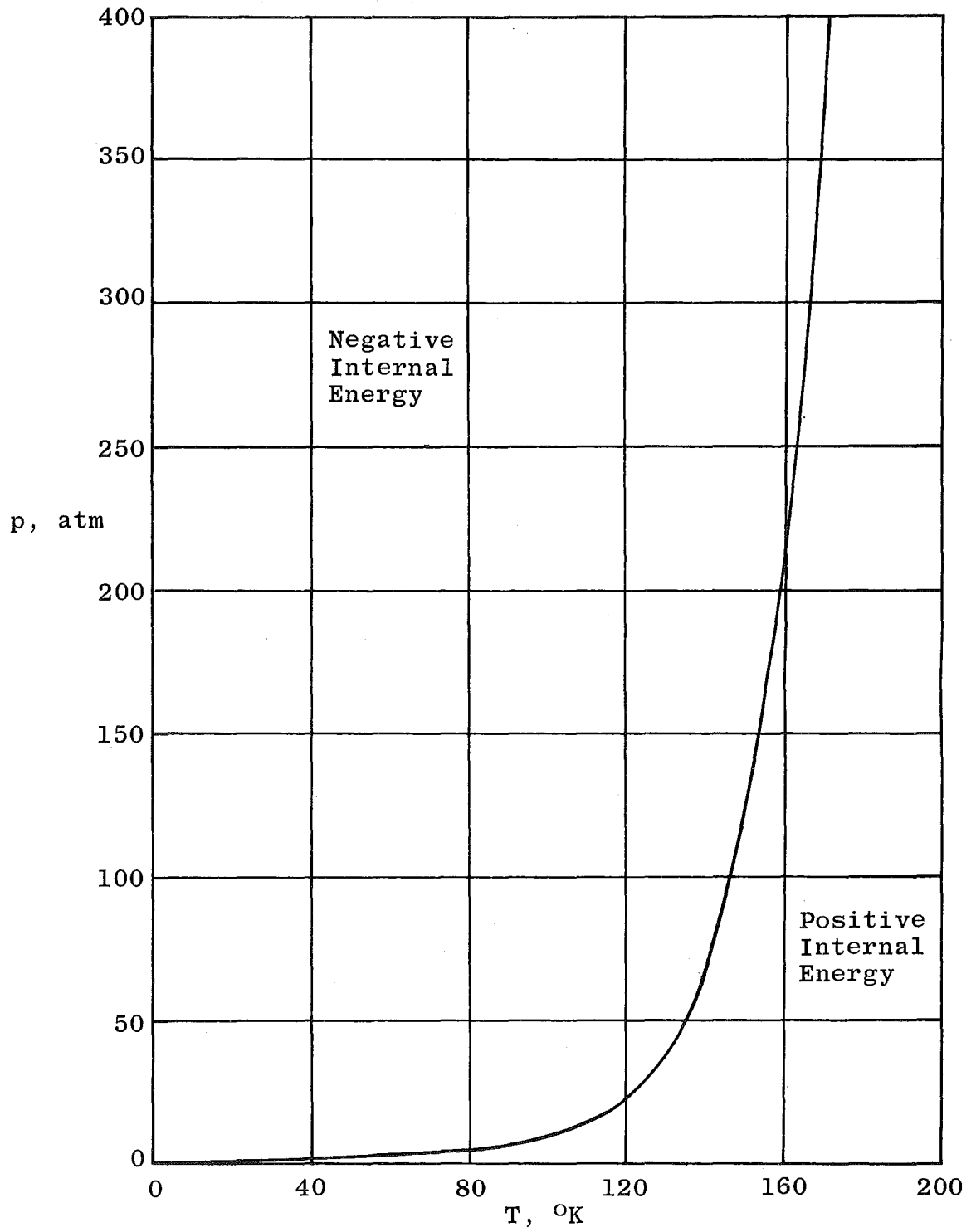


Fig. 1 Locus of Points of Zero Internal Energy

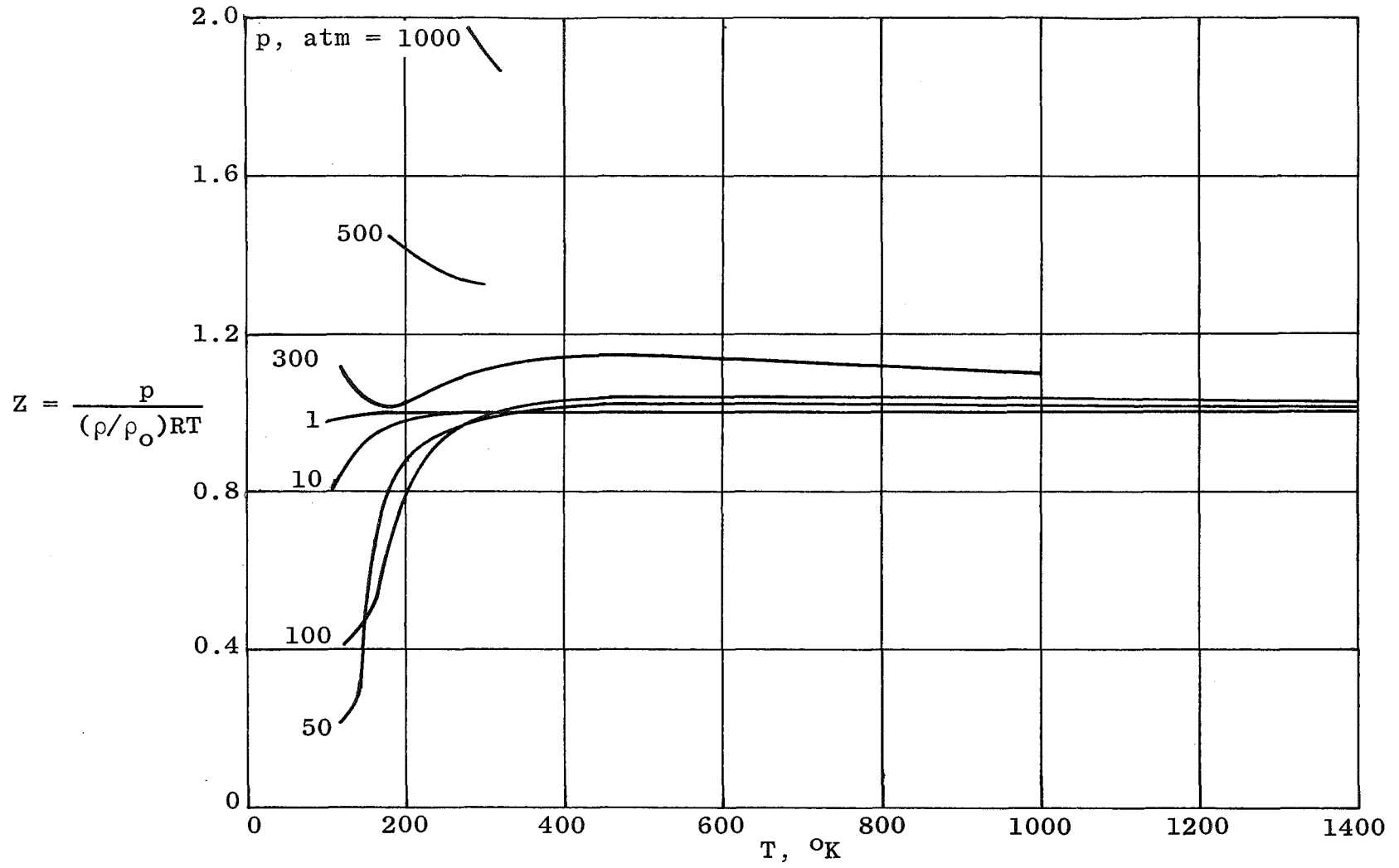


Fig. 2 Z as a Constant-Pressure Function of Temperature



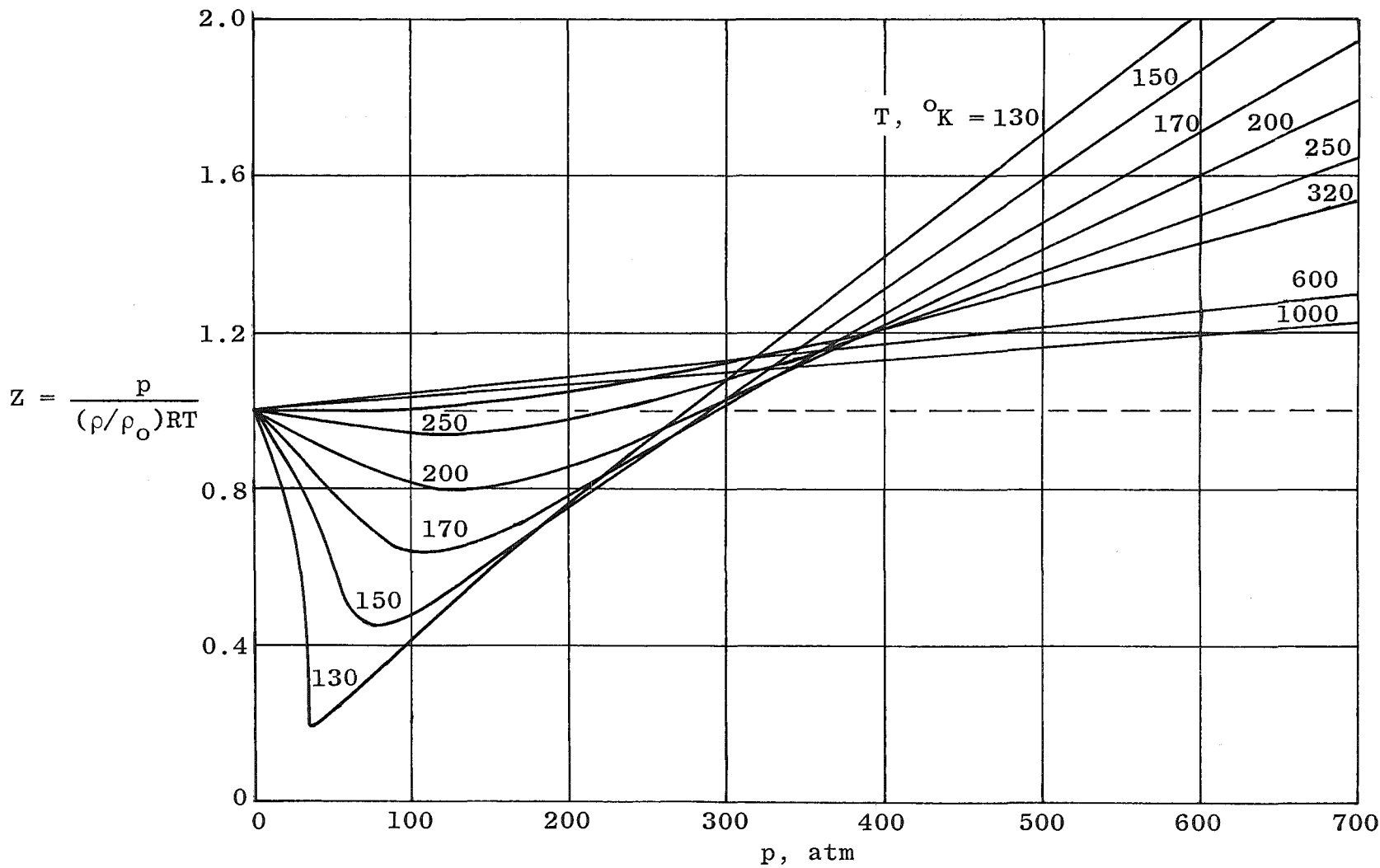


Fig. 3 Z as a Constant-Temperature Function of Pressure

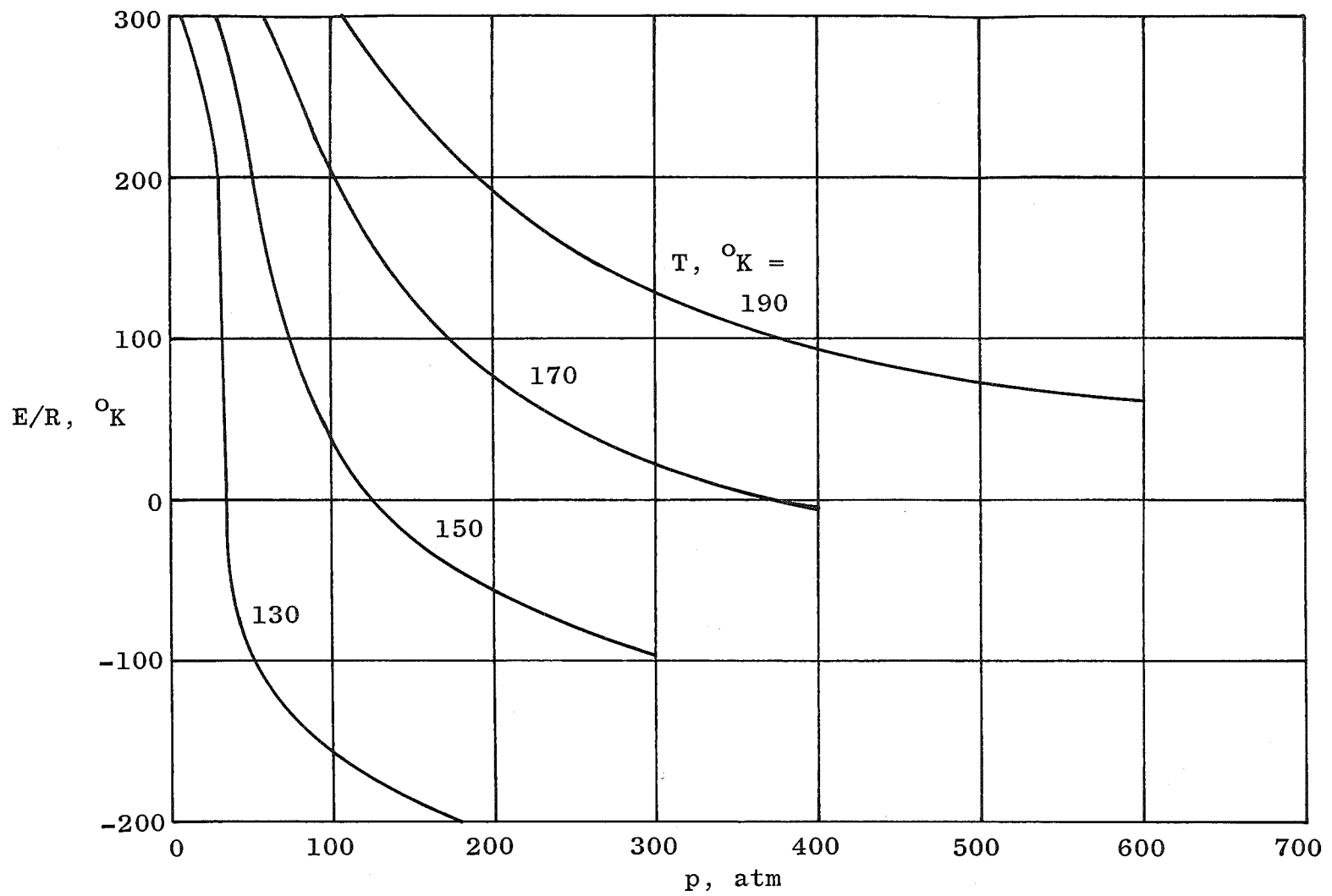


Fig. 4 Internal Energy of Air at Constant Temperature

TABLE 1

REFERENCE LEVELS AND TABULATED FORMS OF THE THERMODYNAMIC  
PROPERTIES OF THE SOURCES

	Din (Ref. 4)	NBS Cir. 564 (Ref. 3) Report 1192 (Ref. 5)	Hilsenrath (Ref. 1)
Mole wt	28.96	28.966	28.967
$\rho_0$	$1.2928 \times 10^{-3} \text{ g/cm}^3$	$1.2930 \times 10^{-3} \text{ g/cm}^3$	$1.2931 \times 10^{-3} \text{ g/cm}^3$
0 °C	273.15°K	273.16°K	273.15°K
H and S	0 at 78.8°K and p = 1 atm	See text	See text
Property	Tabulated Form in Source		
p	atm	atm	atm
$\rho$	$\text{cm}^3/\text{mole}$	$\rho/\rho_0$ (Ref. 3) $\text{mole}/\text{cm}^3$ (Ref. 5)	$\rho/\rho_0$
H	joules/mole	$(H - E_0^\circ)/RT_0$	H/RT
S	joules/mole-°K	S/R	S/R



**TABLE 2**

**TABLES OF THERMODYNAMIC PROPERTIES OF AIR  
FROM 90 TO 1500°K WITH TEMPERATURE AND  
PRESSURE AS INDEPENDENT VARIABLES**



$T = 90^{\circ}\text{K}$

p atm	Z	E/RT	H/RT	S/R	$\rho/\rho_0$
1.0	0.97154	2.3703	3.3418	19.623	3.1239 0
2.0	0.94092	2.3436	3.2845	18.898	6.4520 0

$T = 100^{\circ}\text{K}$

1.0	0.97924	2.3929	3.3721	20.006	2.7894 0
2.0	0.95743	2.3690	3.3264	19.287	5.7059 0
3.0	0.93462	2.3353	3.2699	18.846	8.7677 0
5.0	0.88766	2.2475	3.1352	18.243	1.5386 1

$T = 110^{\circ}\text{K}$

1.0	0.98462	2.4111	3.3957	20.353	2.5220 0
2.0	0.96839	2.3902	3.3586	19.638	5.1285 0
3.0	0.95176	2.3619	3.3137	19.203	7.8272 0
5.0	0.91726	2.3013	3.2186	18.629	1.3536 1
7.0	0.88070	2.2253	3.1060	18.214	1.9737 1
10.0	0.81897	2.0936	2.9126	17.716	3.0321 1

T = 120°K

P atm	Z	E/RT	H/RT	S/R	$\rho/\rho_0$
1.0	0.98828	2.4252	3.4135	20.669	2.3032 0
2.0	0.97565	2.4078	3.3834	19.956	4.6660 0
3.0	0.96295	2.3862	3.3493	19.529	7.0913 0
5.0	0.93686	2.3403	3.2772	18.970	1.2148 1
7.0	0.90970	2.2853	3.1950	18.578	1.7515 1
10.0	0.86561	2.1921	3.0577	18.122	2.6296 1
15.0	0.77899	2.0071	2.7861	17.498	4.3830 1
20.0					
25.0	0.11761	-1.3345	-1.2169	13.253	4.8383 2
30.0	0.13778	-1.5061	-1.3623	13.108	4.9561 2
35.0	0.15790	-1.6124	-1.4545	13.006	5.0454 2
40.0	0.17761	-1.6922	-1.5146	12.932	5.1262 2
45.0	0.19753	-1.7522	-1.5547	12.876	5.1855 2
50.0	0.21744	-1.8022	-1.5848	12.828	5.2340 2
60.0	0.25728	-1.8840	-1.6268	12.746	5.3084 2
70.0	0.29660	-1.9465	-1.6499	12.680	5.3720 2
80.0	0.33572	-1.9956	-1.6599	12.625	5.4241 2
90.0	0.37494	-2.0398	-1.6649	12.579	5.4638 2
100.0	0.41355	-2.0814	-1.6679	12.538	5.5040 2
120.0	0.49016	-2.1590	-1.6689	12.457	5.5725 2
140.0	0.56474	-2.2276	-1.6629	12.385	5.6427 2
160.0	0.63892	-2.2898	-1.6509	12.321	5.7001 2
180.0	0.71147	-2.3433	-1.6318	12.265	5.7587 2
200.0	0.78240	-2.3892	-1.6068	12.214	5.8185 2
250.0	0.95259	-2.4592	-1.5066	12.128	5.9737 2
300.0	1.1157	-2.4870	-1.3713	12.066	6.1206 2



$$T = 130^{\circ}\text{K}$$

P atm	Z	E/RT	H/RT	S/R	$\rho/\rho_0$
1.0	0.99095	2.4375	3.4285	20.959	2.1203 0
2.0	0.98107	2.4233	3.4044	20.248	4.2833 0
3.0	0.97132	2.4061	3.3775	19.826	6.4894 0
5.0	0.95107	2.3691	3.3202	19.278	1.1046 1
7.0	0.93034	2.3269	3.2573	18.898	1.5809 1
10.0	0.89779	2.2559	3.1537	18.467	2.3403 1
15.0	0.83836	2.1210	2.9594	17.920	3.7593 1
20.0	0.77154	1.9593	2.7308	17.462	5.4465 1
25.0	0.69032	1.7503	2.4487	17.014	7.6092 1
30.0	0.57935	1.5085	2.0879	16.537	1.0880 2
35.0	0.19664	-0.2328	-0.0362	14.363	3.7398 2
40.0	0.21009	-0.4961	-0.2861	14.086	4.0003 2
45.0	0.22623	-0.6418	-0.4156	13.934	4.1794 2
50.0	0.24152	-0.7468	-0.5053	13.822	4.3498 2
60.0	0.27800	-0.8971	-0.6191	13.663	4.5347 2
70.0	0.31449	-1.0049	-0.6904	13.546	4.6767 2
80.0	0.34966	-1.0881	-0.7385	13.451	4.8072 2
90.0	0.38408	-1.1548	-0.7708	13.375	4.9234 2
100.0	0.41926	-1.2123	-0.7931	13.315	5.0115 2
120.0	0.48848	-1.3148	-0.8264	13.199	5.1616 2
140.0	0.55676	-1.4034	-0.8467	13.103	5.2833 2
160.0	0.62579	-1.4825	-0.8568	13.016	5.3720 2
180.0	0.69388	-1.5516	-0.8578	12.941	5.4505 2
200.0	0.75973	-1.6101	-0.8504	12.876	5.5312 2
250.0	0.92387	-1.7058	-0.7819	12.760	5.6856 2
300.0	1.0805	-1.7533	-0.6728	12.683	5.8337 2

$$T = 140^{\circ}\text{K}$$

P atm	Z	E/RT	H/RT	S/R	$\rho/\rho_0$
1.0	0.99293	2.4484	3.4413	21.226	1.9650 0
2.0	0.98508	2.4355	3.4206	20.518	3.9613 0
3.0	0.97723	2.4211	3.3983	20.098	5.9897 0
5.0	0.96151	2.3904	3.3519	19.555	1.0146 1
7.0	0.94497	2.3579	3.3029	19.186	1.4453 1
10.0	0.92020	2.3012	3.2214	18.771	2.1203 1
15.0	0.87624	2.2097	3.0770	18.261	3.3400 1
20.0	0.82899	2.0891	2.9181	17.857	4.7072 1
25.0	0.77712	1.9632	2.7403	17.498	6.2767 1
30.0	0.71986	1.8210	2.5409	17.163	8.1312 1
35.0	0.65543	1.6562	2.3116	16.826	1.0419 2
40.0	0.57415	1.4204	1.9946	16.428	1.3593 2
45.0	0.42721	1.0106	1.4379	15.815	2.0552 2
50.0	0.33707	0.5295	0.8666	15.208	2.8942 2
60.0	0.33237	0.1176	0.4500	14.725	3.5222 2
70.0	0.35422	-0.0863	0.2679	14.487	3.8557 2
80.0	0.37975	-0.2382	0.1416	14.308	4.1103 2
90.0	0.40918	-0.3510	0.0582	14.178	4.2915 2
100.0	0.43897	-0.4430	0.0041	14.083	4.4447 2
120.0	0.50064	-0.5790	-0.0784	13.915	4.6767 2
140.0	0.56213	-0.6989	-0.1368	13.781	4.8593 2
160.0	0.62570	-0.7968	-0.1711	13.665	4.9892 2
180.0	0.68981	-0.8841	-0.1943	13.566	5.0912 2
200.0	0.75252	-0.9571	-0.2046	13.484	5.1855 2
250.0	0.90364	-1.0764	-0.1728	13.335	5.3979 2
300.0	1.0530	-1.1541	-0.0921	13.235	5.5587 2

$T = 150^{\circ}\text{K}$ 

P atm	Z	E/RT	H/RT	s/R	$\rho/\rho_0$
1.0	0.99443	2.4564	3.4508	21.473	1.8312 0
2.0	0.98814	2.4449	3.4331	20.767	3.6857 0
3.0	0.98181	2.4329	3.4147	20.349	5.5642 0
5.0	0.96938	2.4076	3.3770	19.813	9.3926 0
7.0	0.95655	2.3795	3.3361	19.448	1.3326 1
10.0	0.93663	2.3361	3.2728	19.047	1.9442 1
15.0	0.90268	2.2586	3.1613	18.561	3.0260 1
20.0	0.86735	2.1753	3.0427	18.188	4.1990 1
25.0	0.83017	2.0858	2.9160	17.869	5.4838 1
30.0	0.79063	1.9898	2.7805	17.587	6.9097 1
35.0	0.74856	1.8843	2.6329	17.320	8.5144 1
40.0	0.71468	1.7531	2.4678	17.056	1.0192 2
45.0	0.65735	1.6051	2.2625	16.769	1.2466 2
50.0	0.58610	1.4182	2.0043	16.449	1.5535 2
60.0	0.48092	1.0239	1.5048	15.849	2.2719 2
70.0	0.45011	0.7338	1.1881	15.458	2.8320 2
80.0	0.44676	0.5280	0.9748	15.181	3.2608 2
90.0	0.45872	0.3670	0.8257	14.977	3.5728 2
100.0	0.47879	0.2507	0.7295	14.834	3.8033 2
120.0	0.52871	0.0580	0.5867	14.598	4.1331 2
140.0	0.58383	-0.0925	0.4913	14.416	4.3667 2
160.0	0.63991	-0.2159	0.4240	14.270	4.5531 2
180.0	0.69649	-0.3190	0.3775	14.143	4.7062 2
200.0	0.75437	-0.4066	0.3478	14.043	4.8279 2
250.0	0.89419	-0.5220	0.3422	13.857	5.0912 2
300.0	1.0340	-0.6421	0.3919	13.730	5.2833 2

$$T = 160^{\circ}\text{K}$$

P atm	Z	E/RT	H/RT	S/R	$\rho/\rho_0$
1.0	0.99563	2.4627	3.4584	21.703	1.7147 0
2.0	0.99057	2.4527	3.4433	20.999	3.4469 0
3.0	0.98540	2.4424	3.4283	20.584	5.1975 0
5.0	0.97510	2.4260	3.4011	20.051	8.7540 0
7.0	0.96452	2.3990	3.3636	19.693	1.2390 1
10.0	0.94897	2.3636	3.3126	19.299	1.7990 1
15.0	0.92218	2.3016	3.2238	18.829	2.7769 1
20.0	0.89469	2.2374	3.1321	18.475	3.8163 1
25.0	0.87159	2.1643	3.0359	18.181	4.9255 1
30.0	0.83770	2.0967	2.9344	17.925	6.1139 1
35.0	0.80820	2.0187	2.8269	17.690	7.3932 1
40.0	0.77794	1.9339	2.7119	17.468	8.7780 1
45.0	0.74724	1.8406	2.5879	17.251	1.0281 2
50.0	0.71635	1.7362	2.4526	17.041	1.1916 2
60.0	0.65569	1.5105	2.1662	16.628	1.5622 2
70.0	0.60228	1.2881	1.8904	16.258	1.9842 2
80.0	0.57066	1.0919	1.6626	15.955	2.3933 2
90.0	0.55077	0.9269	1.4777	15.703	2.7897 2
100.0	0.54947	0.7996	1.3491	15.520	3.1070 2
120.0	0.57614	0.5775	1.1537	15.221	3.5558 2
140.0	0.61775	0.4058	1.0236	14.997	3.8690 2
160.0	0.66454	0.2682	0.9327	14.838	4.1104 2
180.0	0.71331	0.1533	0.8666	14.672	4.3080 2
200.0	0.76515	0.0541	0.8192	14.553	4.4624 2
250.0	0.89356	-0.1156	0.7779	14.328	4.7764 2
300.0	1.0220	-0.2254	0.7966	14.172	5.0115 2
350.0	1.1496	-0.2913	0.8583	14.061	5.1975 2
400.0	1.2742	-0.3310	0.9432	13.980	5.3592 2
450.0			1.0439	13.911	
500.0			1.1484	13.853	

$T = 170^{\circ}\text{K}$ 

P atm	Z	E/RT	H/RT	S/R	$\rho/\rho_0$
1.0	0.99653	2.4678	3.4644	21.920	1.6124 0
2.0	0.99228	2.4593	3.4516	21.216	3.2386 0
3.0	0.98811	2.4508	3.4389	20.803	4.8784 0
5.0	0.97980	2.4329	3.4127	20.273	8.1996 0
7.0	0.97104	2.4140	3.3851	19.919	1.1583 1
10.0	0.95865	2.3847	3.3434	19.531	1.6761 1
15.0	0.93702	2.3342	3.2712	19.073	2.5722 1
20.0	0.91511	2.2825	3.1976	18.733	3.5117 1
25.0	0.89283	2.2283	3.1212	18.454	4.4992 1
30.0	0.87063	2.1720	3.0427	18.214	5.5367 1
35.0	0.84854	2.1113	2.9599	17.998	6.6276 1
40.0	0.82573	2.0485	2.8743	17.799	7.7837 1
45.0	0.80338	1.9818	2.7852	17.611	9.0002 1
50.0	0.78114	1.9113	2.6925	17.436	1.0285 2
60.0	0.73853	1.7644	2.5029	17.107	1.3054 2
70.0	0.69943	1.6124	2.3119	16.806	1.6081 2
80.0	0.66908	1.4574	2.1265	16.533	1.9212 2
90.0	0.64683	1.3137	1.9546	16.284	2.2357 2
100.0	0.63265	1.1848	1.8174	16.084	2.5398 2
120.0	0.63522	0.9705	1.6058	15.756	3.0354 2
140.0	0.66075	0.7978	1.4586	15.507	3.4045 2
160.0	0.69662	0.6566	1.3532	15.310	3.6905 2
180.0	0.73851	0.5361	1.2747	15.145	3.9163 2
200.0	0.78184	0.4349	1.2167	15.013	4.1103 2
250.0	0.89659	0.2500	1.1466	14.755	4.4803 2
300.0	1.0157	0.1239	1.1396	14.574	4.7461 2
350.0	1.1322	0.0442	1.1764	14.442	4.9671 2
400.0	1.2509	-0.0430	1.2379	14.341	5.1379 2
450.0			1.3172	14.256	
500.0			1.4014	14.184	

T = 180°K

P atm	Z	E/RT	H/RT	S/R	$\rho/\rho_0$
1.0	0.99717	2.4725	3.4697	22.123	1.5218 0
2.0	0.99362	2.4646	3.4582	21.421	3.0545 0
3.0	0.99032	2.4573	3.4476	21.008	4.5970 0
5.0	0.98360	2.4420	3.4256	20.481	7.7140 0
7.0	0.97633	2.4258	3.4022	20.129	1.0880 1
10.0	0.96619	2.4012	3.3674	19.747	1.5706 1
15.0	0.94864	2.3592	3.3079	19.298	2.3995 1
20.0	0.93090	2.3162	3.2471	18.966	3.2603 1
25.0	0.91332	2.2716	3.1850	18.698	4.1538 1
30.0	0.89561	2.2259	3.1215	18.469	5.0831 1
35.0	0.87843	2.1777	3.0561	18.266	6.0463 1
40.0	0.86087	2.1280	2.9889	18.082	7.0511 1
45.0	0.84378	2.0773	2.9211	17.910	8.0930 1
50.0	0.82712	2.0244	2.8516	17.754	9.1734 1
60.0	0.79499	1.9131	2.7083	17.462	1.1453 2
70.0	0.76581	1.7971	2.5629	17.197	1.3871 2
80.0	0.74137	1.6759	2.4173	16.954	1.6375 2
90.0	0.72186	1.5550	2.2769	16.728	1.8920 2
100.0	0.70789	1.4474	2.1553	16.535	2.1437 2
120.0	0.69909	1.2558	1.9549	16.207	2.6048 2
140.0	0.71034	1.0968	1.8072	15.949	2.9908 2
160.0	0.73487	0.9770	1.7119	15.740	3.3040 2
180.0	0.76818	0.8446	1.6128	15.566	3.5558 2
200.0	0.80476	0.7432	1.5480	15.423	3.7713 2
250.0	0.90604	0.5525	1.4585	15.142	4.1872 2
300.0	1.0141	0.4176	1.4317	14.939	4.4893 2
350.0	1.1238	0.3253	1.4491	14.789	4.7260 2
400.0	1.2329	0.2597	1.4926	14.674	4.9234 2
450.0	1.3444	0.2109	1.5553	14.576	5.0797 2
500.0	1.4530	0.1705	1.6235	14.493	5.2218 2
600.0	1.6664	0.1008	1.7672	14.344	5.4638 2

$$T = 190^{\circ}\text{K}$$

p atm	z	E/RT	H/RT	s/R	$\rho/\rho_0$
1.0	0.99771	2.4761	3.4738	22.314	1.4409 0
2.0	0.99484	2.4687	3.4636	21.613	2.8901 0
3.0	0.99206	2.4627	3.4548	21.202	4.3473 0
5.0	0.98636	2.4494	3.4358	20.678	7.2874 0
7.0	0.98063	2.4356	3.4162	20.328	1.0262 1
10.0	0.97221	2.4149	3.3871	19.949	1.4787 1
15.0	0.95789	2.3792	3.3371	19.507	2.2512 1
20.0	0.94349	2.3423	3.2858	19.181	3.0474 1
25.0	0.92940	2.3045	3.2339	18.920	3.8670 1
30.0	0.91526	2.2660	3.1813	18.699	4.7121 1
35.0	0.90159	2.2266	3.1282	18.505	5.5808 1
40.0	0.88791	2.1865	3.0744	18.331	6.4763 1
45.0	0.87444	2.1447	3.0192	18.169	7.3981 1
50.0	0.86154	2.1000	2.9478	18.023	8.3432 1
60.0	0.83671	2.0123	2.8490	17.753	1.0309 2
70.0	0.81444	1.9187	2.7332	17.511	1.2356 2
80.0	0.79420	1.8237	2.6179	17.291	1.4481 2
90.0	0.77914	1.7267	2.5059	17.086	1.6606 2
100.0	0.77623	1.6353	2.4015	16.905	1.8762 2
120.0	0.75392	1.4697	2.2236	16.588	2.2882 2
140.0	0.75740	1.3276	2.0850	16.331	2.6573 2
160.0	0.77420	1.2025	1.9767	16.119	2.9710 2
180.0	0.80052	1.0914	1.8919	15.940	3.2325 2
200.0	0.83043	0.9938	1.8242	15.790	3.4623 2
250.0	0.91930	0.8030	1.7223	15.491	3.9095 2
300.0	1.0165	0.6659	1.6824	15.274	4.2427 2
350.0	1.1186	0.5663	1.6849	15.109	4.4983 2
400.0	1.2193	0.4948	1.7141	14.982	4.7161 2
450.0	1.3255	0.4379	1.7634	14.875	4.8805 2
500.0	1.4279	0.3900	1.8197	14.783	5.0340 2
600.0	1.6288	0.3187	1.9457	14.623	5.2958 2
700.0			2.0812	14.490	
800.0			2.2274	14.373	

$$T = 200^{\circ}\text{K}$$

p atm	z	E/RT	H/RT	s/R	$\rho/\rho_0$
1.0	0.99817	2.4787	3.4769	22.496	1.3682 0
2.0	0.99581	2.4726	3.4684	21.796	2.7429 0
3.0	0.99348	2.4672	3.4607	21.385	4.1240 0
5.0	0.98885	2.4555	3.4444	20.863	6.9055 0
7.0	0.98410	2.4435	3.4276	20.514	9.7144 0
10.0	0.97704	2.4258	3.4029	20.139	1.3978 1
15.0	0.96534	2.3943	3.3596	19.702	2.1221 1
20.0	0.95360	2.3638	3.3164	19.381	2.8643 1
25.0	0.94223	2.3303	3.2725	19.126	3.6236 1
30.0	0.93093	2.2971	3.2280	18.910	4.4011 1
35.0	0.91988	2.2642	3.1841	18.723	5.1963 1
40.0	0.90910	2.2299	3.1390	18.555	6.0090 1
45.0	0.89847	2.1947	3.0932	18.400	6.8401 1
50.0	0.88826	2.1586	3.0469	18.260	7.6875 1
60.0	0.86875	2.0837	2.9525	18.005	9.4322 1
70.0	0.85098	2.0065	2.8575	17.779	1.1234 2
80.0	0.83548	1.9282	2.7637	17.575	1.3077 2
90.0	0.82304	1.8493	2.6723	17.386	1.4934 2
100.0	0.81267	1.7718	2.5845	17.215	1.6805 2
120.0	0.80033	1.6309	2.4312	16.915	2.0477 2
140.0	0.80143	1.5041	2.3055	16.664	2.3857 2
160.0	0.81255	1.3913	2.2039	16.454	2.6892 2
180.0	0.83291	1.2892	2.1221	16.273	2.9514 2
200.0	0.85839	1.1957	2.0541	16.119	3.1820 2
250.0	0.93428	1.0122	1.9465	15.810	3.6544 2
300.0	1.0224	0.8754	1.8978	15.580	4.0074 2
350.0	1.1160	0.7739	1.8899	15.406	4.2833 2
400.0	1.2120	0.6966	1.9086	15.269	4.5073 2
450.0	1.3114	0.6357	1.9471	15.154	4.6865 2
500.0	1.4052	0.5888	1.9940	15.055	4.8593 2
600.0	1.5985	0.5061	2.1046	14.885	5.1262 2
700.0	1.7881	0.4380	2.2261	14.745	5.3464 2
800.0			2.3596	14.623	



$$T = 210^{\circ}\text{K}$$

P atm	Z	E/RT	H/RT	S/R	$\rho/\rho_0$
1.0	0.99854	2.4805	3.4791	22.668	1.3026 0
2.0	0.99659	2.4756	3.4722	21.969	2.6103 0
3.0	0.99462	2.4708	3.4654	21.558	3.9232 0
5.0	0.99084	2.4602	3.4510	21.037	6.5636 0
7.0	0.98684	2.4499	3.4368	20.691	9.2263 0
10.0	0.98107	2.4345	3.4156	20.318	1.3258 1
15.0	0.97135	2.4069	3.3783	19.885	2.0086 1
20.0	0.96188	2.3792	3.3411	19.569	2.7045 1
25.0	0.95253	2.3510	3.3090	19.317	3.4138 1
30.0	0.94340	2.3221	3.2655	19.106	4.1362 1
35.0	0.93462	2.2937	3.2283	18.924	4.8709 1
40.0	0.92600	2.2649	3.1899	18.760	5.6186 1
45.0	0.91764	2.2334	3.1510	18.610	6.3785 1
50.0	0.90957	2.2024	3.1120	18.475	7.1501 1
60.0	0.89394	2.1384	3.0324	18.231	8.7301 1
70.0	0.87996	2.0734	2.9534	18.017	1.0347 2
80.0	0.86815	2.0067	2.8749	17.824	1.1986 2
90.0	0.85804	1.9408	2.7988	17.646	1.3643 2
100.0	0.84946	1.8748	2.7243	17.484	1.5312 2
120.0	0.83961	1.7530	2.5926	17.199	1.8590 2
140.0	0.83970	1.6412	2.4809	16.956	2.1686 2
160.0	0.84819	1.5399	2.3881	16.750	2.4536 2
180.0	0.86432	1.4465	2.3108	16.570	2.7088 2
200.0	0.88604	1.3594	2.2455	16.415	2.9360 2
250.0	0.95225	1.1855	2.1378	16.101	3.4148 2
300.0	1.0312	1.0528	2.0840	15.864	3.7840 2
350.0	1.1177	0.9514	2.0691	15.682	4.0730 2
400.0	1.2077	0.8723	2.0800	15.537	4.3080 2
450.0	1.2986	0.8112	2.1098	15.416	4.5073 2
500.0	1.3877	0.7617	2.1493	15.311	4.6865 2
600.0	1.5712	0.6748	2.2460	15.133	4.9671 2
700.0	1.7518	0.6042	2.3560	14.986	5.1975 2
800.0	1.9437	0.5349	2.4786	14.860	5.3720 2

$$T = 220^{\circ}\text{K}$$

P atm	Z	E/RT	H/RT	S/R	$\rho/\rho_0$
1.0	0.99895	2.4822	3.4812	22.832	1.2429 0
2.0	0.99731	2.4778	3.4751	22.134	2.4899 0
3.0	0.99567	2.4734	3.4691	21.723	3.7410 0
5.0	0.99239	2.4641	3.4565	21.203	6.2556 0
7.0	0.98933	2.4547	3.4440	20.858	8.7849 0
10.0	0.98438	2.4410	3.4254	20.486	1.2613 1
15.0	0.97636	2.4167	3.3931	20.057	1.9075 1
20.0	0.96871	2.3922	3.3609	19.744	2.5637 1
25.0	0.96085	2.3677	3.3286	19.496	3.2302 1
30.0	0.95359	2.3422	3.2958	19.288	3.9061 1
35.0	0.94647	2.3171	3.2636	19.110	4.5914 1
40.0	0.93957	2.2912	3.2308	18.950	5.2858 1
45.0	0.93280	2.2647	3.1975	18.804	5.9897 1
50.0	0.92643	2.2376	3.1641	18.674	6.7010 1
60.0	0.91418	2.1827	3.0969	18.438	8.1489 1
70.0	0.90359	2.1260	3.0296	18.232	9.6185 1
80.0	0.89083	2.0720	2.9629	18.047	1.1150 2
90.0	0.88644	2.0114	2.8979	17.878	1.2606 2
100.0	0.87957	1.9554	2.8350	17.725	1.4116 2
120.0	0.87263	1.8487	2.7213	17.452	1.7074 2
140.0	0.87296	1.7493	2.6223	17.216	1.9912 2
160.0	0.88061	1.6575	2.5381	17.014	2.2559 2
180.0	0.89388	1.5726	2.4665	16.837	2.5002 2
200.0	0.91120	1.4946	2.4058	16.683	2.7252 2
250.0	0.96994	1.3314	2.3014	16.368	3.2002 2
300.0	1.0425	1.2033	2.2457	16.127	3.5728 2
350.0	1.1212	1.1053	2.2265	15.939	3.8757 2
400.0	1.2061	1.0254	2.2315	15.789	4.1179 2
450.0	1.2895	0.9655	2.2550	15.662	4.3330 2
500.0	1.3745	0.9133	2.2878	15.553	4.5164 2
600.0	1.5497	0.8233	2.3730	15.368	4.8072 2
700.0	1.7226	0.7505	2.4731	15.216	5.0454 2
800.0	1.8933	0.6924	2.5857	15.085	5.2462 2

$$T = 230^{\circ}\text{K}$$

P atm	Z	E/RT	H/RT	s/R	$\rho/\rho_0$
1.0	0.99924	2.4832	3.4825	22.988	1.1885 0
2.0	0.99786	2.4794	3.4773	22.290	2.3803 0
3.0	0.99642	2.4756	3.4720	21.880	3.5756 0
5.0	0.99376	2.4672	3.4610	21.362	5.9753 0
7.0	0.99121	2.4589	3.4501	21.017	8.3869 0
10.0	0.98712	2.4468	3.4339	20.647	1.2031 1
15.0	0.98052	2.4250	3.4056	20.222	1.8168 1
20.0	0.97408	2.4033	3.3774	19.910	2.4384 1
25.0	0.96792	2.3813	3.3492	19.666	3.0674 1
30.0	0.96191	2.3590	3.3209	19.460	3.7039 1
35.0	0.95613	2.3366	3.2927	19.285	4.3473 1
40.0	0.95065	2.3137	3.2644	19.128	4.9970 1
45.0	0.94519	2.2905	3.2357	18.985	5.6541 1
50.0	0.94021	2.2637	3.1939	18.858	6.3156 1
60.0	0.93072	2.2187	3.1494	18.629	7.6560 1
70.0	0.92256	2.1693	3.0919	18.431	9.0110 1
80.0	0.91565	2.1186	3.0343	18.252	1.0376 2
90.0	0.90942	2.0689	2.9783	18.089	1.1753 2
100.0	0.90442	2.0202	2.9246	17.943	1.3131 2
120.0	0.89953	1.9237	2.8233	17.679	1.5843 2
140.0	0.90028	1.8381	2.7384	17.452	1.8468 2
160.0	0.90760	1.7550	2.6626	17.255	2.0936 2
180.0	0.91896	1.6782	2.5972	17.080	2.3262 2
200.0	0.93519	1.6061	2.5413	16.929	2.5398 2
250.0	0.98871	1.4527	2.4414	16.614	3.0029 2
300.0	1.0545	1.3325	2.3870	16.371	3.3788 2
350.0	1.1263	1.2387	2.3650	16.179	3.6905 2
400.0	1.2045	1.1616	2.3661	16.024	3.9439 2
450.0	1.2835	1.1009	2.3844	15.894	4.1638 2
500.0	1.3651	1.0470	2.4121	15.781	4.3498 2
600.0	1.5300	0.9574	2.4874	15.590	4.6573 2
700.0	1.6922	0.8862	2.5784	15.434	4.9126 2
800.0	1.8534	0.8290	2.6824	15.299	5.1262 2
900.0	2.0183				5.2958 2

$$T = 240^{\circ}\text{K}$$

p atm	z	E/RT	H/RT	S/R	$\rho/\rho_0$
1.0	0.99947	2.4842	3.4837	23.137	1.1387 0
2.0	0.99833	2.4809	3.4792	22.441	2.2800 0
3.0	0.99711	2.4771	3.4742	22.031	3.4242 0
5.0	0.99502	2.4697	3.4647	21.513	5.7190 0
7.0	0.99257	2.4626	3.4552	21.168	8.0263 0
10.0	0.98938	2.4512	3.4406	20.800	1.1503 1
15.0	0.98400	2.4324	3.4161	20.376	1.7349 1
20.0	0.97872	2.4128	3.3915	20.068	2.3257 1
25.0	0.97367	2.3933	3.3670	19.826	2.9222 1
30.0	0.96876	2.3731	3.3419	19.623	3.5244 1
35.0	0.96412	2.3532	3.3173	19.470	4.1316 1
40.0	0.95981	2.3330	3.2928	19.297	4.7430 1
45.0	0.95564	2.3121	3.2678	19.156	5.3592 1
50.0	0.95157	2.2911	3.2427	19.031	5.9801 1
60.0	0.94436	2.2486	3.1930	18.809	7.2309 1
70.0	0.93816	2.2053	3.1435	18.615	8.4918 1
80.0	0.93277	2.1610	3.0938	18.442	9.7610 1
90.0	0.92822	2.1170	3.0453	18.284	1.1035 2
100.0	0.92468	2.0739	2.9986	18.142	1.2308 2
120.0	0.92178	1.9907	2.9125	17.888	1.4816 2
140.0	0.92325	1.9120	2.8353	17.667	1.7258 2
160.0	0.92992	1.8372	2.7671	17.475	1.9582 2
180.0	0.94101	1.7670	2.7080	17.304	2.1770 2
200.0	0.95615	1.7007	2.6569	17.155	2.3806 2
250.0	1.0059	1.5578	2.5637	16.842	2.8285 2
300.0	1.0654	1.4456	2.5110	16.599	3.2048 2
350.0	1.1327	1.3548	2.4875	16.406	3.5167 2
400.0	1.2051	1.2809	2.4860	16.248	3.7776 2
450.0	1.2803	1.2202	2.5005	16.114	4.0003 2
500.0	1.3565	1.1676	2.5241	15.998	4.1950 2
600.0	1.5120	1.0787	2.5907	15.802	4.5164 2
700.0	1.6679	1.0060	2.6739	15.641	4.7764 2
800.0	1.8209	0.9492	2.7701	15.502	5.0003 2
900.0	1.9753	0.8990	2.8743	15.382	5.1855 2
1000.0	2.1338	0.8483	2.9821	15.273	5.3337 2

$$T = 250^{\circ}\text{K}$$

P atm	Z	E/RT	H/RT	S/R	$\rho/\rho_0$
1.0	0.99963	2.4852	3.4848	23.280	1.0930 0
2.0	0.99867	2.4818	3.4805	22.584	2.1881 0
3.0	0.99778	2.4784	3.4762	22.175	3.2851 0
5.0	0.99595	2.4715	3.4675	21.658	5.4852 0
7.0	0.99420	2.4652	3.4594	21.314	7.6928 0
10.0	0.99138	2.4550	3.4464	20.947	1.1021 1
15.0	0.98693	2.4383	3.4252	20.525	1.6606 1
20.0	0.98260	2.4210	3.4036	20.218	2.2239 1
25.0	0.97851	2.4034	3.3819	19.979	2.7915 1
30.0	0.97464	2.3855	3.3602	19.778	3.3631 1
35.0	0.97081	2.3675	3.3386	19.607	3.9391 1
40.0	0.96767	2.3493	3.3170	19.456	4.5164 1
45.0	0.96440	2.3309	3.2953	19.317	5.0982 1
50.0	0.96109	2.3121	3.2732	19.195	5.6842 1
60.0	0.95577	2.2741	3.2299	18.977	6.8590 1
70.0	0.95084	2.2357	3.1866	18.787	8.0436 1
80.0	0.94699	2.1968	3.1438	18.619	9.2301 1
90.0	0.94379	2.1576	3.1014	18.466	1.0419 2
100.0	0.94133	2.1192	3.0605	18.327	1.1607 2
120.0	0.94055	2.0444	2.9850	18.081	1.3940 2
140.0	0.94300	1.9737	2.9167	17.866	1.6221 2
160.0	0.94973	1.9064	2.8561	17.678	1.8407 2
180.0	0.96043	1.8427	2.8032	17.512	2.0477 2
200.0	0.97549	1.7810	2.7565	17.365	2.2401 2
250.0	1.0206	1.6498	2.6704	17.056	2.6764 2
300.0	1.0755	1.5444	2.6199	16.813	3.0478 2
350.0	1.1386	1.4577	2.5963	16.618	3.3585 2
400.0	1.2057	1.3872	2.5929	16.458	3.6248 2
450.0	1.2774	1.3276	2.6050	16.323	3.8490 2
500.0	1.3486	1.2766	2.6252	16.203	4.0509 2
600.0	1.4954	1.1889	2.6843	16.003	4.3838 2
700.0	1.6422	1.1182	2.7604	15.838	4.6573 2
800.0	1.7910	1.0588	2.8498	15.697	4.8805 2
900.0	1.9358	1.0122	2.9480	15.574	5.0797 2
1000.0	2.0827	0.9673	3.0500	15.464	5.2462 2

$$T = 260^{\circ}\text{K}$$

P atm	Z	E/RT	H/RT	S/R	$\rho/\rho_0$	
1.0	0.99981	2.4855	3.4854	23.417	1.0508	0
2.0	0.99905	2.4826	3.4817	22.722	2.1032	0
3.0	0.99838	2.4796	3.4780	22.313	3.1569	0
5.0	0.99683	2.4734	3.4702	21.796	5.2697	0
7.0	0.99538	2.4674	3.4628	21.453	7.3883	0
10.0	0.99310	2.4585	3.4516	21.088	1.0579	1
15.0	0.98945	2.4432	3.4327	20.667	1.5927	1
20.0	0.98592	2.4277	3.4137	20.362	2.1312	1
25.0	0.98264	2.4122	3.3948	20.124	2.6729	1
30.0	0.97952	2.3962	3.3758	19.926	3.2177	1
35.0	0.97668	2.3779	3.3564	19.756	3.7649	1
40.0	0.97418	2.3632	3.3374	19.606	4.3138	1
45.0	0.97166	2.3467	3.3184	19.470	4.8656	1
50.0	0.96917	2.3298	3.2990	19.350	5.4201	1
60.0	0.96518	2.2959	3.2611	19.136	6.5310	1
70.0	0.96190	2.2613	3.2233	18.948	7.6455	1
80.0	0.95936	2.2263	3.1857	18.784	8.7608	1
90.0	0.95688	2.1918	3.1487	18.635	9.8815	1
100.0	0.95579	2.1572	3.1130	18.501	1.0992	2
120.0	0.95676	2.0896	3.0464	18.260	1.3177	2
140.0	0.95995	2.0263	2.9863	18.051	1.5322	2
160.0	0.96724	1.9654	2.9327	17.868	1.7379	2
180.0	0.97755	1.9075	2.8850	17.704	1.9345	2
200.0	0.99146	1.8514	2.8429	17.561	2.1193	2
250.0	1.0341	1.7297	2.7638	17.256	2.5398	2
300.0	1.0862	1.6300	2.7162	17.014	2.9017	2
350.0	1.1457	1.5473	2.6930	16.819	3.2094	2
400.0	1.2081	1.4808	2.6889	16.658	3.4785	2
450.0	1.2747	1.4243	2.6990	16.521	3.7088	2
500.0	1.3413	1.3753	2.7166	16.400	3.9163	2
600.0	1.4801	1.2860	2.7750	16.195	4.2588	2
700.0	1.6218	1.2174	2.8392	16.027	4.5347	2
800.0	1.7634	1.1595	2.9229	15.884	4.7663	2
900.0	1.9036	1.1119	3.0155	15.758	4.9671	2
1000.0	2.0401	1.0716	3.1117	15.647	5.1497	2
1200.0	2.3074				5.4638	2

$$T = 270^{\circ}\text{K}$$

P atm	Z	E/RT	H/RT	S/R	$\rho/\rho_0$
1.0	1.0000	2.4860	3.4860	23.550	1.0117 0
2.0	0.99936	2.4834	3.4828	22.854	2.0247 0
3.0	0.99882	2.4804	3.4793	22.445	3.0387 0
5.0	0.99763	2.4750	3.4726	21.930	5.0705 0
7.0	0.99647	2.4694	3.4659	21.587	7.1070 0
10.0	0.99450	2.4616	3.4561	21.222	1.0173 1
15.0	0.99154	2.4476	3.4392	20.803	1.5305 1
20.0	0.98876	2.4339	3.4227	20.501	2.0464 1
25.0	0.98622	2.4196	3.4058	20.264	2.5646 1
30.0	0.98376	2.4051	3.3889	20.067	3.0852 1
35.0	0.98161	2.3902	3.3719	19.898	3.6073 1
40.0	0.97966	2.3753	3.3550	19.750	4.1308 1
45.0	0.97795	2.3601	3.3381	19.616	4.6553 1
50.0	0.97619	2.3449	3.3211	19.496	5.1819 1
60.0	0.97333	2.3144	3.2877	19.286	6.2365 1
70.0	0.97117	2.2831	3.2543	19.102	7.2921 1
80.0	0.96972	2.2553	3.2250	18.941	8.3463 1
90.0	0.96860	2.2203	3.1889	18.795	9.4005 1
100.0	0.96832	2.1894	3.1577	18.663	1.0448 2
120.0	0.97007	2.1292	3.0993	18.428	1.2515 2
140.0	0.97433	2.0719	3.0463	18.225	1.4537 2
160.0	0.98182	2.0168	2.9986	18.046	1.6484 2
180.0	0.99175	1.9641	2.9559	17.886	1.8362 2
200.0	1.0053	1.9132	2.9185	17.745	2.0127 2
250.0	1.0455	1.8008	2.8463	17.445	2.4192 2
300.0	1.0947	1.7070	2.8017	17.204	2.7725 2
350.0	1.1507	1.6288	2.7795	17.009	3.0771 2
400.0	1.2103	1.5647	2.7750	16.847	3.3435 2
450.0	1.2722	1.5117	2.7839	16.710	3.5785 2
500.0	1.3368	1.4582	2.7995	16.586	3.7840 2
600.0	1.4687	1.3780	2.8467	16.378	4.1331 2
700.0	1.6060	1.3049	2.9109	16.207	4.4097 2
800.0	1.7378	1.2519	2.9897	16.062	4.6573 2
900.0	1.8697	1.2078	3.0775	15.935	4.8699 2
1000.0	2.0007	1.1677	3.1684	15.822	5.0568 2
1200.0	2.2599	1.0898	3.3497	15.617	5.3720 2

$$T = 280^{\circ}\text{K}$$

P atm	Z	E/RT	H/RT	S/R	$\rho/\rho_0$
1.0	1.0001	2.4864	3.4865	23.677	9.7546-1
2.0	0.99955	2.4839	3.4835	22.982	1.9519 0
3.0	0.99912	2.4813	3.4804	22.573	2.9291 0
5.0	0.99809	2.4768	3.4749	22.058	4.8869 0
7.0	0.99709	2.4718	3.4689	21.715	6.8485 0
10.0	0.99570	2.4641	3.4598	21.352	9.7972 0
15.0	0.99332	2.4515	3.4448	20.934	1.4731 1
20.0	0.99122	2.4390	3.4302	20.633	1.9683 1
25.0	0.98928	2.4258	3.4151	20.397	2.4652 1
30.0	0.98739	2.4127	3.4001	20.201	2.9639 1
35.0	0.98582	2.3993	3.3851	20.034	3.4634 1
40.0	0.98451	2.3859	3.3704	19.889	3.9634 1
45.0	0.98313	2.3616	3.3448	19.755	4.4651 1
50.0	0.98219	2.3582	3.3404	19.637	4.9660 1
60.0	0.98033	2.3305	3.3108	19.429	5.9705 1
70.0	0.97910	2.3020	3.2811	19.248	6.9743 1
80.0	0.97824	2.2736	3.2519	19.089	7.9777 1
90.0	0.97824	2.2453	3.2236	18.947	8.9749 1
100.0	0.97849	2.2176	3.1961	18.817	9.9695 1
120.0	0.98140	2.1636	3.1450	18.587	1.1928 2
140.0	0.98643	2.1117	3.0981	18.389	1.3845 2
160.0	0.99428	2.0613	3.0556	18.213	1.5698 2
180.0	1.0041	2.0137	3.0178	18.057	1.7487 2
200.0	1.0173	1.9670	2.9843	17.919	1.9179 2
250.0	1.0560	1.8630	2.9190	17.623	2.3094 2
300.0	1.1026	1.7752	2.8778	17.383	2.6542 2
350.0	1.1553	1.7019	2.8572	17.190	2.9553 2
400.0	1.2123	1.6406	2.8529	17.027	3.2186 2
450.0	1.2718	1.5888	2.8606	16.889	3.4517 2
500.0	1.3325	1.5424	2.8749	16.764	3.6604 2
600.0	1.4579	1.4594	2.9173	16.553	4.0146 2
700.0	1.5882	1.3888	2.9770	16.380	4.2997 2
800.0	1.7175	1.3334	3.0509	16.232	4.5439 2
900.0	1.8420	1.2923	3.1343	16.105	4.7663 2
1000.0	1.9683	1.2523	3.2206	15.991	4.9561 2
1200.0	2.2209	1.1736	3.3945	15.784	5.2709 2



$$T = 290^{\circ}\text{K}$$

p atm	z	E/RT	H/RT	s/R	$\rho/\rho_0$
1.0	1.0002	2.4867	3.4869	23.800	9.4171-1
2.0	0.99978	2.4842	3.4840	23.105	1.8842 0
3.0	0.99939	2.4821	3.4815	22.696	2.8274 0
5.0	0.99859	2.4780	3.4766	22.182	4.7161 0
7.0	0.99805	2.4731	3.4712	21.839	6.6061 0
10.0	0.99678	2.4665	3.4633	21.477	9.4493 0
15.0	0.99495	2.4551	3.4500	21.060	1.4200 1
20.0	0.99340	2.4433	3.4367	20.761	1.8963 1
25.0	0.99196	2.4314	3.4234	20.526	2.3738 1
30.0	0.99070	2.4195	3.4102	20.331	2.8522 1
35.0	0.98965	2.4072	3.3969	20.165	3.3311 1
40.0	0.98876	2.3949	3.3837	20.020	3.8104 1
45.0	0.98786	2.3845	3.3724	19.889	4.2906 1
50.0	0.98724	2.3698	3.3571	19.772	4.7703 1
60.0	0.98615	2.3444	3.3306	19.565	5.7307 1
70.0	0.98521	2.3192	3.3044	19.386	6.6990 1
80.0	0.98556	2.2931	3.2787	19.231	7.6455 1
90.0	0.98615	2.2672	3.2534	19.091	8.5961 1
100.0	0.98724	2.2421	3.2294	18.962	9.5406 1
120.0	0.99094	2.1936	3.1846	18.738	1.1406 2
140.0	0.99656	2.1465	3.1431	18.543	1.3232 2
160.0	1.0051	2.1003	3.1054	18.371	1.4994 2
180.0	1.0149	2.0569	3.0718	18.218	1.6705 2
200.0	1.0276	2.0147	3.0423	18.082	1.8332 2
250.0	1.0648	1.9186	2.9834	17.791	2.2114 2
300.0	1.1088	1.8369	2.9457	17.553	2.5485 2
350.0	1.1582	1.7688	2.9270	17.360	2.8464 2
400.0	1.2126	1.7107	2.9233	17.199	3.1070 2
450.0	1.2696	1.6607	2.9303	17.060	3.3385 2
500.0	1.3287	1.6145	2.9432	16.935	3.5445 2
600.0	1.4481	1.5341	2.9822	16.722	3.9027 2
700.0	1.5717	1.4661	3.0378	16.546	4.1950 2
800.0	1.6953	1.4117	3.1070	16.396	4.4447 2
900.0	1.8197	1.3665	3.1862	16.267	4.6573 2
1000.0	1.9383	1.3305	3.2688	16.153	4.8593 2
1200.0	2.1797	1.2562	3.4359	15.945	5.1855 2

$$T = 300^{\circ}\text{K}$$

p atm	z	E/RT	H/RT	S/R	$\rho/\rho_0$
1.0	1.0003	2.4870	3.4873	23.919	9.1026-1
2.0	1.0000	2.4849	3.4849	23.224	1.8210 0
3.0	0.99974	2.4828	3.4825	22.815	2.7322 0
5.0	0.99906	2.4790	3.4781	22.301	4.5568 0
7.0	0.99864	2.4746	3.4733	21.960	6.3822 0
10.0	0.99775	2.4683	3.4661	21.598	9.1255 0
15.0	0.99646	2.4580	3.4545	21.181	1.3706 1
20.0	0.99530	2.4475	3.4428	20.883	1.8296 1
25.0	0.99439	2.4364	3.4308	20.650	2.2891 1
30.0	0.99353	2.4257	3.4192	20.456	2.7493 1
35.0	0.99294	2.4143	3.4073	20.290	3.2094 1
40.0	0.99237	2.4033	3.3957	20.146	3.6700 1
45.0	0.99188	2.3918	3.3837	20.016	4.1308 1
50.0	0.99153	2.3805	3.3720	19.901	4.5914 1
60.0	0.99133	2.3567	3.3480	19.696	5.5108 1
70.0	0.99124	2.3337	3.3250	19.519	6.4298 1
80.0	0.99174	2.3104	3.3021	19.365	7.3447 1
90.0	0.99279	2.2873	3.2801	19.228	8.2540 1
100.0	0.99458	2.2642	3.2588	19.102	9.1546 1
120.0	0.99890	2.2202	3.2191	18.881	1.0938 2
140.0	1.0054	2.1773	3.1827	18.689	1.2678 2
160.0	1.0145	2.1349	3.1494	18.521	1.4360 2
180.0	1.0242	2.0951	3.1193	18.371	1.6001 2
200.0	1.0364	2.0569	3.0933	18.237	1.7570 2
250.0	1.0720	1.9683	3.0403	17.950	2.1234 2
300.0	1.1145	1.8922	3.0067	17.715	2.4509 2
350.0	1.1622	1.8298	2.9898	17.524	2.7419 2
400.0	1.2145	1.7725	2.9870	17.363	2.9988 2
450.0	1.2675	1.7263	2.9938	17.223	3.2325 2
500.0	1.3230	1.6825	3.0055	17.098	3.4411 2
600.0	1.4388	1.6027	3.0415	16.883	3.7968 2
700.0	1.5592	1.5345	3.0937	16.706	4.0878 2
800.0	1.6778	1.4812	3.1590	16.555	4.3414 2
900.0	1.7961	1.4383	3.2344	16.425	4.5624 2
1000.0	1.9103	1.4031	3.3134	16.309	4.7663 2
1200.0	2.1461	1.3279	3.4740	16.100	5.0912 2

$$T = 320^{\circ}\text{K}$$

p atm	Z	E/RT	H/RT	S/R	$\rho/\rho_0$
1.0	1.0005	2.4879	3.4884	24.145	8.5322-1
2.0	1.0004	2.4862	3.4866	23.450	1.7066 0
3.0	1.0001	2.4846	3.4847	23.042	2.5605 0
5.0	0.99987	2.4810	3.4809	22.528	4.2686 0
7.0	0.99973	2.4775	3.4772	22.188	5.9769 0
10.0	0.99934	2.4723	3.4716	21.827	8.5417 0
15.0	0.99876	2.4634	3.4622	21.412	1.2820 1
20.0	0.99849	2.4531	3.4528	21.115	1.7098 1
25.0	0.99828	2.4451	3.4434	20.884	2.1377 1
30.0	0.99810	2.4360	3.4341	20.692	2.5657 1
35.0	0.99801	2.4267	3.4247	20.528	2.9936 1
40.0	0.99806	2.4172	3.4153	20.385	3.4211 1
45.0	0.99832	2.4076	3.4059	20.258	3.8477 1
50.0	0.99854	2.3980	3.3966	20.144	4.2743 1
60.0	0.99935	2.3781	3.3775	19.943	5.1250 1
70.0	1.00080	2.3583	3.3591	19.769	5.9705 1
80.0	1.00230	2.3390	3.3413	19.619	6.8131 1
90.0	1.00410	2.3197	3.3238	19.484	7.6508 1
100.0	1.00670	2.3002	3.3069	19.362	8.4790 1
120.0	1.01290	2.2627	3.2756	19.146	1.0113 2
140.0	1.02000	2.2271	3.2471	18.961	1.1716 2
160.0	1.02910	2.1922	3.2213	18.799	1.3271 2
180.0	1.03920	2.1589	3.1981	18.653	1.4786 2
200.0	1.05090	2.1269	3.1778	18.523	1.6246 2
250.0	1.08410	2.0522	3.1363	18.244	1.9685 2
300.0	1.12370	1.9867	3.1104	18.016	2.2789 2
350.0	1.16700	1.9314	3.0984	17.830	2.5602 2
400.0	1.21480	1.8828	3.0976	17.670	2.8107 2
450.0	1.26550	1.8385	3.1040	17.530	3.0354 2
500.0	1.31650	1.7989	3.1145	17.405	3.2419 2
600.0	1.42210	1.7242	3.1463	17.187	3.6015 2
700.0	1.53370	1.6582	3.1919	17.007	3.8959 2
800.0	1.64610	1.6048	3.2509	16.853	4.1484 2
900.0	1.75590	1.5638	3.3197	16.722	4.3753 2
1000.0	1.86330	1.5289	3.3922	16.604	4.5811 2
1200.0	2.08050	1.4614	3.5419	16.395	4.9234 2

$$T = 340^{\circ}\text{K}$$

p atm	z	E/RT	H/RT	s/R	$\rho/\rho_0$
1.0	1.00060	2.4894	3.4900	24.358	8.0292-1
2.0	1.00050	2.4877	3.4882	23.663	1.6060 0
3.0	1.00050	2.4863	3.4868	23.255	2.4090 0
5.0	1.00060	2.4829	3.4835	22.743	4.0146 0
7.0	1.00070	2.4799	3.4806	22.402	5.6200 0
10.0	1.00060	2.4757	3.4762	22.043	8.0298 0
15.0	1.00060	2.4679	3.4685	21.629	1.2044 1
20.0	1.00080	2.4604	3.4612	21.333	1.6055 1
25.0	1.00120	2.4526	3.4538	21.103	2.0062 1
30.0	1.00150	2.4444	3.4459	20.912	2.4067 1
35.0	1.00190	2.4366	3.4385	20.751	2.8065 1
40.0	1.00250	2.4287	3.4312	20.609	3.2057 1
45.0	1.00320	2.4206	3.4238	20.483	3.6038 1
50.0	1.00380	2.4124	3.4162	20.370	4.0017 1
60.0	1.00560	2.3956	3.4012	20.171	4.7938 1
70.0	1.00770	2.3785	3.3862	20.000	5.5808 1
80.0	1.01020	2.3616	3.3718	19.854	6.3622 1
90.0	1.01260	2.3453	3.3579	19.721	7.1410 1
100.0	1.01570	2.3287	3.3444	19.601	7.9101 1
120.0	1.02300	2.2967	3.3197	19.391	9.4242 1
140.0	1.03080	2.2666	3.2974	19.210	1.0912 2
160.0	1.03980	2.2376	3.2774	19.051	1.2363 2
180.0	1.04970	2.2100	3.2597	18.911	1.3777 2
200.0	1.06160	2.1828	3.2444	18.784	1.5136 2
250.0	1.09300	2.1199	3.2129	18.514	1.8377 2
300.0	1.12970	2.0644	3.1941	18.290	2.1335 2

$$T = 360^{\circ}\text{K}$$

P atm	Z	E/RT	H/RT	S/R	$\rho/\rho_0$
1.0	1.00060	2.4905	3.4911	24.559	7.5826-1
2.0	1.00070	2.4890	3.4897	23.863	1.5164 0
3.0	1.00070	2.4882	3.4889	23.456	2.2745 0
5.0	1.00100	2.4851	3.4861	22.945	3.7898 0
7.0	1.00120	2.4827	3.4839	22.604	5.3046 0
10.0	1.00140	2.4786	3.4800	22.246	7.5767 0
15.0	1.00180	2.4724	3.4742	21.832	1.1360 1
20.0	1.00250	2.4656	3.4681	21.537	1.5137 1
25.0	1.00320	2.4587	3.4619	21.309	1.8907 1
30.0	1.00400	2.4521	3.4561	21.119	2.2671 1
35.0	1.00480	2.4452	3.4500	20.959	2.6429 1
40.0	1.00570	2.4387	3.4444	20.818	3.0178 1
45.0	1.00670	2.4316	3.4383	20.693	3.3916 1
50.0	1.00780	2.4244	3.4322	20.581	3.7643 1
60.0	1.01000	2.4103	3.4203	20.385	4.5073 1
70.0	1.01280	2.3955	3.4083	20.217	5.2438 1
80.0	1.01580	2.3809	3.3967	20.071	5.9753 1
90.0	1.01870	2.3666	3.3853	19.941	6.7030 1
100.0	1.02220	2.3522	3.3744	19.824	7.4226 1
120.0	1.02990	2.3248	3.3547	19.617	8.8403 1
140.0	1.03840	2.2991	3.3375	19.440	1.0229 2
160.0	1.04750	2.2744	3.3219	19.285	1.1589 2
180.0	1.05710	2.2515	3.3086	19.148	1.2919 2
200.0	1.06830	2.2292	3.2975	19.025	1.4205 2
250.0	1.09910	2.1756	3.2747	18.760	1.7258 2
300.0	1.13400	2.1279	3.2619	18.543	2.0073 2

$$T = 380^{\circ}\text{K}$$

P atm	Z	E/RT	H/RT	S/R	$\rho/\rho_0$
1.0	1.0007	2.4919	3.4926	24.749	7.1829-1
2.0	1.0008	2.4905	3.4913	24.054	1.4364 0
3.0	1.0009	2.4894	3.4903	23.646	2.1544 0
5.0	1.0013	2.4871	3.4884	23.136	3.5894 0
7.0	1.0015	2.4851	3.4866	22.795	5.0239 0
10.0	1.0020	2.4817	3.4837	22.437	7.1733 0
15.0	1.0029	2.4760	3.4789	22.025	1.0751 1
20.0	1.0038	2.4704	3.4742	21.731	1.4322 1
25.0	1.0048	2.4647	3.4695	21.504	1.7885 1
30.0	1.0058	2.4589	3.4647	21.315	2.1439 1
35.0	1.0069	2.4531	3.4600	21.156	2.4985 1
40.0	1.0081	2.4472	3.4553	21.015	2.8522 1
45.0	1.0093	2.4412	3.4505	20.892	3.2048 1
50.0	1.0107	2.4351	3.4458	20.781	3.5558 1
60.0	1.0134	2.4227	3.4361	20.586	4.2556 1
70.0	1.0166	2.4097	3.4263	20.420	4.9495 1
80.0	1.0199	2.3969	3.4168	20.276	5.6384 1
90.0	1.0235	2.3841	3.4076	20.147	6.3209 1
100.0	1.0271	2.3721	3.3992	20.032	6.9983 1
120.0	1.0346	2.3491	3.3837	19.827	8.3370 1
140.0	1.0431	2.3269	3.3700	19.654	9.6475 1
160.0	1.0524	2.3060	3.3584	19.501	1.0928 2
180.0	1.0622	2.2862	3.3484	19.368	1.2181 2
200.0	1.0724	2.2681	3.3405	19.248	1.3406 2
250.0	1.1022	2.2223	3.3245	18.989	1.6304 2
300.0	1.1369	2.1782	3.3171	18.776	1.8968 2

$$T = 400^{\circ}\text{K}$$

p atm	z	E/RT	H/RT	s/R	$\rho/\rho_0$
1.0	1.0008	2.4930	3.4938	24.929	6.8235-1
2.0	1.0010	2.4920	3.4930	24.234	1.3644 0
3.0	1.0011	2.4912	3.4923	23.827	2.0464 0
5.0	1.0015	2.4893	3.4908	23.317	3.4091 0
7.0	1.0018	2.4875	3.4893	22.977	4.7713 0
10.0	1.0025	2.4842	3.4867	22.619	6.8114 0
15.0	1.0036	2.4797	3.4833	22.207	1.0206 1
20.0	1.0047	2.4746	3.4793	21.915	1.3594 1
25.0	1.0059	2.4699	3.4758	21.688	1.6972 1
30.0	1.0070	2.4648	3.4718	21.500	2.0343 1
35.0	1.0085	2.4598	3.4683	21.343	2.3700 1
40.0	1.0099	2.4544	3.4643	21.202	2.7048 1
45.0	1.0113	2.4495	3.4608	21.079	3.0387 1
50.0	1.0128	2.4440	3.4568	20.969	3.3712 1
60.0	1.0158	2.4332	3.4490	20.776	4.0334 1
70.0	1.0191	2.4227	3.4418	20.611	4.6904 1
80.0	1.0228	2.4115	3.4343	20.469	5.3413 1
90.0	1.0266	2.4004	3.4270	20.342	5.9865 1
100.0	1.0306	2.3899	3.4205	20.228	6.6257 1
120.0	1.0382				7.8933 1
140.0	1.0472				9.1297 1
160.0	1.0571				1.0336 2
180.0	1.0676				1.1514 2
200.0	1.0783				1.2666 2
250.0	1.1070				1.5422 2
300.0	1.1389				1.7988 2

$$T = 450^{\circ}\text{K}$$

P atm	Z	E/RT	H/RT	s/R	$\rho/\rho_0$
1.0	1.0008	2.4965	3.4973	25.344	6.0648-1
2.0	1.0011	2.4958	3.4969	24.649	1.2126 0
3.0	1.0014	2.4953	3.4967	24.242	1.8184 0
5.0	1.0020	2.4938	3.4958	23.734	3.0289 0
7.0	1.0026	2.4923	3.4949	23.393	4.2379 0
10.0	1.0034	2.4906	3.4940	23.036	6.0492 0
15.0	1.0049	2.4873	3.4922	22.627	9.0602 0
20.0	1.0065	2.4839	3.4904	22.336	1.2061 1
25.0	1.0081	2.4808	3.4889	22.111	1.5053 1
30.0	1.0097	2.4772	3.4869	21.925	1.8035 1
35.0	1.0114	2.4737	3.4851	21.768	2.1005 1
40.0	1.0131	2.4702	3.4833	21.629	2.3966 1
45.0	1.0148	2.4665	3.4813	21.509	2.6915 1
50.0	1.0166	2.4630	3.4796	21.399	2.9853 1
60.0	1.0203	2.4555	3.4758	21.209	3.5694 1
70.0	1.0242	2.4478	3.4720	21.048	4.1484 1
80.0	1.0283	2.4399	3.4682	20.910	4.7220 1
90.0	1.0325	2.4319	3.4644	20.785	5.2908 1
100.0	1.0370	2.4241	3.4611	20.673	5.8535 1
120.0	1.0450				6.9706 1
140.0	1.0545				8.0591 1
160.0	1.0643				9.1255 1
180.0	1.0742				1.0172 2
200.0	1.0844				1.1195 2
250.0	1.1118				1.3649 2
300.0	1.1420				1.5946 2



$T = 500^{\circ}\text{K}$ 

P atm	Z	E/RT	H/RT	S/R	$\rho/\rho_0$
1.0	1.0003	2.5067	3.5070	25.72	5.4616-1
2.0	1.0008	2.5058	3.5066	25.02	1.0926 0
3.0	1.0011	2.5052	3.5063	24.62	1.6372 0
5.0	1.0018	2.5038	3.5056	24.10	2.7267 0
7.0	1.0025	2.5023	3.5048	23.77	3.8147 0
10.0	1.0035	2.5005	3.5040	23.41	5.4441 0
15.0	1.0053	2.4970	3.5023	22.99	8.1516 0
20.0	1.0070	2.4936	3.5006	22.70	1.0850 1
25.0	1.0089	2.4902	3.4991	22.48	1.3538 1
30.0	1.0108	2.4867	3.4975	22.29	1.6214 1
35.0	1.0130	2.4855	3.4958	22.14	1.8876 1
40.0	1.0146	2.4792	3.4938	22.01	2.1538 1
45.0	1.0166	2.4758	3.4924	21.89	2.4183 1
50.0	1.0185	2.4725	3.4910	21.78	2.6820 1
60.0	1.0206	2.4675	3.4881	21.59	3.2118 1
70.0	1.0266	2.4586	3.4852	21.43	3.7252 1
80.0	1.0308	2.4521	3.4829	21.29	4.2400 1
90.0	1.0351	2.4456	3.4807	21.17	4.7501 1
100.0	1.0394	2.4390	3.4784	21.06	5.2566 1
120.0	1.0484				6.2532 1
140.0	1.0573				7.2340 1
160.0	1.0669				8.1930 1
180.0	1.0768				9.1324 1
200.0	1.0868				1.0054 2
250.0	1.1130				1.2271 2
300.0	1.1401				1.4376 2

$$T = 550^{\circ}\text{K}$$

P atm	Z	E/RT	H/RT	S/R	$\rho/\rho_0$
1.0	1.0004	2.5156	3.5160	26.07	4.9645-1
2.0	1.0008	2.5150	3.5158	25.36	9.9251-1
3.0	1.0012	2.5144	3.5156	24.96	1.4882 0
5.0	1.0019	2.5134	3.5153	24.45	2.4785 0
7.0	1.0027	2.5122	3.5149	24.12	3.4672 0
10.0	1.0037	2.5107	3.5144	23.76	4.9482 0
15.0	1.0055	2.5082	3.5137	23.34	7.4089 0
20.0	1.0074	2.5057	3.5131	23.05	9.8600 0
25.0	1.0093	2.5032	3.5125	22.83	1.2302 1
30.0	1.0113	2.5005	3.5118	22.64	1.4733 1
35.0	1.0132	2.4980	3.5112	22.49	1.7156 1
40.0	1.0153	2.4952	3.5105	22.36	1.9567 1
45.0	1.0174	2.4921	3.5095	22.24	2.1967 1
50.0	1.0195	2.4890	3.5085	22.13	2.4358 1
60.0	1.0236	2.4829	3.5065	21.94	2.9112 1
70.0	1.0277	2.4768	3.5045	21.78	3.3828 1
80.0	1.0319	2.4719	3.5038	21.64	3.8504 1
90.0	1.0363	2.4668	3.5031	21.52	4.3133 1
100.0	1.0406	2.4618	3.5024	21.41	4.7727 1
120.0	1.0495				5.6787 1
140.0	1.0584				6.5694 1
160.0	1.0677				7.4425 1
180.0	1.0773				8.2986 1
200.0	1.0868				9.1397 1
250.0	1.1118				1.1168 2
300.0	1.1376				1.3097 2

$$T = 600^{\circ}\text{K}$$

p atm	Z	E/RT	H/RT	S/R	$\rho/\rho_0$
1.0	1.0004	2.5263	3.5267	26.38	4.5509-1
2.0	1.0008	2.5258	3.5266	25.68	9.0981-1
3.0	1.0013	2.5253	3.5266	25.28	1.3640 0
5.0	1.0020	2.5245	3.5265	24.78	2.2718 0
7.0	1.0028	2.5234	3.5262	24.43	3.1780 0
10.0	1.0039	2.5221	3.5260	24.08	4.5350 0
15.0	1.0058	2.5199	3.5257	23.67	6.7897 0
20.0	1.0078	2.5176	3.5254	23.38	9.0349 0
25.0	1.0096	2.5155	3.5251	23.15	1.1274 1
30.0	1.0116	2.5132	3.5248	22.97	1.3501 1
35.0	1.0137	2.5108	3.5245	22.82	1.5719 1
40.0	1.0156	2.5086	3.5242	22.68	1.7931 1
45.0	1.0177	2.5063	3.5240	22.57	2.0131 1
50.0	1.0198	2.5039	3.5237	22.46	2.2322 1
60.0	1.0240	2.4995	3.5235	22.27	2.6676 1
70.0	1.0281	2.4951	3.5232	22.10	3.0998 1
80.0	1.0323	2.4909	3.5232	21.97	3.5282 1
90.0	1.0366	2.4867	3.5233	21.85	3.9528 1
100.0	1.0408	2.4825	3.5233	21.74	4.3742 1
120.0	1.0497				5.2046 1
140.0	1.0587				6.0204 1
160.0	1.0675				6.8237 1
180.0	1.0765				7.6125 1
200.0	1.0857				8.3867 1
250.0	1.1094				1.0259 2
300.0	1.1330				1.2055 2

$$T = 650^{\circ}\text{K}$$

p atm	z	E/RT	H/RT	s/R	$\rho/\rho_0$
1.0	1.0004	2.5382	3.5386	26.68	4.2008-1
2.0	1.0008	2.5379	3.5387	25.98	8.3983-1
3.0	1.0013	2.5374	3.5387	25.57	1.2591 0
5.0	1.0020	2.5368	3.5388	25.06	2.0971 0
7.0	1.0028	2.5361	3.5388	24.73	2.9335 0
10.0	1.0039	2.5349	3.5388	24.37	4.1862 0
15.0	1.0058	2.5331	3.5389	23.96	6.2674 0
20.0	1.0078	2.5312	3.5390	23.67	8.3399 0
25.0	1.0096	2.5295	3.5391	23.44	1.0406 1
30.0	1.0116	2.5276	3.5392	23.26	1.2463 1
35.0	1.0137	2.5256	3.5393	23.11	1.4510 1
40.0	1.0156	2.5238	3.5394	22.98	1.6552 1
45.0	1.0177	2.5219	3.5396	22.86	1.8582 1
50.0	1.0198	2.5200	3.5398	22.76	2.0605 1
60.0	1.0240	2.5162	3.5402	22.57	2.4624 1
70.0	1.0278	2.5128	3.5406	22.40	2.8622 1
80.0	1.0320	2.5093	3.5413	22.27	3.2578 1
90.0	1.0362	2.5057	3.5419	22.15	3.6501 1
100.0	1.0405	2.5021	3.5426	22.04	4.0389 1
120.0	1.0490				4.8074 1
140.0	1.0578				5.5620 1
160.0	1.0666				6.3041 1
180.0	1.0745				7.0375 1
200.0	1.0842				7.7523 1
250.0	1.1064				9.4959 1
300.0	1.1288				1.1169 2

$$T = 700^{\circ}\text{K}$$

P atm	Z	E/RT	H/RT	S/R	$\rho/\rho_0$
1.0	1.0004	2.5516	3.5520	26.95	3.9007-1
2.0	1.0008	2.5513	3.5521	26.25	7.7984-1
3.0	1.0013	2.5509	3.5522	25.85	1.1692 0
5.0	1.0020	2.5504	3.5524	25.34	1.9473 0
7.0	1.0028	2.5496	3.5524	25.01	2.7240 0
10.0	1.0039	2.5487	3.5526	24.65	3.8871 0
15.0	1.0058	2.5472	3.5530	24.24	5.8197 0
20.0	1.0078	2.5455	3.5533	23.95	7.7442 0
25.0	1.0096	2.5441	3.5537	23.73	9.6630 0
30.0	1.0116	2.5425	3.5541	23.54	1.1573 1
35.0	1.0137	2.5407	3.5544	23.38	1.3473 1
40.0	1.0156	2.5393	3.5549	23.25	1.5369 1
45.0	1.0176	2.5377	3.5553	23.13	1.7257 1
50.0	1.0196	2.5362	3.5558	23.03	1.9136 1
60.0	1.0237	2.5330	3.5567	22.85	2.2872 1
70.0	1.0275	2.5301	3.5576	22.69	2.6585 1
80.0	1.0316	2.5271	3.5587	22.56	3.0262 1
90.0	1.0356	2.5243	3.5599	22.43	3.3913 1
100.0	1.0397	2.5213	3.5610	22.32	3.7533 1
120.0	1.0479				4.4687 1
140.0	1.0561				5.1730 1
160.0	1.0644				5.8659 1
180.0	1.0731				6.5457 1
200.0	1.0816				7.2158 1
250.0	1.1032				8.8431 1
300.0	1.1245				1.0411 2

$$T = 750^{\circ}\text{K}$$

p atm	z	E/RT	H/RT	s/R	$\rho/\rho_0$
1.0	1.0004	2.5659	3.5663	27.21	3.6406-1
2.0	1.0008	2.5656	3.5664	26.51	7.2784-1
3.0	1.0013	2.5652	3.5665	26.11	1.0912 0
5.0	1.0020	2.5646	3.5666	25.59	1.8174 0
7.0	1.0028	2.5641	3.5669	25.27	2.5424 0
10.0	1.0038	2.5634	3.5672	24.91	3.6283 0
15.0	1.0057	2.5621	3.5678	24.50	5.4322 0
20.0	1.0077	2.5607	3.5684	24.21	7.2285 0
25.0	1.0095	2.5595	3.5690	23.98	9.0196 0
30.0	1.0115	2.5581	3.5696	23.80	1.0802 1
35.0	1.0135	2.5567	3.5702	23.65	1.2578 1
40.0	1.0153	2.5555	3.5708	23.52	1.4349 1
45.0	1.0172	2.5542	3.5714	23.40	1.6112 1
50.0	1.0191	2.5530	3.5721	23.29	1.7869 1
60.0	1.0231	2.5496	3.5727	23.11	2.1359 1
70.0	1.0270	2.5477	3.5747	22.95	2.4824 1
80.0	1.0309	2.5454	3.5763	22.81	2.8263 1
90.0	1.0348	2.5431	3.5779	22.68	3.1677 1
100.0	1.0389	2.5406	3.5795	22.58	3.5057 1
120.0	1.0468				4.1751 1
140.0	1.0548				4.8340 1
160.0	1.0629				5.4825 1
180.0	1.0710				6.1212 1
200.0	1.0791				6.7503 1
250.0	1.0997				8.2798 1
300.0	1.1203				9.7530 1

$$T = 800^{\circ}\text{K}$$

p atm	z	E/RT	H/RT	S/R	$\rho/\rho_0$
1.0	1.0004	2.5811	3.5815	27.46	3.4131-1
2.0	1.0008	2.5808	3.5816	26.76	6.8235-1
3.0	1.0012	2.5805	3.5817	26.35	1.0231 0
5.0	1.0019	2.5801	3.5820	25.84	1.7040 0
7.0	1.0027	2.5794	3.5821	25.51	2.3837 0
10.0	1.0037	2.5788	3.5825	25.16	3.4019 0
15.0	1.0056	2.5776	3.5832	24.74	5.0932 0
20.0	1.0075	2.5765	3.5840	24.45	6.7782 0
25.0	1.0093	2.5754	3.5847	24.23	8.4576 0
30.0	1.0111	2.5743	3.5854	24.04	1.0131 1
35.0	1.0129	2.5732	3.5861	23.88	1.1799 1
40.0	1.0148	2.5721	3.5869	23.76	1.3459 1
45.0	1.0167	2.5710	3.5877	23.63	1.5113 1
50.0	1.0185	2.5713	3.5898	23.53	1.6762 1
60.0	1.0224	2.5682	3.5906	23.34	2.0038 1
70.0	1.0262	2.5656	3.5918	23.20	2.3291 1
80.0	1.0300	2.5635	3.5935	23.06	2.6520 1
90.0	1.0337	2.5615	3.5952	22.94	2.9729 1
100.0	1.0376	2.5593	3.5969	22.83	3.2908 1
120.0	1.0454				3.9195 1
140.0	1.0531				4.5393 1
160.0	1.0609				5.1496 1
180.0	1.0687				5.7510 1
200.0	1.0766				6.3431 1
250.0	1.0963				7.7864 1
300.0	1.1161				9.1779 1

$$T = 850^{\circ}\text{K}$$

P atm	Z	E/RT	H/RT	S/R	$\rho/\rho_0$
1.0	1.0004	2.5963	3.5967	27.69	3.2123=1
2.0	1.0007	2.5962	3.5969	26.99	6.4227=1
3.0	1.0012	2.5959	3.5971	26.59	9.6289=1
5.0	1.0018	2.5957	3.5975	26.08	1.6039 0
7.0	1.0026	2.5954	3.5980	25.75	2.2437 0
10.0	1.0036	2.5948	3.5984	25.39	3.2021 0
15.0	1.0054	2.5938	3.5992	24.98	4.7945 0
20.0	1.0073	2.5927	3.6000	24.69	6.3806 0
25.0	1.0090	2.5919	3.6009	24.47	7.9623 0
30.0	1.0108	2.5909	3.6017	24.28	9.5378 0
35.0	1.0127	2.5898	3.6025	24.13	1.1107 1
40.0	1.0145	2.5889	3.6034	24.00	1.2671 1
45.0	1.0162	2.5881	3.6043	23.87	1.4231 1
50.0	1.0181	2.5871	3.6052	23.77	1.5782 1
60.0	1.0218	2.5853	3.6071	23.58	1.8870 1
70.0	1.0256	2.5833	3.6089	23.43	2.1934 1
80.0	1.0292	2.5817	3.6109	23.29	2.4979 1
90.0	1.0329	2.5798	3.6127	23.18	2.8001 1
100.0	1.0367	2.5780	3.6147	23.07	3.0998 1
120.0	1.0440				3.6938 1
140.0	1.0515				4.2787 1
160.0	1.0589				4.8558 1
180.0	1.0664				5.4243 1
200.0	1.0738				5.9855 1
250.0	1.0927				7.3524 1
300.0	1.1115				8.6737 1



$$T = 900^{\circ}\text{K}$$

P atm	Z	E/RT	H/RT	S/R	$\rho/\rho_0$
1.0	1.0004	2.6126	3.6130	27.92	3.0339=1
2.0	1.0007	2.6125	3.6132	27.22	6.0660=1
3.0	1.0011	2.6122	3.6133	26.81	9.0953=1
5.0	1.0017	2.6120	3.6137	26.30	1.5150 0
7.0	1.0025	2.6117	3.6142	25.97	2.1193 0
10.0	1.0035	2.6111	3.6146	25.61	3.0245 0
15.0	1.0052	2.6104	3.6156	25.19	4.5291 0
20.0	1.0069	2.6098	3.6167	24.91	6.0286 0
25.0	1.0088	2.6089	3.6177	24.68	7.5216 0
30.0	1.0105	2.6082	3.6187	24.51	9.0107 0
35.0	1.0123	2.6075	3.6198	24.35	1.0494 1
40.0	1.0141	2.6062	3.6203	24.22	1.1972 1
45.0	1.0159	2.6054	3.6213	24.09	1.3444 1
50.0	1.0176	2.6046	3.6222	23.98	1.4913 1
60.0	1.0212	2.6029	3.6241	23.81	1.7833 1
70.0	1.0248	2.6012	3.6260	23.66	2.0732 1
80.0	1.0283	2.5998	3.6281	23.52	2.3613 1
90.0	1.0318	2.5985	3.6303	23.40	2.6474 1
100.0	1.0355	2.5969	3.6324	23.29	2.9310 1
120.0	1.0426				3.4933 1
140.0	1.0497				4.0480 1
160.0	1.0569				4.5947 1
180.0	1.0643				5.1331 1
200.0	1.0715				5.6651 1
250.0	1.0896				6.9638 1
300.0	1.1076				8.2208 1

$$T = 950^{\circ}\text{K}$$

P atm	Z	E/RT	H/RT	S/R	$\rho/\rho_0$
1.0	1.0003	2.6293	3.6296	28.13	2.8745-1
2.0	1.0007	2.6291	3.6298	27.43	5.7468-1
3.0	1.0011	2.6289	3.6300	27.03	8.6167-1
5.0	1.0017	2.6286	3.6303	26.52	1.4353 0
7.0	1.0025	2.6282	3.6307	26.18	2.0078 0
10.0	1.0034	2.6277	3.6311	25.82	2.8657 0
15.0	1.0050	2.6271	3.6321	25.40	4.2916 0
20.0	1.0068	2.6263	3.6331	25.11	5.7120 0
25.0	1.0085	2.6256	3.6341	24.89	7.1279 0
30.0	1.0103	2.6248	3.6351	24.72	8.5383 0
35.0	1.0119	2.6231	3.6360	24.56	9.9455 0
40.0	1.0137	2.6234	3.6371	24.43	1.1346 1
45.0	1.0154	2.6227	3.6381	24.32	1.2743 1
50.0	1.0171	2.6220	3.6391	24.21	1.4135 1
60.0	1.0205	2.6204	3.6409	24.02	1.6906 1
70.0	1.0240	2.6191	3.6431	23.87	1.9656 1
80.0	1.0275	2.6178	3.6453	23.73	2.2388 1
90.0	1.0308	2.6167	3.6475	23.61	2.5105 1
100.0	1.0343	2.6154	3.6497	23.51	2.7800 1
120.0	1.0411				3.3143 1
140.0	1.0480				3.8412 1
160.0	1.0549				4.3612 1
180.0	1.0620				4.8736 1
200.0	1.0689				5.3801 1
250.0	1.0864				6.6168 1
300.0	1.1038				7.8150 1

$$T = 1000^{\circ}\text{K}$$

P atm	Z	E/RT	H/RT	S/R	$\rho/\rho_0$
1.0	1.0003	2.6457	3.6461	28.33	2.7308-1
2.0	1.0007	2.6456	3.6463	27.63	5.4594-1
3.0	1.0010	2.6455	3.6465	27.23	8.1866-1
5.0	1.0016	2.6452	3.6468	26.72	1.3636 0
7.0	1.0024	2.6448	3.6472	26.38	1.9075 0
10.0	1.0033	2.6445	3.6478	26.03	2.7226 0
15.0	1.0049	2.6440	3.6489	25.61	4.0774 0
20.0	1.0067	2.6432	3.6499	25.32	5.4268 0
25.0	1.0082	2.6438	3.6520	25.10	6.7735 0
30.0	1.0098	2.6412	3.6510	24.92	8.1153 0
35.0	1.0116	2.6415	3.6531	24.77	9.4510 0
40.0	1.0133	2.6408	3.6541	24.63	1.0783 1
45.0	1.0149	2.6402	3.6551	24.52	1.2112 1
50.0	1.0166	2.6396	3.6562	24.41	1.3435 1
60.0	1.0200	2.6381	3.6581	24.22	1.6068 1
70.0	1.0233	2.6370	3.6603	24.07	1.8685 1
80.0	1.0266	2.6359	3.6625	23.94	2.1287 1
90.0	1.0298	2.6349	3.6647	23.82	2.3873 1
100.0	1.0333	2.6336	3.6669	23.71	2.6436 1
120.0	1.0398				3.1525 1
140.0	1.0464				3.6547 1
160.0	1.0532				4.1498 1
180.0	1.0599				4.6390 1
200.0	1.0667				5.1216 1
250.0	1.0835				6.3027 1
300.0	1.1004				7.4471 1

$$T = 1100^{\circ}\text{K}$$

P atm	Z	E/RT	H/RT	S/R	$\rho/\rho_0$
1.0	1.0003	2.6792	3.6795	28.71	2.4826-1
2.0	1.0006	2.6791	3.6797	28.02	4.9636-1
3.0	1.0009	2.6790	3.6799	27.62	7.4432-1
5.0	1.0015	2.6788	3.6803	27.11	1.2398 0
7.0	1.0022	2.6785	3.6807	26.77	1.7345 0
10.0	1.0031	2.6781	3.6812	26.41	2.4756 0
15.0	1.0048	2.6773	3.6821	25.99	3.7072 0
20.0	1.0064	2.6770	3.6834	25.70	4.9350 0
25.0	1.0078	2.6767	3.6845	25.48	6.1602 0
30.0	1.0094	2.6762	3.6856	25.30	7.3805 0
35.0	1.0109	2.6758	3.6867	25.14	8.5978 0
40.0	1.0125	2.6754	3.6879	25.02	9.8106 0
45.0	1.0140	2.6747	3.6887	24.89	1.1021 1
50.0	1.0156	2.6741	3.6897	24.78	1.2226 1
60.0	1.0186	2.6733	3.6919	24.60	1.4628 1
70.0	1.0218	2.6726	3.6944	24.45	1.7012 1
80.0	1.0250	2.6715	3.6965	24.32	1.9382 1
90.0	1.0281	2.6706	3.6987	24.20	2.1739 1
100.0	1.0312	2.6699	3.7011	24.09	2.4082 1

$$T = 1200^{\circ}\text{K}$$

p atm	z	E/RT	H/RT	S/R	$\rho/\rho_0$
1.0	1.0003	2.7124	3.7127	29.07	2.2756-1
2.0	1.0006	2.7123	3.7129	28.37	4.5499-1
3.0	1.0009	2.7122	3.7131	27.97	6.8228-1
5.0	1.0015	2.7121	3.7136	27.46	1.1364 0
7.0	1.0020	2.7121	3.7141	27.12	1.5902 0
10.0	1.0029	2.7119	3.7148	26.76	2.2697 0
15.0	1.0044	2.7114	3.7158	26.34	3.3995 0
20.0	1.0058	2.7111	3.7169	26.06	4.5263 0
25.0	1.0073	2.7106	3.7179	25.83	5.6495 0
30.0	1.0087	2.7103	3.7190	25.65	6.7700 0
35.0	1.0102	2.7098	3.7200	25.49	7.8866 0
40.0	1.0117	2.7094	3.7211	25.37	8.9999 0
45.0	1.0131	2.7091	3.7222	25.24	1.0111 1
50.0	1.0146	2.7087	3.7233	25.14	1.1218 1
60.0	1.0175	2.7079	3.7254	24.96	1.3423 1
70.0	1.0205	2.7073	3.7278	24.81	1.5614 1
80.0	1.0234	2.7065	3.7299	24.67	1.7794 1
90.0	1.0264	2.7057	3.7321	24.56	1.9960 1
100.0	1.0292	2.7051	3.7343	24.45	2.2117 1

$$T = 1300^{\circ}\text{K}$$

$\frac{p}{\text{atm}}$	$z$	$E/RT$	$H/RT$	$S/R$	$\rho/\rho_0$
1.0	1.0003	2.7454	3.7457	29.40	2.1006-1
2.0	1.0006	2.7453	3.7459	28.70	4.1999-1
3.0	1.0008	2.7453	3.7461	28.29	6.2986-1
5.0	1.0014	2.7451	3.7565	27.78	1.0491 0
7.0	1.0019	2.7450	3.7469	27.45	1.4681 0
10.0	1.0028	2.7445	3.7473	27.09	2.0953 0
15.0	1.0042	2.7442	3.7484	26.68	3.1386 0
20.0	1.0055	2.7441	3.7496	26.39	4.1794 0
25.0	1.0069	2.7438	3.7507	26.17	5.2170 0
30.0	1.0083	2.7435	3.7518	25.98	6.2517 0
35.0	1.0096	2.7433	3.7529	25.83	7.2843 0
40.0	1.0110	2.7431	3.7541	25.70	8.3134 0
45.0	1.0123	2.7428	3.7551	25.58	9.3405 0
50.0	1.0138	2.7424	3.7562	25.48	1.0363 1
60.0	1.0165	2.7418	3.7583	25.29	1.2403 1
70.0	1.0192	2.7413	3.7605	24.14	1.4431 1
80.0	1.0220	2.7405	3.7625	25.00	1.6448 1
90.0	1.0247	2.7412	3.7659	24.88	1.8455 1
100.0	1.0275	2.7396	3.7671	24.78	2.0450 1

$$T = 1400^{\circ}\text{K}$$

p atm	Z	E/RT	H/RT	s/R	$\rho/\rho_0$
1.0	1.0003	2.7777	3.7780	29.71	1.9505-1
2.0	1.0005	2.7777	3.7782	29.01	3.9002-1
3.0	1.0008	2.7776	3.7784	28.61	5.8486-1
5.0	1.0013	2.7776	3.7789	28.09	9.7428-1
7.0	1.0018	2.7776	3.7794	27.76	1.3633 0
10.0	1.0026	2.7773	3.7799	27.40	1.9460 0
15.0	1.0039	2.7764	3.7803	26.98	2.9153 0
20.0	1.0051	2.7763	3.7814	26.69	3.8824 0
25.0	1.0064	2.7761	3.7825	26.48	4.8467 0
30.0	1.0077	2.7759	3.7836	26.29	5.8086 0
35.0	1.0090	2.7757	3.7847	26.14	6.7679 0
40.0	1.0104	2.7762	3.7866	26.01	7.7241 0
45.0	1.0117	2.7759	3.7876	25.89	8.6784 0
50.0	1.0129	2.7758	3.7887	25.78	9.6313 0
60.0	1.0155	2.7755	3.7914	25.60	1.1528 1
70.0	1.0181	2.7749	3.7930	25.45	1.3415 1
80.0	1.0207	2.7743	3.7950	25.32	1.5292 1
90.0	1.0233	2.7738	3.7971	25.19	1.7160 1
100.0	1.0259	2.7732	3.7991	25.09	1.9018 1

$$T = 1500^{\circ}\text{K}$$

p atm	z	E/RT	H/RT	s/R	$\rho/\rho_0$
1.0	1.0002	2.8099	3.8101	30.01	1.8207-1
2.0	1.0005	2.8098	3.8103	29.31	3.6404-1
3.0	1.0008	2.8097	3.8105	28.90	5.4589-1
5.0	1.0013	2.8096	3.8109	28.39	9.0937-1
7.0	1.0017	2.8096	3.8113	28.06	1.2726 0
10.0	1.0025	2.8094	3.8119	27.70	1.8165 0
15.0	1.0038	2.8092	3.8130	27.29	2.7213 0
20.0	1.0049	2.8091	3.8140	26.99	3.6244 0
25.0	1.0061	2.8090	3.8151	26.77	4.5251 0
30.0	1.0073	2.8089	3.8162	26.58	5.4237 0
35.0	1.0085	2.8088	3.8173	26.43	6.3201 0
40.0	1.0098	2.8086	3.8184	26.31	7.2137 0
45.0	1.0109	2.8086	3.8195	26.18	8.1066 0
50.0	1.0121	2.8084	3.8205	26.07	8.9966 0
60.0	1.0146	2.8081	3.8227	25.89	1.0769 1
70.0	1.0171	2.8077	3.8248	25.74	1.2533 1
80.0	1.0194	2.8074	3.8268	25.61	1.4292 1
90.0	1.0219	2.8069	3.8288	25.48	1.6039 1
100.0	1.0244	2.8064	3.8308	25.38	1.7777 1



**TABLE 3**

**TABLES OF THERMODYNAMIC PROPERTIES OF AIR  
FROM 90 TO 1500°K WITH TEMPERATURE AND  
DENSITY AS INDEPENDENT VARIABLES**



$$T = 90^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	p
-7.0	1.0000	2.4794	3.4794	36.942	3.2949-08
-6.8	1.0000	2.4794	3.4794	36.481	5.2220-08
-6.6	1.0000	2.4794	3.4794	36.021	8.2764-08
-6.4	1.0000	2.4794	3.4794	35.560	1.3117-07
-6.2	1.0000	2.4794	3.4794	35.100	2.0789-07
-6.0	1.0000	2.4794	3.4794	34.639	3.2949-07
-5.8	1.0000	2.4794	3.4794	34.179	5.2220-07
-5.6	1.0000	2.4794	3.4794	33.718	8.2764-07
-5.4	1.0000	2.4794	3.4794	33.257	1.3117-06
-5.2	1.0000	2.4794	3.4794	32.797	2.0789-06
-5.0	1.0000	2.4794	3.4794	32.336	3.2949-06
-4.8	1.0000	2.4794	3.4794	31.876	5.2220-06
-4.6	1.0000	2.4794	3.4794	31.415	8.2764-06
-4.4	1.0000	2.4794	3.4794	30.955	1.3117-05
-4.2	1.0000	2.4794	3.4794	30.494	2.0789-05
-4.0	1.0000	2.4794	3.4794	30.034	3.2949-05
-3.8	1.0000	2.4794	3.4794	29.573	5.2220-05
-3.6	1.0000	2.4794	3.4794	29.113	8.2764-05
-3.4	1.0000	2.4794	3.4794	28.652	1.3117-04
-3.2	1.0000	2.4794	3.4794	28.192	2.0789-04
-3.0	1.0000	2.4794	3.4794	27.731	3.2949-04
-2.8	1.0000	2.4794	3.4794	27.271	5.2220-04
-2.6	1.0000	2.4794	3.4794	26.810	8.2764-04
-2.4	1.0000	2.4794	3.4794	26.350	1.3117-03
-2.2	1.0000	2.4794	3.4794	25.889	2.0789-03
-2.0	1.0000	2.4794	3.4794	25.429	3.2949-03
-1.8	1.0000	2.4794	3.4794	24.968	5.2220-03
-1.6	1.0000	2.4794	3.4794	24.508	8.2764-03
-1.4	0.99949	2.4792	3.4787	24.047	1.3122-02
-1.2	0.99904	2.4784	3.4775	23.586	2.0796-02
-1.0	0.99859	2.4777	3.4763	23.125	3.2960-02
-0.8	0.99814	2.4769	3.4751	22.664	5.2238-02
-0.6	0.99769	2.4762	3.4739	22.203	8.2791-02
-0.4	0.99603	2.4734	3.4694	21.741	1.3096-01
-0.2	0.99353	2.4690	3.4625	21.279	2.0689-01
0.0	0.99103	2.4647	3.4557	20.817	3.2684-01
0.2	0.98642	2.4568	3.4432	20.350	5.1543-01
0.4	0.97785	2.4473	3.3951	19.865	8.0959-01
0.6	0.96130	2.3614	3.3226	19.381	1.2608 00
0.8	0.94186	2.3444	3.2863	18.920	1.9578 00

$$T = 100^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	P
-7.0	1.0000	2.4806	3.4806	37.206	3.6610-08
-6.8	1.0000	2.4806	3.4806	36.746	5.8022-08
-6.6	1.0000	2.4806	3.4806	36.285	9.1960-08
-6.4	1.0000	2.4806	3.4806	35.825	1.4574-07
-6.2	1.0000	2.4806	3.4806	35.364	2.3099-07
-6.0	1.0000	2.4806	3.4806	34.904	3.6610-07
-5.8	1.0000	2.4806	3.4806	34.443	5.8022-07
-5.6	1.0000	2.4806	3.4806	33.983	9.1960-07
-5.4	1.0000	2.4806	3.4806	33.522	1.4574-06
-5.2	1.0000	2.4806	3.4806	33.062	2.3099-06
-5.0	1.0000	2.4806	3.4806	32.601	3.6610-06
-4.8	1.0000	2.4806	3.4806	32.141	5.8022-06
-4.6	1.0000	2.4806	3.4806	31.680	9.1960-06
-4.4	1.0000	2.4806	3.4806	31.220	1.4574-05
-4.2	1.0000	2.4806	3.4806	30.759	2.3099-05
-4.0	1.0000	2.4806	3.4806	30.299	3.6610-05
-3.8	1.0000	2.4806	3.4806	29.838	5.8022-05
-3.6	1.0000	2.4806	3.4806	29.377	9.1960-05
-3.4	1.0000	2.4806	3.4806	28.917	1.4574-04
-3.2	1.0000	2.4806	3.4806	28.456	2.3099-04
-3.0	1.0000	2.4806	3.4806	27.996	3.6610-04
-2.8	1.0000	2.4806	3.4806	27.535	5.8022-04
-2.6	1.0000	2.4806	3.4806	27.075	9.1960-04
-2.4	1.0000	2.4806	3.4806	26.614	1.4574-03
-2.2	1.0000	2.4806	3.4806	26.154	2.3099-03
-2.0	1.0000	2.4806	3.4806	25.693	3.6610-03
-1.8	1.0000	2.4806	3.4806	25.233	5.8022-03
-1.6	0.99990	2.4806	3.4806	24.772	9.1960-03
-1.4	0.99954	2.4803	3.4798	24.311	1.4576-02
-1.2	0.99920	2.4797	3.4789	23.850	2.3094-02
-1.0	0.99886	2.4792	3.4780	23.389	3.6589-02
-0.8	0.99853	2.4786	3.4771	22.928	5.7970-02
-0.6	0.99819	2.4780	3.4762	22.467	9.1845-02
-0.4	0.99661	2.4751	3.4717	22.006	1.4533-01
-0.2	0.99474	2.4717	3.4665	21.544	2.2991-01
0.0	0.99287	2.4683	3.4612	21.082	3.6371-01
0.2	0.98876	2.4615	3.4502	20.618	5.7406-01
0.4	0.98139	2.4116	3.3930	20.124	9.0264-01
0.6	0.96840	2.3810	3.3494	19.649	1.4113 00
0.8	0.95209	2.3611	3.3132	19.184	2.1992 00
1.0	0.92364	2.3148	3.2384	18.705	3.3806 00

$$T = 110^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	P
-7.0	1.0000	2.4817	3.4817	37.442	4.0271-08
-6.8	1.0000	2.4817	3.4817	36.981	6.3825-08
-6.6	1.0000	2.4817	3.4817	36.521	1.0115-07
-6.4	1.0000	2.4817	3.4817	36.060	1.6032-07
-6.2	1.0000	2.4817	3.4817	35.600	2.5409-07
-6.0	1.0000	2.4817	3.4817	35.139	4.0271-07
-5.8	1.0000	2.4817	3.4817	34.679	6.3825-07
-5.6	1.0000	2.4817	3.4817	34.218	1.0115-06
-5.4	1.0000	2.4817	3.4817	33.758	1.6032-06
-5.2	1.0000	2.4817	3.4817	33.297	2.5409-06
-5.0	1.0000	2.4817	3.4817	32.837	4.0271-06
-4.8	1.0000	2.4817	3.4817	32.376	6.3825-06
-4.6	1.0000	2.4817	3.4817	31.916	1.0115-05
-4.4	1.0000	2.4817	3.4817	31.455	1.6032-05
-4.2	1.0000	2.4817	3.4817	30.995	2.5409-05
-4.0	1.0000	2.4817	3.4817	30.534	4.0271-05
-3.8	1.0000	2.4817	3.4817	30.074	6.3825-05
-3.6	1.0000	2.4817	3.4817	29.613	1.0115-04
-3.4	1.0000	2.4817	3.4817	29.153	1.6032-04
-3.2	1.0000	2.4817	3.4817	28.692	2.5409-04
-3.0	1.0000	2.4817	3.4817	28.232	4.0271-04
-2.8	1.0000	2.4817	3.4817	27.771	6.3825-04
-2.6	1.0000	2.4817	3.4817	27.311	1.0115-03
-2.4	1.0000	2.4817	3.4817	26.850	1.6032-03
-2.2	1.0000	2.4817	3.4817	26.390	2.5409-03
-2.0	1.0000	2.4817	3.4817	25.929	4.0271-03
-1.8	1.0000	2.4817	3.4817	25.469	6.3825-03
-1.6	0.99985	2.4818	3.4817	25.008	1.0120-02
-1.4	0.99959	2.4813	3.4809	24.547	1.6035-02
-1.2	0.99933	2.4808	3.4802	24.087	2.5407-02
-1.0	0.99907	2.4803	3.4795	23.626	4.0257-02
-0.8	0.99881	2.4799	3.4787	23.165	6.3787-02
-0.6	0.99853	2.4793	3.4779	22.704	1.0107-01
-0.4	0.99709	2.4769	3.4740	22.243	1.5995-01
-0.2	0.99566	2.4744	3.4700	21.781	2.5314-01
0.0	0.99422	2.4719	3.4661	21.319	4.0062-01
0.2	0.99064	2.4654	3.4561	20.856	6.3266-01
0.4	0.98468	2.4117	3.3963	20.357	9.9606-01
0.6	0.97418	2.3977	3.3718	19.893	1.5618 00
0.8	0.96024	2.3763	3.3366	19.425	2.4398 00
1.0	0.93633	2.3348	3.2712	18.946	3.7700 00
1.2	0.90197	2.2695	3.1715	18.455	5.7556 00
1.4	0.84603	2.1513	2.9974	17.934	8.5525 00

$$T = 120^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	P
-7.0	1.0000	2.4825	3.4825	37.659	4.3932-08
-6.8	1.0000	2.4825	3.4825	37.198	6.9627-08
-6.6	1.0000	2.4825	3.4825	36.738	1.1035-07
-6.4	1.0000	2.4825	3.4825	36.277	1.7489-07
-6.2	1.0000	2.4825	3.4825	35.817	2.7719-07
-6.0	1.0000	2.4825	3.4825	35.356	4.3932-07
-5.8	1.0000	2.4825	3.4825	34.896	6.9627-07
-5.6	1.0000	2.4825	3.4825	34.435	1.1035-06
-5.4	1.0000	2.4825	3.4825	33.975	1.7489-06
-5.2	1.0000	2.4825	3.4825	33.514	2.7719-06
-5.0	1.0000	2.4825	3.4825	33.054	4.3932-06
-4.8	1.0000	2.4825	3.4825	32.593	6.9627-06
-4.6	1.0000	2.4825	3.4825	32.133	1.1035-05
-4.4	1.0000	2.4825	3.4825	31.672	1.7489-05
-4.2	1.0000	2.4825	3.4825	31.212	2.7719-05
-4.0	1.0000	2.4825	3.4825	30.751	4.3932-05
-3.8	1.0000	2.4825	3.4825	30.291	6.9627-05
-3.6	1.0000	2.4825	3.4825	29.830	1.1035-04
-3.4	1.0000	2.4825	3.4825	29.370	1.7489-04
-3.2	1.0000	2.4825	3.4825	28.909	2.7719-04
-3.0	1.0000	2.4825	3.4825	28.449	4.3932-04
-2.8	1.0000	2.4825	3.4825	27.988	6.9627-04
-2.6	1.0000	2.4825	3.4825	27.528	1.1035-03
-2.4	1.0000	2.4825	3.4825	27.067	1.7489-03
-2.2	1.0000	2.4825	3.4825	26.607	2.7719-03
-2.0	1.0000	2.4825	3.4825	26.146	4.3932-03
-1.8	0.99995	2.4825	3.4825	25.686	6.9627-03
-1.6	0.99985	2.4825	3.4824	25.225	1.1040-02
-1.4	0.99964	2.4821	3.4818	24.764	1.7493-02
-1.2	0.99944	2.4818	3.4812	24.304	2.7720-02
-1.0	0.99923	2.4814	3.4806	23.843	4.3924-02
-0.8	0.99903	2.4810	3.4801	23.383	6.9600-02
-0.6	0.99863	2.4803	3.4789	22.922	1.1027-01
-0.4	0.99751	2.4782	3.4757	22.460	1.7456-01
-0.2	0.99638	2.4762	3.4726	21.999	2.7635-01
0.0	0.99493	2.4734	3.4684	21.537	4.3735-01
0.2	0.99214	2.4680	3.4602	21.074	6.9120-01
0.4	0.98673	2.4231	3.4098	20.581	1.0889 00
0.6	0.97849	2.4117	3.3902	20.116	1.7114 00
0.8	0.96649	2.3922	3.3588	19.648	2.6791 00
1.0	0.94629	2.3569	3.3033	19.172	4.1570 00
1.2	0.91712	2.3003	3.2175	18.685	6.3853 00
1.4	0.87058	2.2026	3.0732	18.173	9.6060 00
1.6	0.79530	2.0419	2.8372	17.615	1.3898 01
1.8	0.67865	1.5001	2.1788	16.854	1.6209 01
2.0	0.55182	0.8593	1.4111	16.040	1.7877 01
2.2	0.42498	0.2185	0.6435	15.226	1.9717 01
2.4	0.29815	-0.4223	-0.1242	14.412	2.1746 01
2.6	0.17132	-1.0631	-0.8918	13.598	2.3984 01

$$T = 130^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	p
-7.0	1.0000	2.4832	3.4832	37.858	4.7593-08
-6.8	1.0000	2.4832	3.4832	37.397	7.5429-08
-6.6	1.0000	2.4832	3.4832	36.937	1.1954-07
-6.4	1.0000	2.4832	3.4832	36.476	1.8947-07
-6.2	1.0000	2.4832	3.4832	36.016	3.0029-07
-6.0	1.0000	2.4832	3.4832	35.555	4.7593-07
-5.8	1.0000	2.4832	3.4832	35.095	7.5429-07
-5.6	1.0000	2.4832	3.4832	34.634	1.1954-06
-5.4	1.0000	2.4832	3.4832	34.174	1.8947-06
-5.2	1.0000	2.4832	3.4832	33.713	3.0029-06
-5.0	1.0000	2.4832	3.4832	33.253	4.7593-06
-4.8	1.0000	2.4832	3.4832	32.792	7.5429-06
-4.6	1.0000	2.4832	3.4832	32.332	1.1954-05
-4.4	1.0000	2.4832	3.4832	31.871	1.8947-05
-4.2	1.0000	2.4832	3.4832	31.411	3.0029-05
-4.0	1.0000	2.4832	3.4832	30.950	4.7593-05
-3.8	1.0000	2.4832	3.4832	30.490	7.5429-05
-3.6	1.0000	2.4832	3.4832	30.029	1.1954-04
-3.4	1.0000	2.4832	3.4832	29.569	1.8947-04
-3.2	1.0000	2.4832	3.4832	29.108	3.0029-04
-3.0	1.0000	2.4832	3.4832	28.648	4.7593-04
-2.8	1.0000	2.4832	3.4832	28.187	7.5429-04
-2.6	1.0000	2.4832	3.4832	27.727	1.1954-03
-2.4	1.0000	2.4832	3.4832	27.266	1.8947-03
-2.2	1.0000	2.4832	3.4832	26.806	3.0029-03
-2.0	1.0000	2.4832	3.4832	26.345	4.7593-03
-1.8	0.99993	2.4832	3.4832	25.884	7.5429-03
-1.6	0.99985	2.4832	3.4830	25.424	1.1960-02
-1.4	0.99969	2.4829	3.4825	24.963	1.8952-02
-1.2	0.99952	2.4825	3.4821	24.503	3.0033-02
-1.0	0.99936	2.4822	3.4816	24.042	4.7591-02
-0.8	0.99920	2.4819	3.4811	23.581	7.5414-02
-0.6	0.99875	2.4811	3.4798	23.121	1.1947-01
-0.4	0.99786	2.4795	3.4774	22.659	1.8918-01
-0.2	0.99696	2.4779	3.4749	22.198	2.9956-01
0.0	0.99557	2.4754	3.4709	21.736	4.7410-01
0.2	0.99316	2.4652	3.4584	21.269	7.4949-01
0.4	0.98857	2.4341	3.4227	20.788	1.1818 00
0.6	0.98210	2.4248	3.4069	20.322	1.8608 00
0.8	0.97198	2.4073	3.3793	19.855	2.9188 00
1.0	0.95486	2.3760	3.3309	19.380	4.5444 00
1.2	0.93013	2.3264	3.2566	18.895	7.0161 00
1.4	0.88892	2.2358	3.1247	18.385	1.0624 01
1.6	0.82803	2.0960	2.9241	17.849	1.5682 01
1.8	0.73581	1.8674	2.6067	17.265	2.2063 01
2.0	0.60553	1.5655	2.1730	16.650	2.8737 01
2.2	0.46275	0.9780	1.4407	15.875	3.1443 01
2.4	0.32001	0.3285	0.6485	15.064	3.3303 01
2.6	0.20913	-0.4773	-0.2682	14.106	3.9620 01

$$T = 140^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	P
-7.0	1.0000	2.4837	3.4837	38.043	5.1254-08
-6.8	1.0000	2.4837	3.4837	37.582	8.1232-08
-6.6	1.0000	2.4837	3.4837	37.122	1.2874-07
-6.4	1.0000	2.4837	3.4837	36.661	2.0404-07
-6.2	1.0000	2.4837	3.4837	36.201	3.2339-07
-6.0	1.0000	2.4837	3.4837	35.740	5.1254-07
-5.8	1.0000	2.4837	3.4837	35.280	8.1232-07
-5.6	1.0000	2.4837	3.4837	34.819	1.2874-06
-5.4	1.0000	2.4837	3.4837	34.359	2.0404-06
-5.2	1.0000	2.4837	3.4837	33.898	3.2339-06
-5.0	1.0000	2.4837	3.4837	33.438	5.1254-06
-4.8	1.0000	2.4837	3.4837	32.977	8.1232-06
-4.6	1.0000	2.4837	3.4837	32.517	1.2874-05
-4.4	1.0000	2.4837	3.4837	32.056	2.0404-05
-4.2	1.0000	2.4837	3.4837	31.596	3.2339-05
-4.0	1.0000	2.4837	3.4837	31.135	5.1254-05
-3.8	1.0000	2.4837	3.4837	30.675	8.1232-05
-3.6	1.0000	2.4837	3.4837	30.214	1.2874-04
-3.4	1.0000	2.4837	3.4837	29.753	2.0404-04
-3.2	1.0000	2.4837	3.4837	29.293	3.2339-04
-3.0	1.0000	2.4837	3.4837	28.832	5.1254-04
-2.8	1.0000	2.4837	3.4837	28.372	8.1232-04
-2.6	1.0000	2.4837	3.4837	27.911	1.2874-03
-2.4	1.0000	2.4837	3.4837	27.451	2.0404-03
-2.2	1.0000	2.4837	3.4837	26.990	3.2339-03
-2.0	1.0000	2.4837	3.4837	26.530	5.1254-03
-1.8	0.99999	2.4837	3.4837	26.069	8.1232-03
-1.6	0.99986	2.4836	3.4835	25.610	1.2866-02
-1.4	0.99973	2.4834	3.4831	25.149	2.0394-02
-1.2	0.99960	2.4831	3.4827	24.688	3.2326-02
-1.0	0.99947	2.4828	3.4823	24.227	5.1239-02
-0.8	0.99934	2.4825	3.4819	23.766	8.1220-02
-0.6	0.99848	2.4817	3.4806	23.305	1.2868-01
-0.4	0.99816	2.4803	3.4785	22.844	2.0379-01
-0.2	0.99743	2.4790	3.4765	22.383	3.2275-01
0.0	0.99613	2.4767	3.4728	21.921	5.1087-01
0.2	0.99411	2.4640	3.4581	21.452	8.0783-01
0.4	0.99018	2.4439	3.4341	20.978	1.2748 00
0.6	0.98499	2.4353	3.4203	20.513	2.0098 00
0.8	0.97568	2.4181	3.3937	20.044	3.1552 00
1.0	0.96194	2.3912	3.3532	19.570	4.9302 00
1.2	0.93901	2.3443	3.2833	19.086	7.6272 00
1.4	0.90381	2.2671	3.1675	18.581	1.1633 01
1.6	0.85206	2.1480	2.9957	18.054	1.7379 01
1.8	0.77596	1.9603	2.7363	17.491	2.5092 01
2.0	0.66610	1.6835	2.3496	16.882	3.4118 01
2.2	0.51957	1.2682	1.7878	16.200	4.1789 01
2.4	0.37437	0.7286	1.1030	15.459	4.7867 01
2.6	0.36700	-0.1623	0.2047	14.397	7.4837 01



$$T = 150^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	P
-7.0	1.0000	2.4843	3.4843	38.215	5.4915-08
-6.8	1.0000	2.4843	3.4843	37.754	8.7034-08
-6.6	1.0000	2.4843	3.4843	37.294	1.3794-07
-6.4	1.0000	2.4843	3.4843	36.833	2.1862-07
-6.2	1.0000	2.4843	3.4843	36.373	3.4649-07
-6.0	1.0000	2.4843	3.4843	35.912	5.4915-07
-5.8	1.0000	2.4843	3.4843	35.452	8.7034-07
-5.6	1.0000	2.4843	3.4843	34.991	1.3794-06
-5.4	1.0000	2.4843	3.4843	34.531	2.1862-06
-5.2	1.0000	2.4843	3.4843	34.070	3.4649-06
-5.0	1.0000	2.4843	3.4843	33.610	5.4915-06
-4.8	1.0000	2.4843	3.4843	33.149	8.7034-06
-4.6	1.0000	2.4843	3.4843	32.689	1.3794-05
-4.4	1.0000	2.4843	3.4843	32.228	2.1862-05
-4.2	1.0000	2.4843	3.4843	31.768	3.4649-05
-4.0	1.0000	2.4843	3.4843	31.307	5.4915-05
-3.8	1.0000	2.4843	3.4843	30.847	8.7034-05
-3.6	1.0000	2.4843	3.4843	30.386	1.3794-04
-3.4	1.0000	2.4843	3.4843	29.926	2.1862-04
-3.2	1.0000	2.4843	3.4843	29.465	3.4649-04
-3.0	1.0000	2.4843	3.4843	29.004	5.4915-04
-2.8	1.0000	2.4843	3.4843	28.544	8.7034-04
-2.6	1.0000	2.4843	3.4843	28.083	1.3794-03
-2.4	1.0000	2.4843	3.4843	27.623	2.1862-03
-2.2	1.0000	2.4843	3.4843	27.162	3.4649-03
-2.0	1.0000	2.4843	3.4843	26.702	5.4915-03
-1.8	0.99998	2.4843	3.4843	26.241	8.7034-03
-1.6	0.99987	2.4842	3.4841	25.781	1.3801-02
-1.4	0.99976	2.4840	3.4838	25.320	2.1870-02
-1.2	0.99965	2.4838	3.4834	24.859	3.4658-02
-1.0	0.99955	2.4836	3.4831	24.399	5.4923-02
-0.8	0.99944	2.4834	3.4828	23.938	8.7037-02
-0.6	0.99900	2.4825	3.4815	23.477	1.3788-01
-0.4	0.99841	2.4813	3.4797	23.016	2.1840-01
-0.2	0.99782	2.4802	3.4780	22.555	3.4594-01
0.0	0.99663	2.4778	3.4744	22.093	5.4761-01
0.2	0.99500	2.4644	3.4594	21.623	8.6619-01
0.4	0.99159	2.4512	3.4428	21.154	1.3678 00
0.6	0.98696	2.4427	3.4297	20.689	2.1577 00
0.8	0.97883	2.4268	3.4056	20.220	3.3915 00
1.0	0.96708	2.4026	3.3697	19.748	5.3106 00
1.2	0.94741	2.3596	3.3070	19.264	8.2452 00
1.4	0.91697	2.2912	3.2082	18.766	1.2647 01
1.6	0.87310	2.1889	3.0620	18.249	1.9086 01
1.8	0.80617	2.0275	2.8338	17.698	2.7925 01
2.0	0.71826	1.7670	2.4853	17.084	3.9439 01
2.2	0.58056	1.3974	1.9780	16.417	5.0482 01
2.4	0.46688	0.8917	1.3605	15.671	6.4366 01
2.6	0.50621	0.1448	0.6511	14.704	1.1053 02

$$T = 160^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	P
-7.0	1.0000	2.4849	3.4849	38.375	5.8576-08
-6.8	1.0000	2.4849	3.4849	37.915	9.2836-08
-6.6	1.0000	2.4849	3.4849	37.454	1.4713-07
-6.4	1.0000	2.4849	3.4849	36.994	2.3319-07
-6.2	1.0000	2.4849	3.4849	36.533	3.6958-07
-6.0	1.0000	2.4849	3.4849	36.073	5.8576-07
-5.8	1.0000	2.4849	3.4849	35.612	9.2836-07
-5.6	1.0000	2.4849	3.4849	35.152	1.4713-06
-5.4	1.0000	2.4849	3.4849	34.691	2.3319-06
-5.2	1.0000	2.4849	3.4849	34.231	3.6958-06
-5.0	1.0000	2.4849	3.4849	33.770	5.8576-06
-4.8	1.0000	2.4849	3.4849	33.310	9.2836-06
-4.6	1.0000	2.4849	3.4849	32.849	1.4713-05
-4.4	1.0000	2.4849	3.4849	32.389	2.3319-05
-4.2	1.0000	2.4849	3.4849	31.928	3.6958-05
-4.0	1.0000	2.4849	3.4849	31.468	5.8576-05
-3.8	1.0000	2.4849	3.4849	31.007	9.2836-05
-3.6	1.0000	2.4849	3.4849	30.546	1.4713-04
-3.4	1.0000	2.4849	3.4849	30.086	2.3319-04
-3.2	1.0000	2.4849	3.4849	29.625	3.6958-04
-3.0	1.0000	2.4849	3.4849	29.165	5.8576-04
-2.8	1.0000	2.4849	3.4849	28.704	9.2836-04
-2.6	1.0000	2.4849	3.4849	28.244	1.4713-03
-2.4	1.0000	2.4849	3.4849	27.783	2.3319-03
-2.2	1.0000	2.4849	3.4849	27.323	3.6958-03
-2.0	1.0000	2.4849	3.4849	26.862	5.8576-03
-1.8	0.99999	2.4849	3.4849	26.402	9.2836-03
-1.6	0.99988	2.4848	3.4847	25.941	1.4720-02
-1.4	0.99979	2.4846	3.4844	25.481	2.3328-02
-1.2	0.99970	2.4844	3.4842	25.020	3.6970-02
-1.0	0.99961	2.4843	3.4839	24.560	5.8588-02
-0.8	0.99952	2.4841	3.4836	24.099	9.2848-02
-0.6	0.99910	2.4832	3.4823	23.638	1.4709-01
-0.4	0.99862	2.4822	3.4809	23.177	2.3301-01
-0.2	0.99814	2.4812	3.4794	22.716	3.6912-01
0.0	0.99706	2.4790	3.4761	22.255	5.8439-01
0.2	0.99584	2.4661	3.4620	21.784	9.2462-01
0.4	0.99286	2.4572	3.4501	21.318	1.4608 00
0.6	0.98876	2.4491	3.4380	20.853	2.3057 00
0.8	0.98157	2.4363	3.4182	20.386	3.6277 00
1.0	0.97105	2.4157	3.3867	19.914	5.6879 00
1.2	0.95425	2.3756	3.3299	19.433	8.8586 00
1.4	0.92837	2.3159	3.2443	18.938	1.3659 01
1.6	0.89086	2.2253	3.1162	18.426	2.0753 01
1.8	0.83281	2.0838	2.9166	17.886	3.0777 01
2.0	0.75262	1.8570	2.6096	17.289	4.4080 01
2.2	0.65247	1.4971	2.1496	16.606	6.0560 01
2.4	0.56438	1.0398	1.6043	15.875	8.3029 01
2.6	0.63983	0.3409	0.9807	14.922	1.4910 02

$T = 170^{\circ}\text{K}$ 

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	P
-7.0	1.0000	2.4851	3.4851	38.527	6.2237-08
-6.8	1.0000	2.4851	3.4851	38.066	9.8638-08
-6.6	1.0000	2.4851	3.4851	37.606	1.5633-07
-6.4	1.0000	2.4851	3.4851	37.145	2.4776-07
-6.2	1.0000	2.4851	3.4851	36.685	3.9268-07
-6.0	1.0000	2.4851	3.4851	36.224	6.2237-07
-5.8	1.0000	2.4851	3.4851	35.764	9.8638-07
-5.6	1.0000	2.4851	3.4851	35.303	1.5633-06
-5.4	1.0000	2.4851	3.4851	34.843	2.4776-06
-5.2	1.0000	2.4851	3.4851	34.382	3.9268-06
-5.0	1.0000	2.4851	3.4851	33.921	6.2237-06
-4.8	1.0000	2.4851	3.4851	33.461	9.8638-06
-4.6	1.0000	2.4851	3.4851	33.000	1.5633-05
-4.4	1.0000	2.4851	3.4851	32.540	2.4776-05
-4.2	1.0000	2.4851	3.4851	32.079	3.9268-05
-4.0	1.0000	2.4851	3.4851	31.619	6.2237-05
-3.8	1.0000	2.4851	3.4851	31.158	9.8638-05
-3.6	1.0000	2.4851	3.4851	30.698	1.5633-04
-3.4	1.0000	2.4851	3.4851	30.237	2.4776-04
-3.2	1.0000	2.4851	3.4851	29.777	3.9268-04
-3.0	1.0000	2.4851	3.4851	29.316	6.2237-04
-2.8	1.0000	2.4851	3.4851	28.856	9.8638-04
-2.6	1.0000	2.4851	3.4851	28.395	1.5633-03
-2.4	1.0000	2.4851	3.4851	27.935	2.4776-03
-2.2	1.0000	2.4851	3.4851	27.474	3.9268-03
-2.0	1.0000	2.4851	3.4851	27.014	6.2237-03
-1.8	0.99996	2.4851	3.4851	26.553	9.8638-03
-1.6	0.99988	2.4850	3.4849	26.093	1.5640-02
-1.4	0.99981	2.4848	3.4847	25.632	2.4787-02
-1.2	0.99974	2.4847	3.4844	25.172	3.9281-02
-1.0	0.99967	2.4845	3.4842	24.711	6.2252-02
-0.8	0.99960	2.4844	3.4840	24.251	9.8655-02
-0.6	0.99921	2.4836	3.4828	23.790	1.5630-01
-0.4	0.99881	2.4827	3.4815	23.329	2.4762-01
-0.2	0.99841	2.4818	3.4803	22.867	3.9230-01
0.0	0.99744	2.4798	3.4773	22.406	6.2112-01
0.2	0.99656	2.4684	3.4650	21.938	9.8300-01
0.4	0.99383	2.4624	3.4563	21.473	1.5536 00
0.6	0.99018	2.4550	3.4452	21.008	2.4533 00
0.8	0.98399	2.4419	3.4259	20.540	3.8639 00
1.0	0.97477	2.4220	3.3968	20.070	6.0665 00
1.2	0.96053	2.3891	3.3497	19.590	9.4742 00
1.4	0.93822	2.3370	3.2752	19.098	1.4667 01
1.6	0.90383	2.2551	3.1589	18.592	2.2392 01
1.8	0.85458	2.1279	2.9825	18.057	3.3555 01
2.0	0.78582	1.9261	2.7120	17.473	4.8903 01
2.2	0.70216	1.6230	2.3252	16.827	6.9252 01
2.4	0.63388	1.1960	1.8293	16.101	9.9091 01
2.6	0.75321	0.5018	1.2550	15.100	1.8655 02

$$T = 180^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	p
-7.0	1.0000	2.4856	3.4856	38.669	6.5898-08
-6.8	1.0000	2.4856	3.4856	38.209	1.0444-07
-6.6	1.0000	2.4856	3.4856	37.748	1.6552-07
-6.4	1.0000	2.4856	3.4856	37.288	2.6234-07
-6.2	1.0000	2.4856	3.4856	36.827	4.1578-07
-6.0	1.0000	2.4856	3.4856	36.367	6.5898-07
-5.8	1.0000	2.4856	3.4856	35.906	1.0444-06
-5.6	1.0000	2.4856	3.4856	35.446	1.6552-06
-5.4	1.0000	2.4856	3.4856	34.985	2.6234-06
-5.2	1.0000	2.4856	3.4856	34.525	4.1578-06
-5.0	1.0000	2.4856	3.4856	34.064	6.5898-06
-4.8	1.0000	2.4856	3.4856	33.604	1.0444-05
-4.6	1.0000	2.4856	3.4856	33.143	1.6552-05
-4.4	1.0000	2.4856	3.4856	32.683	2.6234-05
-4.2	1.0000	2.4856	3.4856	32.222	4.1578-05
-4.0	1.0000	2.4856	3.4856	31.762	6.5898-05
-3.8	1.0000	2.4856	3.4856	31.301	1.0444-04
-3.6	1.0000	2.4856	3.4856	30.841	1.6552-04
-3.4	1.0000	2.4856	3.4856	30.380	2.6234-04
-3.2	1.0000	2.4856	3.4856	29.920	4.1578-04
-3.0	1.0000	2.4856	3.4856	29.459	6.5898-04
-2.8	1.0000	2.4856	3.4856	28.999	1.0444-03
-2.6	1.0000	2.4856	3.4856	28.538	1.6552-03
-2.4	1.0000	2.4856	3.4856	28.078	2.6234-03
-2.2	1.0000	2.4856	3.4856	27.617	4.1578-03
-2.0	0.99999	2.4856	3.4856	27.157	6.5898-03
-1.8	0.99995	2.4856	3.4856	26.696	1.0450-02
-1.6	0.99990	2.4855	3.4854	26.235	1.6561-02
-1.4	0.99984	2.4853	3.4852	25.775	2.6245-02
-1.2	0.99978	2.4852	3.4850	25.314	4.1594-02
-1.0	0.99972	2.4851	3.4849	24.853	6.5918-02
-0.8	0.99964	2.4849	3.4846	24.392	1.0447-01
-0.6	0.99930	2.4842	3.4835	23.932	1.6551-01
-0.4	0.99897	2.4834	3.4824	23.471	2.6223-01
-0.2	0.99859	2.4826	3.4812	23.010	4.1545-01
0.0	0.99777	2.4807	3.4786	22.548	6.5791-01
0.2	0.99696	2.4720	3.4690	22.082	1.0412-00
0.4	0.99462	2.4668	3.4614	21.618	1.6464 00
0.6	0.99148	2.4599	3.4513	21.153	2.6011 00
0.8	0.98621	2.4479	3.4341	20.686	4.1005 00
1.0	0.97811	2.4298	3.4079	20.215	6.4455 00
1.2	0.96582	2.4003	3.3661	19.737	1.0087 01
1.4	0.94599	2.3528	3.2988	19.248	1.5658 01
1.6	0.91640	2.2794	3.1959	18.745	2.4041 01
1.8	0.87356	2.1639	3.0375	18.215	3.6320 01
2.0	0.81463	1.9811	2.7959	17.640	5.3672 01
2.2	0.74618	1.6997	2.4459	17.002	7.7925 01
2.4	0.70073	1.2915	1.9923	16.268	1.1599 02
2.6	0.85717	0.6445	1.5017	15.278	2.2448 02

T = 190°K

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	P
-7.0	1.0000	2.4858	3.4858	38.804	6.9559=08
-6.8	1.0000	2.4858	3.4858	38.344	1.1024=07
-6.6	1.0000	2.4858	3.4858	37.883	1.7472=07
-6.4	1.0000	2.4858	3.4858	37.423	2.7691=07
-6.2	1.0000	2.4858	3.4858	36.962	4.3888=07
-6.0	1.0000	2.4858	3.4858	36.502	6.9559=07
-5.8	1.0000	2.4858	3.4858	36.041	1.1024=06
-5.6	1.0000	2.4858	3.4858	35.581	1.7472=06
-5.4	1.0000	2.4858	3.4858	35.120	2.7691=06
-5.2	1.0000	2.4858	3.4858	34.660	4.3888=06
-5.0	1.0000	2.4858	3.4858	34.199	6.9559=06
-4.8	1.0000	2.4858	3.4858	33.739	1.1024=05
-4.6	1.0000	2.4858	3.4858	33.278	1.7472=05
-4.4	1.0000	2.4858	3.4858	32.818	2.7691=05
-4.2	1.0000	2.4858	3.4858	32.357	4.3888=05
-4.0	1.0000	2.4858	3.4858	31.897	6.9559=05
-3.8	1.0000	2.4858	3.4858	31.436	1.1024=04
-3.6	1.0000	2.4858	3.4858	30.976	1.7472=04
-3.4	1.0000	2.4858	3.4858	30.515	2.7691=04
-3.2	1.0000	2.4858	3.4858	30.055	4.3888=04
-3.0	1.0000	2.4858	3.4858	29.594	6.9559=04
-2.8	1.0000	2.4858	3.4858	29.134	1.1024=03
-2.6	1.0000	2.4858	3.4858	28.673	1.7472=03
-2.4	1.0000	2.4858	3.4858	28.213	2.7691=03
-2.2	1.0000	2.4858	3.4858	27.752	4.3888=03
-2.0	1.0000	2.4858	3.4858	27.291	6.9559=03
-1.8	0.99996	2.4858	3.4858	26.831	1.1031=02
-1.6	0.99991	2.4857	3.4856	26.370	1.7481=02
-1.4	0.99986	2.4856	3.4854	25.909	2.7705=02
-1.2	0.99981	2.4855	3.4853	25.449	4.3906=02
-1.0	0.99976	2.4854	3.4851	24.988	6.9583=02
-0.8	0.99966	2.4852	3.4848	24.527	1.1027=01
-0.6	0.99938	2.4845	3.4839	24.066	1.7472=01
-0.4	0.99910	2.4839	3.4830	23.606	2.7683=01
-0.2	0.99874	2.4831	3.4818	23.144	4.3859=01
0.0	0.99806	2.4813	3.4794	22.683	6.9466=01
0.2	0.99732	2.4751	3.4724	22.218	1.0995 00
0.4	0.99542	2.4702	3.4657	21.754	1.7393 00
0.6	0.99266	2.4640	3.4567	21.291	2.7489 00
0.8	0.98795	2.4531	3.4411	20.824	4.3361 00
1.0	0.98106	2.4366	3.4177	20.354	6.8243 00
1.2	0.96985	2.4090	3.3788	19.876	1.0692 01
1.4	0.95268	2.3658	3.3185	19.389	1.6646 01
1.6	0.92732	2.2988	3.2262	18.887	2.5679 01
1.8	0.89031	2.1935	3.0838	18.361	3.9075 01
2.0	0.84028	2.0249	2.8632	17.792	5.8447 01
2.2	0.78427	1.7598	2.5441	17.156	8.6459 01
2.4	0.75609	1.3811	2.1372	16.428	1.3211 02
2.6	0.94086	0.7726	1.7135	15.443	2.6032 02

$$T = 200^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	p
-7.0	1.0000	2.4862	3.4862	38.932	7.3220-08
-6.8	1.0000	2.4862	3.4862	38.472	1.1604-07
-6.6	1.0000	2.4862	3.4862	38.011	1.8392-07
-6.4	1.0000	2.4862	3.4862	37.551	2.9149-07
-6.2	1.0000	2.4862	3.4862	37.090	4.6198-07
-6.0	1.0000	2.4862	3.4862	36.630	7.3220-07
-5.8	1.0000	2.4862	3.4862	36.169	1.1604-06
-5.6	1.0000	2.4862	3.4862	35.709	1.8392-06
-5.4	1.0000	2.4862	3.4862	35.248	2.9149-06
-5.2	1.0000	2.4862	3.4862	34.787	4.6198-06
-5.0	1.0000	2.4862	3.4862	34.327	7.3220-06
-4.8	1.0000	2.4862	3.4862	33.866	1.1604-05
-4.6	1.0000	2.4862	3.4862	33.406	1.8392-05
-4.4	1.0000	2.4862	3.4862	32.945	2.9149-05
-4.2	1.0000	2.4862	3.4862	32.485	4.6198-05
-4.0	1.0000	2.4862	3.4862	32.024	7.3220-05
-3.8	1.0000	2.4862	3.4862	31.564	1.1604-04
-3.6	1.0000	2.4862	3.4862	31.103	1.8392-04
-3.4	1.0000	2.4862	3.4862	30.643	2.9149-04
-3.2	1.0000	2.4862	3.4862	30.182	4.6198-04
-3.0	1.0000	2.4862	3.4862	29.722	7.3220-04
-2.8	1.0000	2.4862	3.4862	29.261	1.1604-03
-2.6	1.0000	2.4862	3.4862	28.801	1.8392-03
-2.4	1.0000	2.4862	3.4862	28.340	2.9149-03
-2.2	1.0000	2.4862	3.4862	27.880	4.6198-03
-2.0	1.0000	2.4862	3.4862	27.419	7.3220-03
-1.8	0.99997	2.4862	3.4862	26.958	1.1611-02
-1.6	0.99992	2.4861	3.4860	26.497	1.8401-02
-1.4	0.99988	2.4860	3.4859	26.036	2.9162-02
-1.2	0.99984	2.4859	3.4857	25.574	4.6217-02
-1.0	0.99980	2.4858	3.4856	25.113	7.3246-02
-0.8	0.99970	2.4855	3.4852	24.652	1.1608-01
-0.6	0.99946	2.4850	3.4844	24.192	1.8393-01
-0.4	0.99923	2.4844	3.4836	23.732	2.9144-01
-0.2	0.99889	2.4835	3.4824	23.272	4.6175-01
0.0	0.99835	2.4816	3.4800	22.811	7.3138-01
0.2	0.99767	2.4774	3.4751	22.348	1.1578 00
0.4	0.99611	2.4734	3.4695	21.885	1.8321 00
0.6	0.99368	2.4677	3.4614	21.421	2.8966 00
0.8	0.98966	2.4575	3.4473	20.954	4.5722 00
1.0	0.98354	2.4421	3.4256	20.484	7.2017 00
1.2	0.97352	2.4163	3.3899	20.008	1.1297 01
1.4	0.95874	2.3772	3.3353	19.522	1.7633 01
1.6	0.93676	2.3142	3.2510	19.021	2.7306 01
1.8	0.90510	2.2166	3.1217	18.497	4.1815 01
2.0	0.86281	2.0579	2.9207	17.929	6.3174 01
2.2	0.81782	1.8103	2.6231	17.300	9.4906 01
2.4	0.80622	1.4556	2.2618	16.574	1.4828 02
2.6	1.0161	0.8852	1.9013	15.596	2.9612 02

$$T = 210^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	p
-7.0	1.0000	2.4867	3.4867	39.053	7.6881=08
-6.8	1.0000	2.4867	3.4867	38.593	1.2184=07
-6.6	1.0000	2.4867	3.4867	38.132	1.9311=07
-6.4	1.0000	2.4867	3.4867	37.672	3.0606=07
-6.2	1.0000	2.4867	3.4867	37.211	4.8508=07
-6.0	1.0000	2.4867	3.4867	36.751	7.6881=07
-5.8	1.0000	2.4867	3.4867	36.290	1.2184=06
-5.6	1.0000	2.4867	3.4867	35.830	1.9311=06
-5.4	1.0000	2.4867	3.4867	35.369	3.0606=06
-5.2	1.0000	2.4867	3.4867	34.909	4.8508=06
-5.0	1.0000	2.4867	3.4867	34.448	7.6881=06
-4.8	1.0000	2.4867	3.4867	33.988	1.2184=05
-4.6	1.0000	2.4867	3.4867	33.527	1.9311=05
-4.4	1.0000	2.4867	3.4867	33.067	3.0606=05
-4.2	1.0000	2.4867	3.4867	32.606	4.8508=05
-4.0	1.0000	2.4867	3.4867	32.146	7.6881=05
-3.8	1.0000	2.4867	3.4867	31.685	1.2184=04
-3.6	1.0000	2.4867	3.4867	31.225	1.9311=04
-3.4	1.0000	2.4867	3.4867	30.764	3.0606=04
-3.2	1.0000	2.4867	3.4867	30.304	4.8508=04
-3.0	1.0000	2.4867	3.4867	29.843	7.6881=04
-2.8	1.0000	2.4867	3.4867	29.382	1.2184=03
-2.6	1.0000	2.4867	3.4867	28.922	1.9311=03
-2.4	1.0000	2.4867	3.4867	28.461	3.0606=03
-2.2	1.0000	2.4867	3.4867	28.001	4.8508=03
-2.0	1.0000	2.4867	3.4867	27.540	7.6881=03
-1.8	0.99997	2.4866	3.4866	27.080	1.2191=02
-1.6	0.99993	2.4865	3.4865	26.619	1.9321=02
-1.4	0.99989	2.4864	3.4863	26.159	3.0621=02
-1.2	0.99986	2.4863	3.4862	25.698	4.8530=02
-1.0	0.99982	2.4862	3.4860	25.238	7.6913=02
-0.8	0.99972	2.4859	3.4856	24.777	1.2189=01
-0.6	0.99958	2.4854	3.4849	24.316	1.9314=01
-0.4	0.99933	2.4849	3.4842	23.855	3.0605=01
-0.2	0.99902	2.4840	3.4830	23.394	4.8490=01
0.0	0.99861	2.4823	3.4809	22.933	7.6808=01
0.2	0.99799	2.4791	3.4772	22.471	1.2160 00
0.4	0.99670	2.4759	3.4726	22.008	1.9248 00
0.6	0.99451	2.4705	3.4650	21.543	3.0439 00
0.8	0.99113	2.4610	3.4521	21.077	4.8079 00
1.0	0.98556	2.4465	3.4321	20.608	7.5771 00
1.2	0.97689	2.4226	3.3996	20.132	1.1903 01
1.4	0.96423	2.3861	3.3503	19.647	1.8621 01
1.6	0.94522	2.3279	3.2742	19.148	2.8930 01
1.8	0.91836	2.2361	3.1543	18.623	4.4548 01
2.0	0.88277	2.0864	2.9693	18.060	6.7867 01
2.2	0.84771	1.8532	2.7009	17.433	1.0329 02
2.4	0.85202	1.5177	2.3698	16.707	1.6453 02
2.6	1.0909	0.9829	2.0737	15.738	3.3366 02

$$T = 220^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	P
-7.0	1.0000	2.4868	3.4868	39.169	8.0542-08
-6.8	1.0000	2.4868	3.4868	38.708	1.2765-07
-6.6	1.0000	2.4868	3.4868	38.248	2.0231-07
-6.4	1.0000	2.4868	3.4868	37.787	3.2064-07
-6.2	1.0000	2.4868	3.4868	37.327	5.0818-07
-6.0	1.0000	2.4868	3.4868	36.866	8.0542-07
-5.8	1.0000	2.4868	3.4868	36.406	1.2765-06
-5.6	1.0000	2.4868	3.4868	35.945	2.0231-06
-5.4	1.0000	2.4868	3.4868	35.485	3.2064-06
-5.2	1.0000	2.4868	3.4868	35.024	5.0818-06
-5.0	1.0000	2.4868	3.4868	34.564	8.0542-06
-4.8	1.0000	2.4868	3.4868	34.103	1.2765-05
-4.6	1.0000	2.4868	3.4868	33.643	2.0231-05
-4.4	1.0000	2.4868	3.4868	33.182	3.2064-05
-4.2	1.0000	2.4868	3.4868	32.722	5.0818-05
-4.0	1.0000	2.4868	3.4868	32.261	8.0542-05
-3.8	1.0000	2.4868	3.4868	31.801	1.2765-04
-3.6	1.0000	2.4868	3.4868	31.340	2.0231-04
-3.4	1.0000	2.4868	3.4868	30.880	3.2064-04
-3.2	1.0000	2.4868	3.4868	30.419	5.0818-04
-3.0	1.0000	2.4868	3.4868	29.958	8.0542-04
-2.8	1.0000	2.4868	3.4868	29.498	1.2765-03
-2.6	1.0000	2.4868	3.4868	29.037	2.0231-03
-2.4	1.0000	2.4868	3.4868	28.577	3.2064-03
-2.2	1.0000	2.4868	3.4868	28.116	5.0818-03
-2.0	1.0000	2.4868	3.4868	27.656	8.0542-03
-1.8	0.99997	2.4868	3.4867	27.195	1.2772-02
-1.6	0.99994	2.4867	3.4866	26.735	2.0241-02
-1.4	0.99991	2.4866	3.4865	26.275	3.2080-02
-1.2	0.99988	2.4865	3.4864	25.814	5.0841-02
-1.0	0.99985	2.4864	3.4863	25.354	8.0575-02
-0.8	0.99975	2.4861	3.4858	24.893	1.2769-01
-0.6	0.99959	2.4856	3.4852	24.432	2.0235-01
-0.4	0.99943	2.4851	3.4845	23.971	3.2065-01
-0.2	0.99914	2.4842	3.4834	23.510	5.0805-01
0.0	0.99890	2.4829	3.4819	23.049	8.0481-01
0.2	0.99838	2.4807	3.4791	22.588	1.2744-00
0.4	0.99728	2.4777	3.4750	22.125	2.0176 00
0.6	0.99527	2.4723	3.4676	21.660	3.1912 00
0.8	0.99231	2.4639	3.4562	21.194	5.0427 00
1.0	0.98756	2.4498	3.4373	20.725	7.9539 00
1.2	0.97995	2.4276	3.4076	20.249	1.2509 01
1.4	0.96924	2.3939	3.3631	19.766	1.9607 01
1.6	0.95275	2.3392	3.2920	19.267	3.0549 01
1.8	0.92985	2.2521	3.1820	18.744	4.7253 01
2.0	0.90023	2.1118	3.0120	18.183	7.2504 01
2.2	0.87535	1.8905	2.7658	17.559	1.1174 02
2.4	0.89482	1.5684	2.4632	16.829	1.8103 02
2.6	1.1588	1.0699	2.2287	15.873	3.7131 02



$$T = 230^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	p
-7.0	1.0000	2.4873	3.4873	39.280	8.4203-08
-6.8	1.0000	2.4873	3.4873	38.820	1.3345-07
-6.6	1.0000	2.4873	3.4873	38.359	2.1150-07
-6.4	1.0000	2.4873	3.4873	37.899	3.3521-07
-6.2	1.0000	2.4873	3.4873	37.438	5.3128-07
-6.0	1.0000	2.4873	3.4873	36.978	8.4203-07
-5.8	1.0000	2.4873	3.4873	36.517	1.3345-06
-5.6	1.0000	2.4873	3.4873	36.057	2.1150-06
-5.4	1.0000	2.4873	3.4873	35.596	3.3521-06
-5.2	1.0000	2.4873	3.4873	35.136	5.3128-06
-5.0	1.0000	2.4873	3.4873	34.675	8.4203-06
-4.8	1.0000	2.4873	3.4873	34.215	1.3345-05
-4.6	1.0000	2.4873	3.4873	33.754	2.1150-05
-4.4	1.0000	2.4873	3.4873	33.294	3.3521-05
-4.2	1.0000	2.4873	3.4873	32.833	5.3128-05
-4.0	1.0000	2.4873	3.4873	32.373	8.4203-05
-3.8	1.0000	2.4873	3.4873	31.912	1.3345-04
-3.6	1.0000	2.4873	3.4873	31.452	2.1150-04
-3.4	1.0000	2.4873	3.4873	30.991	3.3521-04
-3.2	1.0000	2.4873	3.4873	30.531	5.3128-04
-3.0	1.0000	2.4873	3.4873	30.070	8.4203-04
-2.8	1.0000	2.4873	3.4873	29.610	1.3345-03
-2.6	1.0000	2.4873	3.4873	29.149	2.1150-03
-2.4	1.0000	2.4873	3.4873	28.688	3.3521-03
-2.2	1.0000	2.4873	3.4873	28.228	5.3128-03
-2.0	1.0000	2.4873	3.4873	27.767	8.4203-03
-1.8	0.99997	2.4872	3.4872	27.307	1.3353-02
-1.6	0.99995	2.4871	3.4871	26.846	2.1162-02
-1.4	0.99992	2.4870	3.4870	26.386	3.3539-02
-1.2	0.99990	2.4869	3.4869	25.925	5.3154-02
-1.0	0.99987	2.4868	3.4867	25.465	8.4240-02
-0.8	0.99978	2.4865	3.4863	25.004	1.3350-01
-0.6	0.99964	2.4860	3.4857	24.543	2.1156-01
-0.4	0.99950	2.4856	3.4851	24.082	3.3525-01
-0.2	0.99925	2.4848	3.4841	23.621	5.3121-01
0.0	0.99915	2.4837	3.4829	23.160	8.4157-01
0.2	0.99867	2.4816	3.4803	22.699	1.3328 00
0.4	0.99767	2.4789	3.4766	22.236	2.1102 00
0.6	0.99586	2.4738	3.4697	21.772	3.3383 00
0.8	0.99335	2.4659	3.4592	21.307	5.2775 00
1.0	0.98922	2.4530	3.4422	20.837	8.3295 00
1.2	0.98271	2.4322	3.4150	20.363	1.3114 01
1.4	0.97328	2.4005	3.3738	19.878	2.0586 01
1.6	0.95931	2.3489	3.3082	19.381	3.2158 01
1.8	0.94025	2.2639	3.1943	18.859	4.9955 01
2.0	0.91746	2.1319	3.0494	18.299	7.7253 01
2.2	0.89953	1.9235	2.8231	17.678	1.2005 02
2.4	0.93315	1.6152	2.5483	16.948	1.9737 02
2.6	1.2182	1.1511	2.3693	16.002	4.0823 02

$$T = 240^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	P
-7.0	1.0000	2.4876	3.4876	39.387	8.7864-08
-6.8	1.0000	2.4876	3.4876	38.926	1.3925-07
-6.6	1.0000	2.4876	3.4876	38.466	2.2070-07
-6.4	1.0000	2.4876	3.4876	38.005	3.4979-07
-6.2	1.0000	2.4876	3.4876	37.545	5.5438-07
-6.0	1.0000	2.4876	3.4876	37.084	8.7864-07
-5.8	1.0000	2.4876	3.4876	36.624	1.3925-06
-5.6	1.0000	2.4876	3.4876	36.163	2.2070-06
-5.4	1.0000	2.4876	3.4876	35.703	3.4979-06
-5.2	1.0000	2.4876	3.4876	35.242	5.5438-06
-5.0	1.0000	2.4876	3.4876	34.782	8.7864-06
-4.8	1.0000	2.4876	3.4876	34.321	1.3925-05
-4.6	1.0000	2.4876	3.4876	33.861	2.2070-05
-4.4	1.0000	2.4876	3.4876	33.400	3.4979-05
-4.2	1.0000	2.4876	3.4876	32.940	5.5438-05
-4.0	1.0000	2.4876	3.4876	32.479	8.7864-05
-3.8	1.0000	2.4876	3.4876	32.019	1.3925-04
-3.6	1.0000	2.4876	3.4876	31.558	2.2070-04
-3.4	1.0000	2.4876	3.4876	31.097	3.4979-04
-3.2	1.0000	2.4876	3.4876	30.637	5.5438-04
-3.0	1.0000	2.4876	3.4876	30.176	8.7864-04
-2.8	1.0000	2.4876	3.4876	29.716	1.3925-03
-2.6	1.0000	2.4876	3.4876	29.255	2.2070-03
-2.4	1.0000	2.4876	3.4876	28.795	3.4979-03
-2.2	1.0000	2.4876	3.4876	28.334	5.5438-03
-2.0	1.0000	2.4876	3.4876	27.874	8.7864-03
-1.8	0.99998	2.4875	3.4875	27.413	1.3933-02
-1.6	0.99996	2.4875	3.4874	26.953	2.2082-02
-1.4	0.99994	2.4874	3.4873	26.492	3.4997-02
-1.2	0.99992	2.4873	3.4872	26.032	5.5465-02
-1.0	0.99990	2.4872	3.4871	25.571	8.7905-02
-0.8	0.99981	2.4869	3.4867	25.110	1.3931-01
-0.6	0.99969	2.4865	3.4862	24.649	2.2076-01
-0.4	0.99957	2.4861	3.4857	24.188	3.4985-01
-0.2	0.99935	2.4853	3.4846	23.727	5.5437-01
0.0	0.99938	2.4844	3.4838	23.267	8.7831-01
0.2	0.99893	2.4826	3.4816	22.806	1.3911 00
0.4	0.99804	2.4800	3.4780	22.343	2.2028 00
0.6	0.99650	2.4749	3.4714	21.879	3.4857 00
0.8	0.99431	2.4676	3.4619	21.413	5.5124 00
1.0	0.99062	2.4556	3.4463	20.943	8.7043 00
1.2	0.98518	2.4365	3.4215	20.469	1.3720 01
1.4	0.97702	2.4062	3.3832	19.986	2.1563 01
1.6	0.96520	2.3578	3.3230	19.506	3.3763 01
1.8	0.94953	2.2791	3.2287	18.968	5.2642 01
2.0	0.93187	2.1523	3.0842	18.411	8.1880 01
2.2	0.92243	1.9559	2.8784	17.790	1.2846 02
2.4	0.97164	1.6562	2.6279	17.058	2.1439 02
2.6	1.2740	1.2253	2.4993	16.125	4.4556 02

$$T = 250^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	p
-7.0	1.0000	2.4876	3.4876	39.488	9.1525-08
-6.8	1.0000	2.4876	3.4876	39.027	1.4505-07
-6.6	1.0000	2.4876	3.4876	38.567	2.2990-07
-6.4	1.0000	2.4876	3.4876	38.106	3.6436-07
-6.2	1.0000	2.4876	3.4876	37.646	5.7748-07
-6.0	1.0000	2.4876	3.4876	37.185	9.1525-07
-5.8	1.0000	2.4876	3.4876	36.725	1.4505-06
-5.6	1.0000	2.4876	3.4876	36.264	2.2990-06
-5.4	1.0000	2.4876	3.4876	35.804	3.6436-06
-5.2	1.0000	2.4876	3.4876	35.343	5.7748-06
-5.0	1.0000	2.4876	3.4876	34.883	9.1525-06
-4.8	1.0000	2.4876	3.4876	34.422	1.4505-05
-4.6	1.0000	2.4876	3.4876	33.962	2.2990-05
-4.4	1.0000	2.4876	3.4876	33.501	3.6436-05
-4.2	1.0000	2.4876	3.4876	33.041	5.7748-05
-4.0	1.0000	2.4876	3.4876	32.580	9.1525-05
-3.8	1.0000	2.4876	3.4876	32.120	1.4505-04
-3.6	1.0000	2.4876	3.4876	31.659	2.2990-04
-3.4	1.0000	2.4876	3.4876	31.199	3.6436-04
-3.2	1.0000	2.4876	3.4876	30.738	5.7748-04
-3.0	1.0000	2.4876	3.4876	30.278	9.1525-04
-2.8	1.0000	2.4876	3.4876	29.817	1.4505-03
-2.6	1.0000	2.4876	3.4876	29.357	2.2990-03
-2.4	1.0000	2.4876	3.4876	28.896	3.6436-03
-2.2	1.0000	2.4876	3.4876	28.436	5.7748-03
-2.0	1.0000	2.4876	3.4876	27.975	9.1525-03
-1.8	0.99998	2.4875	3.4875	27.514	1.4513-02
-1.6	0.99996	2.4875	3.4874	27.054	2.3002-02
-1.4	0.99995	2.4874	3.4873	26.593	3.6455-02
-1.2	0.99993	2.4873	3.4872	26.133	5.7776-02
-1.0	0.99991	2.4872	3.4871	25.672	9.1567-02
-0.8	0.99983	2.4869	3.4868	25.211	1.4511-01
-0.6	0.99974	2.4866	3.4863	24.751	2.2997-01
-0.4	0.99964	2.4863	3.4859	24.290	3.6445-01
-0.2	0.99944	2.4855	3.4849	23.829	5.7748-01
0.0	0.99956	2.4852	3.4847	23.369	9.1497-01
0.2	0.99912	2.4834	3.4825	22.907	1.4493 00
0.4	0.99837	2.4806	3.4790	22.445	2.2953 00
0.6	0.99709	2.4758	3.4729	21.981	3.6331 00
0.8	0.99523	2.4689	3.4641	21.516	5.7473 00
1.0	0.99214	2.4578	3.4499	21.046	9.0806 00
1.2	0.98744	2.4402	3.4276	20.573	1.4323 01
1.4	0.98041	2.4116	3.3920	20.090	2.2539 01
1.6	0.97057	2.3661	3.3369	19.595	3.5364 01
1.8	0.95813	2.2910	3.2491	19.074	5.5330 01
2.0	0.94487	2.1709	3.1158	18.518	8.6480 01
2.2	0.94263	1.9845	2.9272	17.899	1.3673 02
2.4	1.0045	1.6966	2.7011	17.166	2.3088 02
2.6	1.3244	1.2939	2.6183	16.244	4.8240 02

$$T = 260^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	P
-7.0	1.0000	2.4879	3.4879	39.586	9.5186-08
-6.8	1.0000	2.4879	3.4879	39.125	1.5085-07
-6.6	1.0000	2.4879	3.4879	38.665	2.3909-07
-6.4	1.0000	2.4879	3.4879	38.204	3.7894-07
-6.2	1.0000	2.4879	3.4879	37.744	6.0058-07
-6.0	1.0000	2.4879	3.4879	37.283	9.5186-07
-5.8	1.0000	2.4879	3.4879	36.823	1.5085-06
-5.6	1.0000	2.4879	3.4879	36.362	2.3909-06
-5.4	1.0000	2.4879	3.4879	35.902	3.7894-06
-5.2	1.0000	2.4879	3.4879	35.441	6.0058-06
-5.0	1.0000	2.4879	3.4879	34.981	9.5186-06
-4.8	1.0000	2.4879	3.4879	34.520	1.5085-05
-4.6	1.0000	2.4879	3.4879	34.060	2.3909-05
-4.4	1.0000	2.4879	3.4879	33.599	3.7894-05
-4.2	1.0000	2.4879	3.4879	33.139	6.0058-05
-4.0	1.0000	2.4879	3.4879	32.678	9.5186-05
-3.8	1.0000	2.4879	3.4879	32.217	1.5085-04
-3.6	1.0000	2.4879	3.4879	31.757	2.3909-04
-3.4	1.0000	2.4879	3.4879	31.296	3.7894-04
-3.2	1.0000	2.4879	3.4879	30.836	6.0058-04
-3.0	1.0000	2.4879	3.4879	30.375	9.5186-04
-2.8	1.0000	2.4879	3.4879	29.915	1.5085-03
-2.6	1.0000	2.4879	3.4879	29.454	2.3909-03
-2.4	1.0000	2.4879	3.4879	28.994	3.7894-03
-2.2	1.0000	2.4879	3.4879	28.533	6.0058-03
-2.0	1.0000	2.4879	3.4879	28.073	9.5186-03
-1.8	0.99998	2.4878	3.4878	27.612	1.5094-02
-1.6	0.99996	2.4878	3.4877	27.152	2.3923-02
-1.4	0.99995	2.4877	3.4877	26.691	3.7915-02
-1.2	0.99994	2.4877	3.4876	26.230	6.0091-02
-1.0	0.99992	2.4876	3.4875	25.770	9.5238-02
-0.8	0.99985	2.4873	3.4871	25.309	1.5093-01
-0.6	0.99978	2.4870	3.4867	24.848	2.3919-01
-0.4	0.99970	2.4866	3.4863	24.388	3.7905-01
-0.2	0.99952	2.4859	3.4854	23.927	6.0063-01
0.0	0.99976	2.4855	3.4854	23.467	9.5169-01
0.2	0.99936	2.4838	3.4832	23.005	1.5076 00
0.4	0.99876	2.4813	3.4801	22.543	2.3879 00
0.6	0.99768	2.4768	3.4745	22.079	3.7805 00
0.8	0.99606	2.4702	3.4663	21.613	5.9820 00
1.0	0.99346	2.4599	3.4534	21.145	9.4561 00
1.2	0.98949	2.4434	3.4329	20.672	1.4927 01
1.4	0.98354	2.4165	3.4000	20.189	2.3516 01
1.6	0.97565	2.3719	3.3486	19.694	3.6971 01
1.8	0.96592	2.3022	3.2681	19.176	5.8010 01
2.0	0.95676	2.1879	3.1447	18.620	9.1068 01
2.2	0.96191	2.0100	2.9719	18.002	1.4511 02
2.4	1.0315	1.7371	2.7686	17.275	2.4662 02
2.6	1.3685	1.3578	2.7280	16.360	5.1816 02

$$T = 270^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	P
-7.0	1.0000	2.4882	3.4882	39.680	9.8847-08
-6.8	1.0000	2.4882	3.4882	39.220	1.5666-07
-6.6	1.0000	2.4882	3.4882	38.759	2.4829-07
-6.4	1.0000	2.4882	3.4882	38.298	3.9351-07
-6.2	1.0000	2.4882	3.4882	37.838	6.2368-07
-6.0	1.0000	2.4882	3.4882	37.377	9.8847-07
-5.8	1.0000	2.4882	3.4882	36.917	1.5666-06
-5.6	1.0000	2.4882	3.4882	36.456	2.4829-06
-5.4	1.0000	2.4882	3.4882	35.996	3.9351-06
-5.2	1.0000	2.4882	3.4882	35.535	6.2368-06
-5.0	1.0000	2.4882	3.4882	35.075	9.8847-06
-4.8	1.0000	2.4882	3.4882	34.618	1.5666-05
-4.6	1.0000	2.4882	3.4882	34.154	2.4829-05
-4.4	1.0000	2.4882	3.4882	33.693	3.9351-05
-4.2	1.0000	2.4882	3.4882	33.233	6.2368-05
-4.0	1.0000	2.4882	3.4882	32.772	9.8847-05
-3.8	1.0000	2.4882	3.4882	32.312	1.5666-04
-3.6	1.0000	2.4882	3.4882	31.851	2.4829-04
-3.4	1.0000	2.4882	3.4882	31.391	3.9351-04
-3.2	1.0000	2.4882	3.4882	30.930	6.2368-04
-3.0	1.0000	2.4882	3.4882	30.470	9.8847-04
-2.8	1.0000	2.4882	3.4882	30.009	1.5666-03
-2.6	1.0000	2.4882	3.4882	29.549	2.4829-03
-2.4	1.0000	2.4882	3.4882	29.088	3.9351-03
-2.2	1.0000	2.4882	3.4882	28.628	6.2368-03
-2.0	1.0000	2.4882	3.4882	28.167	9.8847-03
-1.8	0.99998	2.4881	3.4881	27.706	1.5675-02
-1.6	0.99997	2.4881	3.4880	27.246	2.4843-02
-1.4	0.99996	2.4880	3.4880	26.785	3.9374-02
-1.2	0.99995	2.4880	3.4879	26.325	6.2403-02
-1.0	0.99994	2.4879	3.4878	25.864	9.8902-02
-0.8	0.99988	2.4876	3.4875	25.403	1.5674-01
-0.6	0.99982	2.4873	3.4871	24.943	2.4839-01
-0.4	0.99975	2.4870	3.4868	24.482	3.9365-01
-0.2	0.99960	2.4863	3.4859	24.021	6.2377-01
0.0	0.99960	2.4860	3.4860	23.562	9.8844-01
0.2	0.99959	2.4843	3.4839	23.100	1.5659 00
0.4	0.99907	2.4818	3.4809	22.637	2.4805 00
0.6	0.99819	2.4776	3.4758	22.173	3.9279 00
0.8	0.99688	2.4714	3.4683	21.708	6.2171 00
1.0	0.99459	2.4620	3.4566	21.239	9.8309 00
1.2	0.99121	2.4460	3.4372	20.767	1.5528 01
1.4	0.98645	2.4209	3.4074	20.286	2.4492 01
1.6	0.98019	2.3794	3.3596	19.790	3.8571 01
1.8	0.97317	2.3121	3.2852	19.272	6.0693 01
2.0	0.96844	2.2022	3.1706	18.718	9.5724 01
2.2	0.97948	2.0340	3.0135	18.102	1.5346 02
2.4	1.0591	1.7749	2.8340	17.379	2.6289 02
2.6	1.4127	1.4121	2.8267	16.466	5.5530 02

$$T = 280^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	P
-7.0	1.0000	2.4886	3.4886	39.771	1.0250-07
-6.8	1.0000	2.4886	3.4886	39.310	1.6246-07
-6.6	1.0000	2.4886	3.4886	38.850	2.5748-07
-6.4	1.0000	2.4886	3.4886	38.389	4.0809-07
-6.2	1.0000	2.4886	3.4886	37.929	6.4678-07
-6.0	1.0000	2.4886	3.4886	37.468	1.0250-06
-5.8	1.0000	2.4886	3.4886	37.008	1.6246-06
-5.6	1.0000	2.4886	3.4886	36.547	2.5748-06
-5.4	1.0000	2.4886	3.4886	36.087	4.0809-06
-5.2	1.0000	2.4886	3.4886	35.626	6.4678-06
-5.0	1.0000	2.4886	3.4886	35.165	1.0250-05
-4.8	1.0000	2.4886	3.4886	34.705	1.6246-05
-4.6	1.0000	2.4886	3.4886	34.244	2.5748-05
-4.4	1.0000	2.4886	3.4886	33.784	4.0809-05
-4.2	1.0000	2.4886	3.4886	33.323	6.4678-05
-4.0	1.0000	2.4886	3.4886	32.863	1.0250-04
-3.8	1.0000	2.4886	3.4886	32.402	1.6246-04
-3.6	1.0000	2.4886	3.4886	31.942	2.5748-04
-3.4	1.0000	2.4886	3.4886	31.481	4.0809-04
-3.2	1.0000	2.4886	3.4886	31.021	6.4678-04
-3.0	1.0000	2.4886	3.4886	30.560	1.0250-03
-2.8	1.0000	2.4886	3.4886	30.100	1.6246-03
-2.6	1.0000	2.4886	3.4886	29.639	2.5748-03
-2.4	1.0000	2.4886	3.4886	29.179	4.0809-03
-2.2	1.0000	2.4886	3.4886	28.718	6.4678-03
-2.0	1.0000	2.4886	3.4886	28.258	1.0256-02
-1.8	0.99999	2.4886	3.4886	27.797	1.6255-02
-1.6	0.99998	2.4885	3.4885	27.336	2.5763-02
-1.4	0.99997	2.4885	3.4885	26.876	4.0832-02
-1.2	0.99996	2.4884	3.4884	26.415	6.4714-02
-1.0	0.99995	2.4884	3.4884	25.955	1.0256-01
-0.8	0.99990	2.4881	3.4880	25.494	1.6254-01
-0.6	0.99985	2.4879	3.4877	25.033	2.5760-01
-0.4	0.99980	2.4876	3.4874	24.573	4.0825-01
-0.2	0.99967	2.4868	3.4865	24.112	6.4696-01
0.0	0.99950	2.4863	3.4864	23.652	1.0251 00
0.2	0.99940	2.4847	3.4844	23.191	1.6242 00
0.4	0.99928	2.4823	3.4816	22.728	2.5731 00
0.6	0.99850	2.4786	3.4771	22.264	4.0749 00
0.8	0.99733	2.4730	3.4704	21.798	6.4507 00
1.0	0.99558	2.4635	3.4590	21.331	1.0206 01
1.2	0.99279	2.4483	3.4411	20.858	1.6130 01
1.4	0.98909	2.4245	3.4136	20.377	2.5468 01
1.6	0.98446	2.3850	3.3694	19.884	4.0176 01
1.8	0.97989	2.3204	3.3002	19.365	6.3379 01
2.0	0.97854	2.2167	3.1952	18.813	1.0031 02
2.2	0.99515	2.0571	3.0522	18.199	1.6168 02
2.4	1.0842	1.8100	2.8941	17.478	2.7910 02
2.6	1.4465	1.4609	2.9135	16.572	5.9015 02

$$T = 290^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	p
-7.0	1.0000	2.4888	3.4888	39.859	1.0616-07
-6.8	1.0000	2.4888	3.4888	39.398	1.6826-07
-6.6	1.0000	2.4888	3.4888	38.938	2.6668-07
-6.4	1.0000	2.4888	3.4888	38.477	4.2266-07
-6.2	1.0000	2.4888	3.4888	38.016	6.6988-07
-6.0	1.0000	2.4888	3.4888	37.556	1.0616-06
-5.8	1.0000	2.4888	3.4888	37.095	1.6826-06
-5.6	1.0000	2.4888	3.4888	36.635	2.6668-06
-5.4	1.0000	2.4888	3.4888	36.174	4.2266-06
-5.2	1.0000	2.4888	3.4888	35.714	6.6988-06
-5.0	1.0000	2.4888	3.4888	35.253	1.0616-05
-4.8	1.0000	2.4888	3.4888	34.793	1.6826-05
-4.6	1.0000	2.4888	3.4888	34.332	2.6668-05
-4.4	1.0000	2.4888	3.4888	33.872	4.2266-05
-4.2	1.0000	2.4888	3.4888	33.411	6.6988-05
-4.0	1.0000	2.4888	3.4888	32.951	1.0616-04
-3.8	1.0000	2.4888	3.4888	32.490	1.6826-04
-3.6	1.0000	2.4888	3.4888	32.030	2.6668-04
-3.4	1.0000	2.4888	3.4888	31.569	4.2266-04
-3.2	1.0000	2.4888	3.4888	31.109	6.6988-04
-3.0	1.0000	2.4888	3.4888	30.648	1.0616-03
-2.8	1.0000	2.4888	3.4888	30.188	1.6826-03
-2.6	1.0000	2.4888	3.4888	29.727	2.6668-03
-2.4	1.0000	2.4888	3.4888	29.267	4.2266-03
-2.2	1.0000	2.4888	3.4888	28.806	6.6988-03
-2.0	1.0000	2.4888	3.4888	28.345	1.0624-02
-1.8	0.99999	2.4887	3.4887	27.885	1.6837-02
-1.6	0.99998	2.4887	3.4887	27.424	2.6684-02
-1.4	0.99998	2.4886	3.4886	26.964	4.2291-02
-1.2	0.99997	2.4886	3.4886	26.503	6.7025-02
-1.0	0.99996	2.4885	3.4885	26.043	1.0622-01
-0.8	0.99992	2.4883	3.4882	25.582	1.6835-01
-0.6	0.99988	2.4881	3.4879	25.121	2.6680-01
-0.4	0.99983	2.4878	3.4876	24.660	4.2284-01
-0.2	0.99973	2.4871	3.4868	24.200	6.7012-01
0.0	0.99965	2.4865	3.4866	23.740	1.0619 00
0.2	0.99958	2.4848	3.4847	23.278	1.6825 00
0.4	0.99950	2.4827	3.4822	22.815	2.6655 00
0.6	0.99886	2.4794	3.4782	22.352	4.2218 00
0.8	0.99812	2.4738	3.4719	21.886	6.6863 00
1.0	0.99653	2.4649	3.4615	21.419	1.0580 01
1.2	0.99436	2.4506	3.4449	20.946	1.6732 01
1.4	0.99157	2.4277	3.4193	20.466	2.6444 01
1.6	0.98843	2.3911	3.3795	19.972	4.1778 01
1.8	0.98557	2.3289	3.3145	19.455	6.5981 01
2.0	0.98821	2.2293	3.2176	18.903	1.0492 02
2.2	1.0101	2.0780	3.0882	18.292	1.6997 02
2.4	1.1043	1.8452	2.9495	17.577	2.9447 02
2.6	1.4821	1.5154	2.9975	16.674	6.2601 02

$$T = 300^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	p
-7.0	1.0000	2.4891	3.4891	39.944	1.0983-07
-6.8	1.0000	2.4891	3.4891	39.483	1.7406-07
-6.6	1.0000	2.4891	3.4891	39.023	2.7588-07
-6.4	1.0000	2.4891	3.4891	38.562	4.3724-07
-6.2	1.0000	2.4891	3.4891	38.102	6.9298-07
-6.0	1.0000	2.4891	3.4891	37.641	1.0983-06
-5.8	1.0000	2.4891	3.4891	37.181	1.7406-06
-5.6	1.0000	2.4891	3.4891	36.720	2.7588-06
-5.4	1.0000	2.4891	3.4891	36.260	4.3724-06
-5.2	1.0000	2.4891	3.4891	35.799	6.9298-06
-5.0	1.0000	2.4891	3.4891	35.338	1.0983-05
-4.8	1.0000	2.4891	3.4891	34.878	1.7406-05
-4.6	1.0000	2.4891	3.4891	34.417	2.7588-05
-4.4	1.0000	2.4891	3.4891	33.957	4.3724-05
-4.2	1.0000	2.4891	3.4891	33.496	6.9298-05
-4.0	1.0000	2.4891	3.4891	33.036	1.0983-04
-3.8	1.0000	2.4891	3.4891	32.575	1.7406-04
-3.6	1.0000	2.4891	3.4891	32.115	2.7588-04
-3.4	1.0000	2.4891	3.4891	31.654	4.3724-04
-3.2	1.0000	2.4891	3.4891	31.194	6.9298-04
-3.0	1.0000	2.4891	3.4891	30.733	1.0983-03
-2.8	1.0000	2.4891	3.4891	30.273	1.7406-03
-2.6	1.0000	2.4891	3.4891	29.812	2.7588-03
-2.4	1.0000	2.4891	3.4891	29.352	4.3724-03
-2.2	1.0000	2.4891	3.4891	28.891	6.9298-03
-2.0	1.0000	2.4891	3.4891	28.431	1.0989-02
-1.8	0.99999	2.4891	3.4891	27.970	1.7416-02
-1.6	0.99999	2.4890	3.4890	27.509	2.7603-02
-1.4	0.99998	2.4890	3.4890	27.049	4.3748-02
-1.2	0.99998	2.4889	3.4889	26.588	6.9336-02
-1.0	0.99996	2.4888	3.4888	26.128	1.0989-01
-0.8	0.99993	2.4886	3.4885	25.667	1.7416-01
-0.6	0.99990	2.4883	3.4882	25.206	2.7601-01
-0.4	0.99987	2.4880	3.4879	24.745	4.3744-01
-0.2	0.99979	2.4875	3.4873	24.285	6.9325-01
0.0	0.99979	2.4867	3.4870	23.825	1.0985 00
0.2	0.99979	2.4853	3.4854	23.363	1.7408 00
0.4	0.99979	2.4832	3.4830	22.900	2.7582 00
0.6	0.99924	2.4800	3.4793	22.437	4.3691 00
0.8	0.99865	2.4747	3.4735	21.972	6.9204 00
1.0	0.99746	2.4660	3.4635	21.504	1.0955 01
1.2	0.99588	2.4527	3.4486	21.031	1.7335 01
1.4	0.99395	2.4310	3.4249	20.552	2.7421 01
1.6	0.99203	2.3954	3.3874	20.057	4.3376 01
1.8	0.99125	2.3365	3.3278	19.541	6.8692 01
2.0	0.99672	2.2424	3.2391	18.992	1.0947 02
2.2	1.0233	2.0986	3.1220	18.384	1.7814 02
2.4	1.1250	1.8785	3.0030	17.673	3.1030 02
2.6	1.5161	1.5589	3.0750	16.769	6.6239 02



$$T = 320^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	p
-7.0	1.0000	2.4899	3.4899	40.105	1.1715-07
-6.8	1.0000	2.4899	3.4899	39.645	1.8567-07
-6.6	1.0000	2.4899	3.4899	39.184	2.9427-07
-6.4	1.0000	2.4899	3.4899	38.724	4.6639-07
-6.2	1.0000	2.4899	3.4899	38.263	7.3917-07
-6.0	1.0000	2.4899	3.4899	37.803	1.1715-06
-5.8	1.0000	2.4899	3.4899	37.342	1.8567-06
-5.6	1.0000	2.4899	3.4899	36.882	2.9427-06
-5.4	1.0000	2.4899	3.4899	36.421	4.6639-06
-5.2	1.0000	2.4899	3.4899	35.960	7.3917-06
-5.0	1.0000	2.4899	3.4899	35.500	1.1715-05
-4.8	1.0000	2.4899	3.4899	35.039	1.8567-05
-4.6	1.0000	2.4899	3.4899	34.579	2.9427-05
-4.4	1.0000	2.4899	3.4899	34.118	4.6639-05
-4.2	1.0000	2.4899	3.4899	33.658	7.3917-05
-4.0	1.0000	2.4899	3.4899	33.197	1.1715-04
-3.8	1.0000	2.4899	3.4899	32.737	1.8567-04
-3.6	1.0000	2.4899	3.4899	32.276	2.9427-04
-3.4	1.0000	2.4899	3.4899	31.816	4.6639-04
-3.2	1.0000	2.4899	3.4899	31.355	7.3917-04
-3.0	1.0000	2.4899	3.4899	30.895	1.1715-03
-2.8	1.0000	2.4899	3.4899	30.434	1.8567-03
-2.6	1.0000	2.4899	3.4899	29.974	2.9427-03
-2.4	1.0000	2.4899	3.4899	29.513	4.6639-03
-2.2	1.0000	2.4899	3.4899	29.053	7.3917-03
-2.0	1.0000	2.4899	3.4899	28.592	1.1722-02
-1.8	1.0000	2.4899	3.4899	28.131	1.8578-02
-1.6	1.0000	2.4899	3.4899	27.671	2.9444-02
-1.4	0.99999	2.4898	3.4898	27.210	4.6666-02
-1.2	0.99999	2.4898	3.4898	26.750	7.3961-02
-1.0	0.99998	2.4897	3.4897	26.289	1.1722-01
-0.8	0.99997	2.4895	3.4895	25.828	1.8578-01
-0.6	0.99995	2.4893	3.4893	25.368	2.9443-01
-0.4	0.99993	2.4890	3.4889	24.907	4.6663-01
-0.2	0.99993	2.4884	3.4884	24.446	7.3956-01
0.0	0.99992	2.4875	3.4880	23.986	1.1720 00
0.2	0.99992	2.4864	3.4868	23.524	1.8574-00
0.4	0.99991	2.4847	3.4848	23.061	2.9431 00
0.6	0.99990	2.4815	3.4814	22.598	4.6634 00
0.8	0.99967	2.4767	3.4764	22.133	7.3892 00
1.0	0.99912	2.4688	3.4680	21.666	1.1705 01
1.2	0.99856	2.4558	3.4553	21.193	1.8540 01
1.4	0.99812	2.4371	3.4352	20.714	2.9371 01
1.6	0.99839	2.4045	3.4029	20.221	4.6563 01
1.8	1.0014	2.3502	3.3517	19.706	7.4022 01
2.0	1.0125	2.2651	3.2776	19.160	1.1861 02
2.2	1.0478	2.1353	3.1831	18.557	1.9454 02
2.4	1.1599	1.9405	3.1004	17.860	3.4128 02
2.6	1.5724	1.6398	3.2122	16.954	7.3294 02

$$T = 340^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	P
-7.0	1.0000	2.4910	3.4910	40.257	1.2447-07
-6.8	1.0000	2.4910	3.4910	39.797	1.9727-07
-6.6	1.0000	2.4910	3.4910	39.336	3.1266-07
-6.4	1.0000	2.4910	3.4910	38.876	4.9553-07
-6.2	1.0000	2.4910	3.4910	38.415	7.8537-07
-6.0	1.0000	2.4910	3.4910	37.955	1.2447-06
-5.8	1.0000	2.4910	3.4910	37.494	1.9727-06
-5.6	1.0000	2.4910	3.4910	37.034	3.1266-06
-5.4	1.0000	2.4910	3.4910	36.573	4.9553-06
-5.2	1.0000	2.4910	3.4910	36.113	7.8537-06
-5.0	1.0000	2.4910	3.4910	35.652	1.2447-05
-4.8	1.0000	2.4910	3.4910	35.192	1.9727-05
-4.6	1.0000	2.4910	3.4910	34.731	3.1266-05
-4.4	1.0000	2.4910	3.4910	34.271	4.9553-05
-4.2	1.0000	2.4910	3.4910	33.810	7.8537-05
-4.0	1.0000	2.4910	3.4910	33.350	1.2447-04
-3.8	1.0000	2.4910	3.4910	32.889	1.9727-04
-3.6	1.0000	2.4910	3.4910	32.429	3.1266-04
-3.4	1.0000	2.4910	3.4910	31.968	4.9553-04
-3.2	1.0000	2.4910	3.4910	31.508	7.8537-04
-3.0	1.0000	2.4910	3.4910	31.047	1.2447-03
-2.8	1.0000	2.4910	3.4910	30.587	1.9727-03
-2.6	1.0000	2.4910	3.4910	30.126	3.1266-03
-2.4	1.0000	2.4910	3.4910	29.666	4.9553-03
-2.2	1.0000	2.4910	3.4910	29.205	7.8537-03
-2.0	1.0000	2.4910	3.4910	28.744	1.2455-02
-1.8	1.0000	2.4910	3.4910	28.284	1.9740-02
-1.6	1.0000	2.4910	3.4910	27.823	3.1285-02
-1.4	1.0000	2.4909	3.4909	27.363	4.9584-02
-1.2	1.0000	2.4909	3.4909	26.902	7.8585-02
-1.0	1.0000	2.4908	3.4908	26.441	1.2455-01
-0.8	1.0000	2.4906	3.4906	25.981	1.9739-01
-0.6	0.99999	2.4904	3.4904	25.520	3.1284-01
-0.4	0.99999	2.4901	3.4901	25.059	4.9580-01
-0.2	1.0002	2.4897	3.4899	24.599	7.8578-01
0.0	1.0006	2.4889	3.4894	24.138	1.2454 00
0.2	1.0005	2.4877	3.4882	23.676	1.9737 00
0.4	1.0005	2.4860	3.4865	23.213	3.1282 00
0.6	1.0006	2.4830	3.4836	22.751	4.9582 00
0.8	1.0007	2.4785	3.4792	22.286	7.8585 00
1.0	1.0006	2.4715	3.4720	21.819	1.2454 01
1.2	1.0008	2.4607	3.4615	21.346	1.9743 01
1.4	1.0016	2.4422	3.4438	20.867	3.1315 01
1.6	1.0038	2.4128	3.4166	20.376	4.9741 01
1.8	1.0100	2.3627	3.3727	19.863	7.9326 01
2.0	1.0262	2.2845	3.3107	19.318	1.2772 02
2.2	1.0691	2.1679	3.2309	18.720	2.1087 02

$$T = 360^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	P
-7.0	1.0000	2.4923	3.4923	40.400	1.3179-07
-6.8	1.0000	2.4923	3.4923	39.940	2.0888-07
-6.6	1.0000	2.4923	3.4923	39.479	3.3105-07
-6.4	1.0000	2.4923	3.4923	39.019	5.2468-07
-6.2	1.0000	2.4923	3.4923	38.558	8.3157-07
-6.0	1.0000	2.4923	3.4923	38.098	1.3179-06
-5.8	1.0000	2.4923	3.4923	37.637	2.0888-06
-5.6	1.0000	2.4923	3.4923	37.177	3.3105-06
-5.4	1.0000	2.4923	3.4923	36.716	5.2468-06
-5.2	1.0000	2.4923	3.4923	36.256	8.3157-06
-5.0	1.0000	2.4923	3.4923	35.795	1.3179-05
-4.8	1.0000	2.4923	3.4923	35.335	2.0888-05
-4.6	1.0000	2.4923	3.4923	34.874	3.3105-05
-4.4	1.0000	2.4923	3.4923	34.414	5.2468-05
-4.2	1.0000	2.4923	3.4923	33.953	8.3157-05
-4.0	1.0000	2.4923	3.4923	33.493	1.3179-04
-3.8	1.0000	2.4923	3.4923	33.032	2.0888-04
-3.6	1.0000	2.4923	3.4923	32.572	3.3105-04
-3.4	1.0000	2.4923	3.4923	32.111	5.2468-04
-3.2	1.0000	2.4923	3.4923	31.651	8.3157-04
-3.0	1.0000	2.4923	3.4923	31.190	1.3179-03
-2.8	1.0000	2.4923	3.4923	30.729	2.0888-03
-2.6	1.0000	2.4923	3.4923	30.269	3.3105-03
-2.4	1.0000	2.4923	3.4923	29.808	5.2468-03
-2.2	1.0000	2.4923	3.4923	29.348	8.3157-03
-2.0	1.0000	2.4923	3.4923	28.887	1.3187-02
-1.8	1.0000	2.4922	3.4922	28.427	2.0901-02
-1.6	1.0000	2.4922	3.4922	27.967	3.3125-02
-1.4	1.0000	2.4922	3.4922	27.506	5.2500-02
-1.2	1.0000	2.4921	3.4921	27.046	8.3207-02
-1.0	1.0000	2.4920	3.4920	26.585	1.3187-01
-0.8	1.0000	2.4919	3.4919	26.124	2.0901-01
-0.6	1.0000	2.4918	3.4918	25.664	3.3126-01
-0.4	1.0001	2.4915	3.4915	25.203	5.2501-01
-0.2	1.0003	2.4909	3.4912	24.742	8.3210-01
0.0	1.0006	2.4899	3.4905	24.281	1.3189 00
0.2	1.0007	2.4889	3.4896	23.819	2.0903 00
0.4	1.0008	2.4876	3.4884	23.357	3.3133 00
0.6	1.0010	2.4847	3.4858	22.895	5.2525 00
0.8	1.0013	2.4807	3.4820	22.430	8.3269 00
1.0	1.0017	2.4744	3.4760	21.962	1.3202 01
1.2	1.0026	2.4642	3.4668	21.490	2.0944 01
1.4	1.0045	2.4475	3.4520	21.012	3.3256 01
1.6	1.0085	2.4200	3.4285	20.520	5.2915 01
1.8	1.0172	2.3741	3.3913	20.009	8.4590 01
2.0	1.0371	2.3031	3.3402	19.467	1.3669 02
2.2	1.0856	2.1991	3.2847	18.876	2.2675 02

$$T = 380^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	P
-7.0	1.0000	2.4934	3.4934	40.536	1.3911-07
-6.8	1.0000	2.4934	3.4934	40.076	2.2048-07
-6.6	1.0000	2.4934	3.4934	39.615	3.4944-07
-6.4	1.0000	2.4934	3.4934	39.155	5.5383-07
-6.2	1.0000	2.4934	3.4934	38.694	8.7777-07
-6.0	1.0000	2.4934	3.4934	38.234	1.3911-06
-5.8	1.0000	2.4934	3.4934	37.773	2.2048-06
-5.6	1.0000	2.4934	3.4934	37.313	3.4944-06
-5.4	1.0000	2.4934	3.4934	36.852	5.5383-06
-5.2	1.0000	2.4934	3.4934	36.392	8.7777-06
-5.0	1.0000	2.4934	3.4934	35.931	1.3911-05
-4.8	1.0000	2.4934	3.4934	35.471	2.2048-05
-4.6	1.0000	2.4934	3.4934	35.010	3.4944-05
-4.4	1.0000	2.4934	3.4934	34.550	5.5383-05
-4.2	1.0000	2.4934	3.4934	34.089	8.7777-05
-4.0	1.0000	2.4934	3.4934	33.629	1.3911-04
-3.8	1.0000	2.4934	3.4934	33.168	2.2048-04
-3.6	1.0000	2.4934	3.4934	32.707	3.4944-04
-3.4	1.0000	2.4934	3.4934	32.247	5.5383-04
-3.2	1.0000	2.4934	3.4934	31.786	8.7777-04
-3.0	1.0000	2.4934	3.4934	31.326	1.3911-03
-2.8	1.0000	2.4934	3.4934	30.865	2.2048-03
-2.6	1.0000	2.4934	3.4934	30.405	3.4944-03
-2.4	1.0000	2.4934	3.4934	29.944	5.5383-03
-2.2	1.0000	2.4934	3.4934	29.484	8.7777-03
-2.0	1.0000	2.4934	3.4934	29.023	1.3920-02
-1.8	1.0000	2.4934	3.4934	28.563	2.2061-02
-1.6	1.0000	2.4933	3.4933	28.103	3.4965-02
-1.4	1.0000	2.4933	3.4933	27.642	5.5416-02
-1.2	1.0000	2.4933	3.4933	27.182	8.7828-02
-1.0	1.0000	2.4932	3.4932	26.721	1.3920-01
-0.8	1.0000	2.4931	3.4931	26.260	2.2062-01
-0.6	1.0001	2.4929	3.4929	25.800	3.4967-01
-0.4	1.0001	2.4927	3.4927	25.339	5.5423-01
-0.2	1.0005	2.4921	3.4926	24.878	8.7842-01
0.0	1.0008	2.4912	3.4920	24.417	1.3923 00
0.2	1.0008	2.4902	3.4911	23.955	2.2068 00
0.4	1.0010	2.4887	3.4897	23.493	3.4982 00
0.6	1.0014	2.4865	3.4878	23.031	5.5460 00
0.8	1.0018	2.4829	3.4847	22.566	8.7943 00
1.0	1.0027	2.4770	3.4798	22.099	1.3950 01
1.2	1.0043	2.4678	3.4721	21.627	2.2142 01
1.4	1.0070	2.4529	3.4598	21.150	3.5189 01
1.6	1.0124	2.4273	3.4397	20.658	5.6074 01
1.8	1.0234	2.3843	3.4077	20.149	8.9834 01
2.0	1.0458	2.3209	3.3667	19.610	1.4549 02
2.2	1.0979	2.2289	3.3268	19.026	2.4206 02

$$T = 400^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	p
-7.0	1.0000	2.4952	3.4952	40.666	1.4644-07
-6.8	1.0000	2.4952	3.4952	40.205	2.3209-07
-6.6	1.0000	2.4952	3.4952	39.745	3.6784-07
-6.4	1.0000	2.4952	3.4952	39.284	5.8298-07
-6.2	1.0000	2.4952	3.4952	38.824	9.2397-07
-6.0	1.0000	2.4952	3.4952	38.363	1.4644-06
-5.8	1.0000	2.4952	3.4952	37.903	2.3209-06
-5.6	1.0000	2.4952	3.4952	37.442	3.6784-06
-5.4	1.0000	2.4952	3.4952	36.982	5.8298-06
-5.2	1.0000	2.4952	3.4952	36.521	9.2397-06
-5.0	1.0000	2.4952	3.4952	36.061	1.4644-05
-4.8	1.0000	2.4952	3.4952	35.600	2.3209-05
-4.6	1.0000	2.4952	3.4952	35.140	3.6784-05
-4.4	1.0000	2.4952	3.4952	34.679	5.8298-05
-4.2	1.0000	2.4952	3.4952	34.219	9.2397-05
-4.0	1.0000	2.4952	3.4952	33.758	1.4644-04
-3.8	1.0000	2.4952	3.4952	33.298	2.3209-04
-3.6	1.0000	2.4952	3.4952	32.837	3.6784-04
-3.4	1.0000	2.4952	3.4952	32.377	5.8298-04
-3.2	1.0000	2.4952	3.4952	31.916	9.2397-04
-3.0	1.0000	2.4952	3.4952	31.456	1.4644-03
-2.8	1.0000	2.4952	3.4952	30.995	2.3209-03
-2.6	1.0000	2.4952	3.4952	30.535	3.6784-03
-2.4	1.0000	2.4952	3.4952	30.074	5.8298-03
-2.2	1.0000	2.4952	3.4952	29.614	9.2397-03
-2.0	1.0000	2.4952	3.4952	29.153	1.4652-02
-1.8	1.0000	2.4952	3.4952	28.693	2.3222-02
-1.6	1.0000	2.4951	3.4951	28.232	3.6804-02
-1.4	1.0000	2.4951	3.4951	27.772	5.8331-02
-1.2	1.0000	2.4951	3.4951	27.312	9.2448-02
-1.0	1.0000	2.4950	3.4950	26.851	1.4652-01
-0.8	1.0001	2.4948	3.4949	26.390	2.3223-01
-0.6	1.0001	2.4946	3.4947	25.929	3.6808-01
-0.4	1.0001	2.4945	3.4946	25.468	5.8337-01
-0.2	1.0007	2.4933	3.4940	25.007	9.2466-01
0.0	1.0009	2.4923	3.4934	24.546	1.4657 00
0.2	1.0010	2.4917	3.4927	24.084	2.3233 00
0.4	1.0013	2.4904	3.4917	23.622	3.6831 00
0.6	1.0016	2.4885	3.4901	23.160	5.8397 00
0.8	1.0024	2.4849	3.4873	22.696	9.2619 00
1.0	1.0035	2.4799	3.4835	22.228	1.4696 01
1.2	1.0055	2.4713	3.4769	21.758	2.3337 01
1.4	1.0091	2.4574	3.4665	21.281	3.7118 01
1.6	1.0156	2.4340	3.4496	20.790	5.9209 01
1.8	1.0287	2.3950	3.4236	20.283	9.5049 01
2.0	1.0545				1.5441 02
2.2	1.1127				2.5822 02

$$T = 450^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	p
-7.0	1.0000	2.5004	3.5004	40.966	1.6474=07
-6.8	1.0000	2.5004	3.5004	40.506	2.6110=07
-6.6	1.0000	2.5004	3.5004	40.045	4.1382=07
-6.4	1.0000	2.5004	3.5004	39.585	6.5586=07
-6.2	1.0000	2.5004	3.5004	39.124	1.0394=06
-6.0	1.0000	2.5004	3.5004	38.664	1.6474=06
-5.8	1.0000	2.5004	3.5004	38.203	2.6110=06
-5.6	1.0000	2.5004	3.5004	37.743	4.1382=06
-5.4	1.0000	2.5004	3.5004	37.282	6.5586=06
-5.2	1.0000	2.5004	3.5004	36.822	1.0394=05
-5.0	1.0000	2.5004	3.5004	36.361	1.6474=05
-4.8	1.0000	2.5004	3.5004	35.901	2.6110=05
-4.6	1.0000	2.5004	3.5004	35.440	4.1382=05
-4.4	1.0000	2.5004	3.5004	34.979	6.5586=05
-4.2	1.0000	2.5004	3.5004	34.519	1.0394=04
-4.0	1.0000	2.5004	3.5004	34.058	1.6474=04
-3.8	1.0000	2.5004	3.5004	33.598	2.6110=04
-3.6	1.0000	2.5004	3.5004	33.137	4.1382=04
-3.4	1.0000	2.5004	3.5004	32.677	6.5586=04
-3.2	1.0000	2.5004	3.5004	32.216	1.0394=03
-3.0	1.0000	2.5004	3.5004	31.756	1.6474=03
-2.8	1.0000	2.5004	3.5004	31.295	2.6110=03
-2.6	1.0000	2.5004	3.5004	30.835	4.1382=03
-2.4	1.0000	2.5004	3.5004	30.374	6.5586=03
-2.2	1.0000	2.5004	3.5004	29.914	1.0402=02
-2.0	1.0000	2.5004	3.5004	29.453	1.6485=02
-1.8	1.0000	2.5004	3.5004	28.992	2.6127=02
-1.6	1.0000	2.5003	3.5003	28.532	4.1409=02
-1.4	1.0000	2.5003	3.5003	28.071	6.5629=02
-1.2	1.0000	2.5003	3.5003	27.611	1.0402=01
-1.0	1.0001	2.5002	3.5002	27.150	1.6486=01
-0.8	1.0001	2.5001	3.5002	26.689	2.6128=01
-0.6	1.0001	2.5000	3.5002	26.228	4.1411=01
-0.4	1.0002	2.4998	3.5000	25.767	6.5632=01
-0.2	1.0008	2.4965	3.4973	25.304	1.0404=00
0.0	1.0010	2.4960	3.4970	24.842	1.6492 00
0.2	1.0013	2.4955	3.4968	24.380	2.6145 00
0.4	1.0018	2.4944	3.4961	23.920	4.1456 00
0.6	1.0025	2.4926	3.4951	23.456	6.5750 00
0.8	1.0036	2.4903	3.4938	22.993	1.0432 01
1.0	1.0055	2.4861	3.4916	22.527	1.6565 01
1.2	1.0086	2.4798	3.4883	22.058	2.6334 01
1.4	1.0138	2.4687	3.4825	21.580	4.1954 01
1.6	1.0231	2.4499	3.4730	21.092	6.7106 01
1.8	1.0404				1.0815 02
2.0	1.0726				1.7670 02
2.2	1.1408				2.9786 02

$$T = 500^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	p
-7.0	1.0000	2.5074	3.5074	41.237	1.8305-07
-6.8	1.0000	2.5074	3.5074	40.776	2.9011-07
-6.6	1.0000	2.5074	3.5074	40.316	4.5980-07
-6.4	1.0000	2.5074	3.5074	39.855	7.2873-07
-6.2	1.0000	2.5074	3.5074	39.395	1.1549-06
-6.0	1.0000	2.5074	3.5074	38.934	1.8305-06
-5.8	1.0000	2.5074	3.5074	38.474	2.9011-06
-5.6	1.0000	2.5074	3.5074	38.013	4.5980-06
-5.4	1.0000	2.5074	3.5074	37.553	7.2873-06
-5.2	1.0000	2.5074	3.5074	37.092	1.1549-05
-5.0	1.0000	2.5074	3.5074	36.632	1.8305-05
-4.8	1.0000	2.5074	3.5074	36.171	2.9011-05
-4.6	1.0000	2.5074	3.5074	35.711	4.5980-05
-4.4	1.0000	2.5074	3.5074	35.250	7.2873-05
-4.2	1.0000	2.5074	3.5074	34.790	1.1549-04
-4.0	1.0000	2.5074	3.5074	34.329	1.8305-04
-3.8	1.0000	2.5074	3.5074	33.869	2.9011-04
-3.6	1.0000	2.5074	3.5074	33.408	4.5980-04
-3.4	1.0000	2.5074	3.5074	32.948	7.2873-04
-3.2	1.0000	2.5074	3.5074	32.487	1.1549-03
-3.0	1.0000	2.5074	3.5074	32.026	1.8305-03
-2.8	1.0000	2.5074	3.5074	31.566	2.9011-03
-2.6	1.0000	2.5074	3.5074	31.105	4.5980-03
-2.4	1.0000	2.5074	3.5074	30.645	7.2873-03
-2.2	1.0000	2.5074	3.5074	30.184	1.1556-02
-2.0	1.0000	2.5074	3.5074	29.724	1.8315-02
-1.8	1.0000	2.5074	3.5074	29.263	2.9027-02
-1.6	1.0000	2.5073	3.5073	28.803	4.6005-02
-1.4	1.0000	2.5073	3.5073	28.342	7.2913-02
-1.2	1.0000	2.5073	3.5073	27.881	1.1556-01
-1.0	1.0001	2.5072	3.5073	27.421	1.8316-01
-0.8	1.0001	2.5071	3.5072	26.960	2.9031-01
-0.6	1.0002	2.5070	3.5072	26.500	4.6015-01
-0.4	1.0003	2.5069	3.5071	26.039	7.2928-01
-0.2	1.0004	2.5065	3.5069	25.574	1.1552 00
0.0	1.0007	2.5059	3.5067	25.109	1.8306 00
0.2	1.0011	2.5052	3.5063	24.652	2.9039 00
0.4	1.0017	2.5040	3.5057	24.184	4.6056 00
0.6	1.0026	2.5021	3.5047	23.727	7.3062 00
0.8	1.0042	2.4992	3.5034	23.256	1.1597 01
1.0	1.0065	2.4946	3.5011	22.783	1.8424 01
1.2	1.0106	2.4871	3.4977	22.314	2.9317 01
1.4	1.0173	2.4746	3.4919	21.850	4.6773 01
1.6	1.0288	2.4553	3.4840	21.358	7.4965 01
1.8	1.0490				1.2114 02
2.0	1.0862				1.9882 02

$$T = 550^{\circ}\text{K}$$

Log $\rho/\rho_0$	z	E/RT	H/RT	S/R	p
-7.0	1.0000	2.5166	3.5166	41.485	2.0135-07
-6.8	1.0000	2.5166	3.5166	41.024	3.1912-07
-6.6	1.0000	2.5166	3.5166	40.563	5.0578-07
-6.4	1.0000	2.5166	3.5166	40.103	8.0160-07
-6.2	1.0000	2.5166	3.5166	39.642	1.2704-06
-6.0	1.0000	2.5166	3.5166	39.182	2.0135-06
-5.8	1.0000	2.5166	3.5166	38.721	3.1912-06
-5.6	1.0000	2.5166	3.5166	38.261	5.0578-06
-5.4	1.0000	2.5166	3.5166	37.800	8.0160-06
-5.2	1.0000	2.5166	3.5166	37.340	1.2704-05
-5.0	1.0000	2.5166	3.5166	36.879	2.0135-05
-4.8	1.0000	2.5166	3.5166	36.419	3.1912-05
-4.6	1.0000	2.5166	3.5166	35.958	5.0578-05
-4.4	1.0000	2.5166	3.5166	35.498	8.0160-05
-4.2	1.0000	2.5166	3.5166	35.037	1.2704-04
-4.0	1.0000	2.5166	3.5166	34.577	2.0135-04
-3.8	1.0000	2.5166	3.5166	34.116	3.1912-04
-3.6	1.0000	2.5166	3.5166	33.656	5.0578-04
-3.4	1.0000	2.5166	3.5166	33.195	8.0160-04
-3.2	1.0000	2.5166	3.5166	32.735	1.2704-03
-3.0	1.0000	2.5166	3.5166	32.274	2.0135-03
-2.8	1.0000	2.5166	3.5166	31.814	3.1912-03
-2.6	1.0000	2.5166	3.5166	31.353	5.0578-03
-2.4	1.0000	2.5166	3.5166	30.893	8.0160-03
-2.2	1.0000	2.5166	3.5166	30.432	1.2713-02
-2.0	1.0000	2.5166	3.5166	29.971	2.0149-02
-1.8	1.0000	2.5166	3.5166	29.511	3.1934-02
-1.6	1.0000	2.5166	3.5166	29.050	5.0612-02
-1.4	1.0000	2.5166	3.5166	28.589	8.0215-02
-1.2	1.0001	2.5165	3.5166	28.129	1.2713-01
-1.0	1.0001	2.5164	3.5165	27.669	2.0150-01
-0.8	1.0001	2.5163	3.5165	27.208	3.1936-01
-0.6	1.0002	2.5162	3.5165	26.747	5.0614-01
-0.4	1.0003	2.5159	3.5162	26.288	8.0207-01
-0.2	1.0005	2.5154	3.5159	25.824	1.2711 00
0.0	1.0008	2.5150	3.5158	25.353	2.0151 00
0.2	1.0013	2.5143	3.5156	24.897	3.1952 00
0.4	1.0019	2.5134	3.5153	24.437	5.0675 00
0.6	1.0031	2.5116	3.5147	23.980	8.0406 00
0.8	1.0048	2.5092	3.5140	23.507	1.2765 01
1.0	1.0075	2.5055	3.5131	23.036	2.0286 01
1.2	1.0122	2.4993	3.5115	22.568	3.2302 01
1.4	1.0202	2.4879	3.5082	22.097	5.1598 01
1.6	1.0332	2.4704	3.5036	21.605	8.2819 01
1.8	1.0559				1.3415 02
2.0	1.0980				2.2107 02



$$T = 600^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	P
-7.0	1.0000	2.5270	3.5270	41.715	2.1966-07
-6.8	1.0000	2.5270	3.5270	41.254	3.4813-07
-6.6	1.0000	2.5270	3.5270	40.793	5.5176-07
-6.4	1.0000	2.5270	3.5270	40.333	8.7448-07
-6.2	1.0000	2.5270	3.5270	39.872	1.3859-06
-6.0	1.0000	2.5270	3.5270	39.412	2.1966-06
-5.8	1.0000	2.5270	3.5270	38.951	3.4813-06
-5.6	1.0000	2.5270	3.5270	38.491	5.5176-06
-5.4	1.0000	2.5270	3.5270	38.030	8.7448-06
-5.2	1.0000	2.5270	3.5270	37.570	1.3859-05
-5.0	1.0000	2.5270	3.5270	37.109	2.1966-05
-4.8	1.0000	2.5270	3.5270	36.649	3.4813-05
-4.6	1.0000	2.5270	3.5270	36.188	5.5176-05
-4.4	1.0000	2.5270	3.5270	35.728	8.7448-05
-4.2	1.0000	2.5270	3.5270	35.267	1.3859-04
-4.0	1.0000	2.5270	3.5270	34.807	2.1966-04
-3.8	1.0000	2.5270	3.5270	34.346	3.4813-04
-3.6	1.0000	2.5270	3.5270	33.886	5.5176-04
-3.4	1.0000	2.5270	3.5270	33.425	8.7448-04
-3.2	1.0000	2.5270	3.5270	32.965	1.3859-03
-3.0	1.0000	2.5270	3.5270	32.504	2.1966-03
-2.8	1.0000	2.5270	3.5270	32.044	3.4813-03
-2.6	1.0000	2.5270	3.5270	31.583	5.5176-03
-2.4	1.0000	2.5270	3.5270	31.123	8.7448-03
-2.2	1.0000	2.5270	3.5270	30.662	1.3867-02
-2.0	1.0000	2.5270	3.5270	30.201	2.1978-02
-1.8	1.0000	2.5270	3.5270	29.741	3.4833-02
-1.6	1.0000	2.5270	3.5270	29.280	5.5206-02
-1.4	1.0000	2.5270	3.5270	28.820	8.7496-02
-1.2	1.0001	2.5269	3.5270	28.359	1.3868-01
-1.0	1.0001	2.5268	3.5269	27.899	2.1981-01
-0.8	1.0001	2.5267	3.5269	27.438	3.4840-01
-0.6	1.0002	2.5266	3.5269	26.977	5.5221-01
-0.4	1.0004	2.5264	3.5268	26.515	8.7496-01
-0.2	1.0006	2.5261	3.5267	26.050	1.3867-00
0.0	1.0009	2.5257	3.5266	25.587	2.1985 00
0.2	1.0015	2.5251	3.5266	25.133	3.4865 00
0.4	1.0022	2.5242	3.5264	24.675	5.5297 00
0.6	1.0035	2.5226	3.5261	24.208	8.7750 00
0.8	1.0055	2.5203	3.5258	23.745	1.3935 01
1.0	1.0086	2.5166	3.5253	23.275	2.2154 01
1.2	1.0138	2.5107	3.5245	22.811	3.5293 01
1.4	1.0226	2.5010	3.5236	22.334	5.6419 01
1.6	1.0369	2.4864	3.5233	21.842	9.0670 01
1.8	1.0620				1.4718 02
2.0	1.1064				2.4302 02

T = 650°K

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	p
-7.0	1.0000	2.5383	3.5383	41.929	2.3796-07
-6.8	1.0000	2.5383	3.5383	41.469	3.7714-07
-6.6	1.0000	2.5383	3.5383	41.008	5.9774-07
-6.4	1.0000	2.5383	3.5383	40.548	9.4735-07
-6.2	1.0000	2.5383	3.5383	40.087	1.5014-06
-6.0	1.0000	2.5383	3.5383	39.627	2.3796-06
-5.8	1.0000	2.5383	3.5383	39.166	3.7714-06
-5.6	1.0000	2.5383	3.5383	38.706	5.9774-06
-5.4	1.0000	2.5383	3.5383	38.245	9.4735-06
-5.2	1.0000	2.5383	3.5383	37.785	1.5014-05
-5.0	1.0000	2.5383	3.5383	37.324	2.3796-05
-4.8	1.0000	2.5383	3.5383	36.864	3.7714-05
-4.6	1.0000	2.5383	3.5383	36.403	5.9774-05
-4.4	1.0000	2.5383	3.5383	35.943	9.4735-05
-4.2	1.0000	2.5383	3.5383	35.482	1.5014-04
-4.0	1.0000	2.5383	3.5383	35.022	2.3796-04
-3.8	1.0000	2.5383	3.5383	34.561	3.7714-04
-3.6	1.0000	2.5383	3.5383	34.101	5.9774-04
-3.4	1.0000	2.5383	3.5383	33.640	9.4735-04
-3.2	1.0000	2.5383	3.5383	33.180	1.5014-03
-3.0	1.0000	2.5383	3.5383	32.719	2.3796-03
-2.8	1.0000	2.5383	3.5383	32.259	3.7714-03
-2.6	1.0000	2.5383	3.5383	31.798	5.9774-03
-2.4	1.0000	2.5383	3.5383	31.338	9.4735-03
-2.2	1.0000	2.5383	3.5383	30.877	1.5023-02
-2.0	1.0000	2.5383	3.5383	30.416	2.3810-02
-1.8	1.0000	2.5383	3.5383	29.956	3.7736-02
-1.6	1.0000	2.5383	3.5383	29.495	5.9807-02
-1.4	1.0000	2.5383	3.5383	29.035	9.4787-02
-1.2	1.0001	2.5382	3.5383	28.574	1.5024-01
-1.0	1.0001	2.5382	3.5383	28.113	2.3812-01
-0.8	1.0002	2.5381	3.5383	27.652	3.7742-01
-0.6	1.0002	2.5380	3.5383	27.192	5.9823-01
-0.4	1.0004	2.5382	3.5386	26.733	9.4776-01
-0.2	1.0006	2.5380	3.5387	26.269	1.5023 00
0.0	1.0010	2.5377	3.5387	25.803	2.3820 00
0.2	1.0016	2.5371	3.5387	25.340	3.7774 00
0.4	1.0024	2.5364	3.5388	24.883	5.9916 00
0.6	1.0037	2.5351	3.5388	24.421	9.5085 00
0.8	1.0059	2.5331	3.5389	23.953	1.5102 01
1.0	1.0093	2.5298	3.5391	23.481	2.4017 01
1.2	1.0150	2.5244	3.5394	23.023	3.8277 01
1.4	1.0245	2.5158	3.5403	22.548	6.1236 01
1.6	1.0399	2.5026	3.5425	22.056	9.8510 01
1.8	1.0667				1.6015 02
2.0	1.1135				2.6496 02

$$T = 700^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	P
-7.0	1.0000	2.5516	3.5516	42.131	2.5627-07
-6.8	1.0000	2.5516	3.5516	41.671	4.0616-07
-6.6	1.0000	2.5516	3.5516	41.210	6.4372-07
-6.4	1.0000	2.5516	3.5516	40.750	1.0202-06
-6.2	1.0000	2.5516	3.5516	40.289	1.6169-06
-6.0	1.0000	2.5516	3.5516	39.829	2.5627-06
-5.8	1.0000	2.5516	3.5516	39.368	4.0616-06
-5.6	1.0000	2.5516	3.5516	38.908	6.4372-06
-5.4	1.0000	2.5516	3.5516	38.447	1.0202-05
-5.2	1.0000	2.5516	3.5516	37.987	1.6169-05
-5.0	1.0000	2.5516	3.5516	37.526	2.5627-05
-4.8	1.0000	2.5516	3.5516	37.066	4.0616-05
-4.6	1.0000	2.5516	3.5516	36.605	6.4372-05
-4.4	1.0000	2.5516	3.5516	36.145	1.0202-04
-4.2	1.0000	2.5516	3.5516	35.684	1.6169-04
-4.0	1.0000	2.5516	3.5516	35.224	2.5627-04
-3.8	1.0000	2.5516	3.5516	34.763	4.0616-04
-3.6	1.0000	2.5516	3.5516	34.303	6.4372-04
-3.4	1.0000	2.5516	3.5516	33.842	1.0202-03
-3.2	1.0000	2.5516	3.5516	33.382	1.6169-03
-3.0	1.0000	2.5516	3.5516	32.921	2.5627-03
-2.8	1.0000	2.5516	3.5516	32.461	4.0616-03
-2.6	1.0000	2.5516	3.5516	32.000	6.4372-03
-2.4	1.0000	2.5516	3.5516	31.539	1.0208-02
-2.2	1.0000	2.5516	3.5516	31.079	1.6178-02
-2.0	1.0000	2.5516	3.5516	30.618	2.5641-02
-1.8	1.0000	2.5516	3.5516	30.158	4.0638-02
-1.6	1.0000	2.5516	3.5516	29.697	6.4407-02
-1.4	1.0000	2.5516	3.5516	29.236	1.0208-01
-1.2	1.0001	2.5516	3.5516	28.776	1.6179-01
-1.0	1.0001	2.5515	3.5517	28.315	2.5644-01
-0.8	1.0002	2.5515	3.5517	27.855	4.0646-01
-0.6	1.0003	2.5514	3.5517	27.394	6.4427-01
-0.4	1.0004	2.5516	3.5520	26.929	1.0206 00
-0.2	1.0007	2.5514	3.5521	26.464	1.6180 00
0.0	1.0011	2.5511	3.5522	26.004	2.5654 00
0.2	1.0017	2.5506	3.5523	25.546	4.0683 00
0.4	1.0026	2.5498	3.5524	25.090	6.4537 00
0.6	1.0040	2.5486	3.5526	24.626	1.0243 01
0.8	1.0064	2.5467	3.5531	24.158	1.6272 01
1.0	1.0100	2.5438	3.5538	23.694	2.5881 01
1.2	1.0161	2.5389	3.5550	23.218	4.1270 01
1.4	1.0261	2.5312	3.5573	22.750	6.6047 01
1.6	1.0425				1.0635 02
1.8	1.0702				1.7303 02
2.0	1.1192				2.8680 02

$$T = 750^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	P
-7.0	1.0000	2.5660	3.5660	42.321	2.7457-07
-6.8	1.0000	2.5660	3.5660	41.861	4.3517-07
-6.6	1.0000	2.5660	3.5660	41.400	6.8970-07
-6.4	1.0000	2.5660	3.5660	40.940	1.0931-06
-6.2	1.0000	2.5660	3.5660	40.479	1.7324-06
-6.0	1.0000	2.5660	3.5660	40.019	2.7457-06
-5.8	1.0000	2.5660	3.5660	39.558	4.3517-06
-5.6	1.0000	2.5660	3.5660	39.098	6.8970-06
-5.4	1.0000	2.5660	3.5660	38.637	1.0931-05
-5.2	1.0000	2.5660	3.5660	38.177	1.7324-05
-5.0	1.0000	2.5660	3.5660	37.716	2.7457-05
-4.8	1.0000	2.5660	3.5660	37.256	4.3517-05
-4.6	1.0000	2.5660	3.5660	36.795	6.8970-05
-4.4	1.0000	2.5660	3.5660	36.335	1.0931-04
-4.2	1.0000	2.5660	3.5660	35.874	1.7324-04
-4.0	1.0000	2.5660	3.5660	35.414	2.7457-04
-3.8	1.0000	2.5660	3.5660	34.953	4.3517-04
-3.6	1.0000	2.5660	3.5660	34.493	6.8970-04
-3.4	1.0000	2.5660	3.5660	34.032	1.0931-03
-3.2	1.0000	2.5660	3.5660	33.572	1.7324-03
-3.0	1.0000	2.5660	3.5660	33.111	2.7457-03
-2.8	1.0000	2.5660	3.5660	32.651	4.3517-03
-2.6	1.0000	2.5660	3.5660	32.190	6.8970-03
-2.4	1.0000	2.5660	3.5660	31.729	1.0937-02
-2.2	1.0000	2.5660	3.5660	31.269	1.7334-02
-2.0	1.0000	2.5660	3.5660	30.809	2.7473-02
-1.8	1.0000	2.5660	3.5660	30.348	4.3541-02
-1.6	1.0000	2.5660	3.5660	29.888	6.9008-02
-1.4	1.0001	2.5660	3.5660	29.427	1.0937-01
-1.2	1.0001	2.5659	3.5660	28.967	1.7335-01
-1.0	1.0001	2.5659	3.5660	28.506	2.7477-01
-0.8	1.0002	2.5658	3.5660	28.045	4.3551-01
-0.6	1.0003	2.5658	3.5661	27.585	6.9029-01
-0.4	1.0005	2.5659	3.5663	27.120	1.0936 00
-0.2	1.0007	2.5657	3.5664	26.654	1.7336 00
0.0	1.0012	2.5653	3.5665	26.196	2.7490 00
0.2	1.0018	2.5648	3.5666	25.730	4.3595 00
0.4	1.0028	2.5641	3.5669	25.282	6.9158 00
0.6	1.0042	2.5631	3.5673	24.816	1.0977 01
0.8	1.0068	2.5614	3.5681	24.348	1.7441 01
1.0	1.0106	2.5587	3.5693	23.877	2.7749 01
1.2	1.0169	2.5544	3.5713	23.417	4.4253 01
1.4	1.0274	2.5475	3.5748	22.933	7.0856 01
1.6	1.0447				1.1419 02
1.8	1.0735				1.8597 02

$$T = 800^{\circ}\text{K}$$

Log $\rho/\rho_0$	z	E/RT	H/RT	S/R	p
-7.0	1.0000	2.5817	3.5817	42.503	2.9288-07
-6.8	1.0000	2.5817	3.5817	42.042	4.6418-07
-6.6	1.0000	2.5817	3.5817	41.582	7.3568-07
-6.4	1.0000	2.5817	3.5817	41.121	1.1659-06
-6.2	1.0000	2.5817	3.5817	40.661	1.8479-06
-6.0	1.0000	2.5817	3.5817	40.200	2.9288-06
-5.8	1.0000	2.5817	3.5817	39.740	4.6418-06
-5.6	1.0000	2.5817	3.5817	39.279	7.3568-06
-5.4	1.0000	2.5817	3.5817	38.819	1.1659-05
-5.2	1.0000	2.5817	3.5817	38.358	1.8479-05
-5.0	1.0000	2.5817	3.5817	37.898	2.9288-05
-4.8	1.0000	2.5817	3.5817	37.437	4.6418-05
-4.6	1.0000	2.5817	3.5817	36.977	7.3568-05
-4.4	1.0000	2.5817	3.5817	36.516	1.1659-04
-4.2	1.0000	2.5817	3.5817	36.056	1.8479-04
-4.0	1.0000	2.5817	3.5817	35.595	2.9288-04
-3.8	1.0000	2.5817	3.5817	35.135	4.6418-04
-3.6	1.0000	2.5817	3.5817	34.674	7.3568-04
-3.4	1.0000	2.5817	3.5817	34.214	1.1659-03
-3.2	1.0000	2.5817	3.5817	33.753	1.8479-03
-3.0	1.0000	2.5817	3.5817	33.292	2.9288-03
-2.8	1.0000	2.5817	3.5817	32.832	4.6418-03
-2.6	1.0000	2.5817	3.5817	32.371	7.3568-03
-2.4	1.0000	2.5817	3.5817	31.911	1.1668-02
-2.2	1.0000	2.5817	3.5817	31.450	1.8492-02
-2.0	1.0000	2.5817	3.5817	30.990	2.9308-02
-1.8	1.0000	2.5817	3.5817	30.529	4.6449-02
-1.6	1.0000	2.5817	3.5817	30.068	7.3615-02
-1.4	1.0001	2.5817	3.5817	29.608	1.1667-01
-1.2	1.0001	2.5816	3.5817	29.147	1.8492-01
-1.0	1.0001	2.5815	3.5817	28.687	2.9310-01
-0.8	1.0002	2.5815	3.5817	28.227	4.6455-01
-0.6	1.0003	2.5814	3.5817	27.766	7.3626-01
-0.4	1.0005	2.5810	3.5815	27.304	1.1665 00
-0.2	1.0008	2.5808	3.5816	26.839	1.8493 00
0.0	1.0012	2.5805	3.5817	26.373	2.9322 00
0.2	1.0018	2.5802	3.5820	25.912	4.6501 00
0.4	1.0029	2.5793	3.5822	25.458	7.3775 00
0.6	1.0044	2.5783	3.5828	24.996	1.1711 01
0.8	1.0070	2.5768	3.5838	24.523	1.8609 01
1.0	1.0110	2.5744	3.5853	24.054	2.9608 01
1.2	1.0175	2.5711	3.5887	23.584	4.7230 01
1.4	1.0284	2.5644	3.5928	23.119	7.5656 01
1.6	1.0462				1.2198 02
1.8	1.0762				1.9886 02

T = 850°K

Log $\rho/\rho_0$	z	E/RT	H/RT	S/R	p
-7.0	1.0000	2.5971	3.5971	42.676	3.1118-07
-6.8	1.0000	2.5971	3.5971	42.216	4.9319-07
-6.6	1.0000	2.5971	3.5971	41.755	7.8166-07
-6.4	1.0000	2.5971	3.5971	41.295	1.2388-06
-6.2	1.0000	2.5971	3.5971	40.834	1.9634-06
-6.0	1.0000	2.5971	3.5971	40.374	3.1118-06
-5.8	1.0000	2.5971	3.5971	39.913	4.9319-06
-5.6	1.0000	2.5971	3.5971	39.453	7.8166-06
-5.4	1.0000	2.5971	3.5971	38.992	1.2388-05
-5.2	1.0000	2.5971	3.5971	38.532	1.9634-05
-5.0	1.0000	2.5971	3.5971	38.071	3.1118-05
-4.8	1.0000	2.5971	3.5971	37.611	4.9319-05
-4.6	1.0000	2.5971	3.5971	37.150	7.8166-05
-4.4	1.0000	2.5971	3.5971	36.689	1.2388-04
-4.2	1.0000	2.5971	3.5971	36.229	1.9634-04
-4.0	1.0000	2.5971	3.5971	35.768	3.1118-04
-3.8	1.0000	2.5971	3.5971	35.308	4.9319-04
-3.6	1.0000	2.5971	3.5971	34.847	7.8166-04
-3.4	1.0000	2.5971	3.5971	34.387	1.2388-03
-3.2	1.0000	2.5971	3.5971	33.926	1.9634-03
-3.0	1.0000	2.5971	3.5971	33.466	3.1118-03
-2.8	1.0000	2.5971	3.5971	33.005	4.9319-03
-2.6	1.0000	2.5971	3.5971	32.545	7.8166-03
-2.4	1.0000	2.5971	3.5971	32.084	1.2395-02
-2.2	1.0000	2.5971	3.5971	31.624	1.9645-02
-2.0	1.0000	2.5971	3.5971	31.163	3.1136-02
-1.8	1.0000	2.5971	3.5971	30.702	4.9348-02
-1.6	1.0000	2.5971	3.5971	30.242	7.8214-02
-1.4	1.0001	2.5971	3.5971	29.781	1.2396-01
-1.2	1.0001	2.5971	3.5971	29.321	1.9648-01
-1.0	1.0001	2.5970	3.5971	28.860	3.1140-01
-0.8	1.0002	2.5969	3.5971	28.400	4.9357-01
-0.6	1.0003	2.5966	3.5970	27.938	7.8220-01
-0.4	1.0005	2.5963	3.5968	27.473	1.2394 00
-0.2	1.0007	2.5962	3.5969	27.008	1.9648 00
0.0	1.0012	2.5959	3.5971	26.552	3.1158 00
0.2	1.0018	2.5957	3.5975	26.092	4.9407 00
0.4	1.0029	2.5952	3.5981	25.636	7.8392 00
0.6	1.0046	2.5943	3.5988	25.169	1.2445 01
0.8	1.0072	2.5927	3.6000	24.701	1.9776 01
1.0	1.0114	2.5906	3.6019	24.233	3.1472 01
1.2	1.0182	2.5871	3.6052	23.766	5.0216 01
1.4	1.0294	2.5816	3.6110	23.285	8.0462 01
1.6	1.0478				1.2981 02
1.8	1.0787				2.1177 02

$$T = 900^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	p
-7.0	1.0000	2.6129	3.6129	42.841	3.2949-07
-6.8	1.0000	2.6129	3.6129	42.381	5.2220-07
-6.6	1.0000	2.6129	3.6129	41.920	8.2764-07
-6.4	1.0000	2.6129	3.6129	41.459	1.3117-06
-6.2	1.0000	2.6129	3.6129	40.999	2.0789-06
-6.0	1.0000	2.6129	3.6129	40.538	3.2949-06
-5.8	1.0000	2.6129	3.6129	40.078	5.2220-06
-5.6	1.0000	2.6129	3.6129	39.617	8.2764-06
-5.4	1.0000	2.6129	3.6129	39.157	1.3117-05
-5.2	1.0000	2.6129	3.6129	38.696	2.0789-05
-5.0	1.0000	2.6129	3.6129	38.236	3.2949-05
-4.8	1.0000	2.6129	3.6129	37.775	5.2220-05
-4.6	1.0000	2.6129	3.6129	37.315	8.2764-05
-4.4	1.0000	2.6129	3.6129	36.854	1.3117-04
-4.2	1.0000	2.6129	3.6129	36.394	2.0789-04
-4.0	1.0000	2.6129	3.6129	35.933	3.2949-04
-3.8	1.0000	2.6129	3.6129	35.473	5.2220-04
-3.6	1.0000	2.6129	3.6129	35.012	8.2764-04
-3.4	1.0000	2.6129	3.6129	34.552	1.3117-03
-3.2	1.0000	2.6129	3.6129	34.091	2.0789-03
-3.0	1.0000	2.6129	3.6129	33.631	3.2949-03
-2.8	1.0000	2.6129	3.6129	33.170	5.2220-03
-2.6	1.0000	2.6129	3.6129	32.710	8.2764-03
-2.4	1.0000	2.6129	3.6129	32.249	1.3126-02
-2.2	1.0000	2.6129	3.6129	31.788	2.0803-02
-2.0	1.0000	2.6129	3.6129	31.328	3.2970-02
-1.8	1.0000	2.6129	3.6129	30.867	5.2254-02
-1.6	1.0000	2.6129	3.6129	30.407	8.2816-02
-1.4	1.0001	2.6129	3.6129	29.946	1.3126-01
-1.2	1.0001	2.6128	3.6129	29.486	2.0804-01
-1.0	1.0001	2.6128	3.6129	29.025	3.2973-01
-0.8	1.0002	2.6127	3.6129	28.564	5.2262-01
-0.6	1.0003	2.6126	3.6129	28.106	8.2815-01
-0.4	1.0005	2.6126	3.6131	27.645	1.3123 00
-0.2	1.0007	2.6125	3.6132	27.180	2.0804 00
0.0	1.0012	2.6122	3.6134	26.715	3.2988 00
0.2	1.0018	2.6120	3.6138	26.256	5.2312 00
0.4	1.0030	2.6114	3.6144	25.798	8.3007 00
0.6	1.0047	2.6106	3.6153	25.324	1.3178 01
0.8	1.0073	2.6096	3.6169	24.863	2.0940 01
1.0	1.0117	2.6077	3.6195	24.401	3.3334 01
1.2	1.0188	2.6040	3.6228	23.922	5.3201 01
1.4	1.0302	2.5991	3.6293	23.455	8.5259 01
1.6	1.0489				1.3758 02
1.8	1.0810				2.2471 02

$$T = 950^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	P
-7.0	1.0000	2.6291	3.6291	42.999	3.4779-07
-6.8	1.0000	2.6291	3.6291	42.538	5.5121-07
-6.6	1.0000	2.6291	3.6291	42.078	8.7362-07
-6.4	1.0000	2.6291	3.6291	41.617	1.3845-06
-6.2	1.0000	2.6291	3.6291	41.157	2.1944-06
-6.0	1.0000	2.6291	3.6291	40.696	3.4779-06
-5.8	1.0000	2.6291	3.6291	40.236	5.5121-06
-5.6	1.0000	2.6291	3.6291	39.775	8.7362-06
-5.4	1.0000	2.6291	3.6291	39.315	1.3845-05
-5.2	1.0000	2.6291	3.6291	38.854	2.1944-05
-5.0	1.0000	2.6291	3.6291	38.394	3.4779-05
-4.8	1.0000	2.6291	3.6291	37.933	5.5121-05
-4.6	1.0000	2.6291	3.6291	37.473	8.7362-05
-4.4	1.0000	2.6291	3.6291	37.012	1.3845-04
-4.2	1.0000	2.6291	3.6291	36.552	2.1944-04
-4.0	1.0000	2.6291	3.6291	36.091	3.4779-04
-3.8	1.0000	2.6291	3.6291	35.631	5.5121-04
-3.6	1.0000	2.6291	3.6291	35.170	8.7362-04
-3.4	1.0000	2.6291	3.6291	34.710	1.3845-03
-3.2	1.0000	2.6291	3.6291	34.249	2.1944-03
-3.0	1.0000	2.6291	3.6291	33.789	3.4779-03
-2.8	1.0000	2.6291	3.6291	33.328	5.5121-03
-2.6	1.0000	2.6291	3.6291	32.868	8.7362-03
-2.4	1.0000	2.6291	3.6291	32.407	1.3852-02
-2.2	1.0000	2.6291	3.6291	31.946	2.1955-02
-2.0	1.0000	2.6291	3.6291	31.486	3.4798-02
-1.8	1.0000	2.6291	3.6291	31.025	5.5153-02
-1.6	1.0000	2.6291	3.6291	30.565	8.7415-02
-1.4	1.0001	2.6291	3.6291	30.104	1.3855-01
-1.2	1.0001	2.6290	3.6291	29.644	2.1959-01
-1.0	1.0001	2.6290	3.6291	29.183	3.4804-01
-0.8	1.0002	2.6289	3.6291	28.722	5.5165-01
-0.6	1.0003	2.6291	3.6294	28.264	8.7404-01
-0.4	1.0005	2.6292	3.6297	27.801	1.3852 00
-0.2	1.0008	2.6291	3.6298	27.338	2.1961 00
0.0	1.0013	2.6288	3.6301	26.881	3.4822 00
0.2	1.0019	2.6285	3.6304	26.420	5.5224 00
0.4	1.0031	2.6279	3.6310	25.953	8.7624 00
0.6	1.0047	2.6272	3.6319	25.478	1.3910 01
0.8	1.0076	2.6260	3.6335	25.011	2.2109 01
1.0	1.0120	2.6231	3.6360	24.555	3.5194 01
1.2	1.0193	2.6210	3.6403	24.089	5.6181 01
1.4	1.0308	2.6167	3.6475	23.609	9.0051 01
1.6	1.0499				1.4537 02
1.8	1.0824				2.3750 02



$$T = 1000^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	P
-7.0	1.0000	2.6467	3.6467	43.151	3.6610-07
-6.8	1.0000	2.6467	3.6467	42.690	5.8022-07
-6.6	1.0000	2.6467	3.6467	42.230	9.1960-07
-6.4	1.0000	2.6467	3.6467	41.769	1.4574-06
-6.2	1.0000	2.6467	3.6467	41.309	2.3099-06
-6.0	1.0000	2.6467	3.6467	40.848	3.6610-06
-5.8	1.0000	2.6467	3.6467	40.388	5.8022-06
-5.6	1.0000	2.6467	3.6467	39.927	9.1960-06
-5.4	1.0000	2.6467	3.6467	39.467	1.4574-05
-5.2	1.0000	2.6467	3.6467	39.006	2.3099-05
-5.0	1.0000	2.6467	3.6467	38.546	3.6610-05
-4.8	1.0000	2.6467	3.6467	38.085	5.8022-05
-4.6	1.0000	2.6467	3.6467	37.624	9.1960-05
-4.4	1.0000	2.6467	3.6467	37.164	1.4574-04
-4.2	1.0000	2.6467	3.6467	36.703	2.3099-04
-4.0	1.0000	2.6467	3.6467	36.243	3.6610-04
-3.8	1.0000	2.6467	3.6467	35.782	5.8022-04
-3.6	1.0000	2.6467	3.6467	35.322	9.1960-04
-3.4	1.0000	2.6467	3.6467	34.861	1.4574-03
-3.2	1.0000	2.6467	3.6467	34.401	2.3099-03
-3.0	1.0000	2.6467	3.6467	33.940	3.6610-03
-2.8	1.0000	2.6467	3.6467	33.480	5.8022-03
-2.6	1.0000	2.6467	3.6467	33.019	9.1960-03
-2.4	1.0000	2.6467	3.6467	32.559	1.4583-02
-2.2	1.0000	2.6467	3.6467	32.098	2.3113-02
-2.0	1.0000	2.6467	3.6467	31.637	3.6632-02
-1.8	1.0000	2.6467	3.6467	31.177	5.8058-02
-1.6	1.0000	2.6467	3.6467	30.716	9.2017-02
-1.4	1.0001	2.6467	3.6467	30.256	1.4584-01
-1.2	1.0001	2.6466	3.6467	29.795	2.3115-01
-1.0	1.0001	2.6466	3.6467	29.335	3.6637-01
-0.8	1.0002	2.6465	3.6467	28.874	5.8068-01
-0.6	1.0003	2.6459	3.6462	28.414	9.1995-01
-0.4	1.0005	2.6456	3.6462	27.949	1.4582 00
-0.2	1.0008	2.6456	3.6264	27.487	2.3117 00
0.0	1.0012	2.6454	3.6466	27.030	3.6654 00
0.2	1.0020	2.6450	3.6470	26.568	5.8135 00
0.4	1.0031	2.6446	3.6477	26.109	9.2242 00
0.6	1.0048	2.6440	3.6488	25.635	1.4644 01
0.8	1.0077	2.6436	3.6513	25.170	2.3277 01
1.0	1.0123	2.6412	3.6535	24.710	3.7060 01
1.2	1.0197	2.6382	3.6580	24.235	5.9167 01
1.4	1.0316	2.6343	3.6658	23.264	9.4857 01
1.6	1.0510				1.5317 02
1.8	1.0836				2.5030 02

$$T = 1100^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	P
-7.0	1.0000	2.6791	3.6791	43.437	4.0271-07
-6.8	1.0000	2.6791	3.6791	42.977	6.3825-07
-6.6	1.0000	2.6791	3.6791	42.516	1.0115-06
-6.4	1.0000	2.6791	3.6791	42.056	1.6032-06
-6.2	1.0000	2.6791	3.6791	41.595	2.5409-06
-6.0	1.0000	2.6791	3.6791	41.135	4.0271-06
-5.8	1.0000	2.6791	3.6791	40.674	6.3825-06
-5.6	1.0000	2.6791	3.6791	40.214	1.0115-05
-5.4	1.0000	2.6791	3.6791	39.753	1.6032-05
-5.2	1.0000	2.6791	3.6791	39.293	2.5409-05
-5.0	1.0000	2.6791	3.6791	38.832	4.0271-05
-4.8	1.0000	2.6791	3.6791	38.372	6.3825-05
-4.6	1.0000	2.6791	3.6791	37.911	1.0115-04
-4.4	1.0000	2.6791	3.6791	37.451	1.6032-04
-4.2	1.0000	2.6791	3.6791	36.990	2.5409-04
-4.0	1.0000	2.6791	3.6791	36.530	4.0271-04
-3.8	1.0000	2.6791	3.6791	36.069	6.3825-04
-3.6	1.0000	2.6791	3.6791	35.609	1.0115-03
-3.4	1.0000	2.6791	3.6791	35.148	1.6032-03
-3.2	1.0000	2.6791	3.6791	34.688	2.5409-03
-3.0	1.0000	2.6791	3.6791	34.227	4.0271-03
-2.8	1.0000	2.6791	3.6791	33.767	6.3825-03
-2.6	1.0000	2.6791	3.6791	33.306	1.0120-02
-2.4	1.0000	2.6791	3.6791	32.846	1.6040-02
-2.2	1.0000	2.6791	3.6791	32.385	2.5423-02
-2.0	1.0000	2.6791	3.6791	31.925	4.0294-02
-1.8	1.0000	2.6791	3.6791	31.464	6.3864-02
-1.6	1.0000	2.6791	3.6791	31.004	1.0122-01
-1.4	1.0001	2.6791	3.6791	30.543	1.6043-01
-1.2	1.0001	2.6790	3.6791	30.083	2.5426-01
-1.0	1.0001	2.6790	3.6791	29.623	4.0298-01
-0.8	1.0002	2.6789	3.6791	29.162	6.3876-01
-0.6	1.0003	2.6792	3.6795	28.698	1.0118 00
-0.4	1.0005	2.6791	3.6796	28.240	1.6039 00
-0.2	1.0008	2.6790	3.6798	27.783	2.5428 00
0.0	1.0013	2.6789	3.6801	27.325	4.0319 00
0.2	1.0020	2.6786	3.6806	26.861	6.3950 00
0.4	1.0032	2.6781	3.6812	26.395	1.0147 01
0.6	1.0052	2.6772	3.6824	25.918	1.6115 01
0.8	1.0080	2.6766	3.6846	25.456	2.5612 01
1.0	1.0128	2.6753	3.6880	24.999	4.0782 01
1.2	1.0203	2.6729	3.6932	24.520	6.5117 01

$$T = 1200^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	P
-7.0	1.0000	2.7122	3.7122	43.706	4.3932-07
-6.8	1.0000	2.7122	3.7122	43.246	6.9627-07
-6.6	1.0000	2.7122	3.7122	42.785	1.1035-06
-6.4	1.0000	2.7122	3.7122	42.325	1.7489-06
-6.2	1.0000	2.7122	3.7122	41.864	2.7719-06
-6.0	1.0000	2.7122	3.7122	41.404	4.3932-06
-5.8	1.0000	2.7122	3.7122	40.943	6.9627-06
-5.6	1.0000	2.7122	3.7122	40.483	1.1035-05
-5.4	1.0000	2.7122	3.7122	40.022	1.7489-05
-5.2	1.0000	2.7122	3.7122	39.562	2.7719-05
-5.0	1.0000	2.7122	3.7122	39.101	4.3932-05
-4.8	1.0000	2.7122	3.7122	38.641	6.9627-05
-4.6	1.0000	2.7122	3.7122	38.180	1.1035-04
-4.4	1.0000	2.7122	3.7122	37.720	1.7489-04
-4.2	1.0000	2.7122	3.7122	37.259	2.7719-04
-4.0	1.0000	2.7122	3.7122	36.799	4.3932-04
-3.8	1.0000	2.7122	3.7122	36.338	6.9627-04
-3.6	1.0000	2.7122	3.7122	35.878	1.1035-03
-3.4	1.0000	2.7122	3.7122	35.418	1.7489-03
-3.2	1.0000	2.7122	3.7122	34.957	2.7719-03
-3.0	1.0000	2.7122	3.7122	34.496	4.3932-03
-2.8	1.0000	2.7122	3.7122	34.036	6.9627-03
-2.6	1.0000	2.7122	3.7122	33.576	1.1041-02
-2.4	1.0000	2.7122	3.7122	33.114	1.7500-02
-2.2	1.0000	2.7122	3.7122	32.654	2.7735-02
-2.0	1.0000	2.7122	3.7122	32.193	4.3959-02
-1.8	1.0000	2.7122	3.7122	31.732	6.9671-02
-1.6	1.0000	2.7122	3.7122	31.272	1.1042-01
-1.4	1.0001	2.7122	3.7122	30.811	1.7501-01
-1.2	1.0001	2.7121	3.7122	30.351	2.7737-01
-1.0	1.0001	2.7121	3.7122	29.890	4.3962-01
-0.8	1.0002	2.7120	3.7122	29.430	6.9683-01
-0.6	1.0003	2.7124	3.7127	28.970	1.1039 00
-0.4	1.0005	2.7123	3.7129	28.505	1.7499 00
-0.2	1.0008	2.7122	3.7131	28.047	2.7742 00
0.0	1.0014	2.7121	3.7135	27.588	4.3991 00
0.2	1.0020	2.7121	3.7141	27.123	6.9766 00
0.4	1.0033	2.7118	3.7151	26.655	1.1071 01
0.6	1.0052	2.7112	3.7164	26.186	1.7580 01
0.8	1.0082	2.7104	3.7186	25.720	2.7945 01
1.0	1.0130	2.7091	3.7221	25.252	4.4500 01
1.2	1.0208	2.7072	3.7280	24.794	7.1076 01

$$T = 1300^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	p
-7.0	1.0000	2.7452	3.7452	43.957	4.7593-07
-6.8	1.0000	2.7452	3.7452	43.497	7.5429-07
-6.6	1.0000	2.7452	3.7452	43.036	1.1954-06
-6.4	1.0000	2.7452	3.7452	42.576	1.8947-06
-6.2	1.0000	2.7452	3.7452	42.115	3.0029-06
-6.0	1.0000	2.7452	3.7452	41.655	4.7593-06
-5.8	1.0000	2.7452	3.7452	41.194	7.5429-06
-5.6	1.0000	2.7452	3.7452	40.734	1.1954-05
-5.4	1.0000	2.7452	3.7452	40.273	1.8947-05
-5.2	1.0000	2.7452	3.7452	39.813	3.0029-05
-5.0	1.0000	2.7452	3.7452	39.352	4.7593-05
-4.8	1.0000	2.7452	3.7452	38.892	7.5429-05
-4.6	1.0000	2.7452	3.7452	38.431	1.1954-04
-4.4	1.0000	2.7452	3.7452	37.971	1.8947-04
-4.2	1.0000	2.7452	3.7452	37.510	3.0029-04
-4.0	1.0000	2.7452	3.7452	37.050	4.7593-04
-3.8	1.0000	2.7452	3.7452	36.589	7.5429-04
-3.6	1.0000	2.7452	3.7452	36.129	1.1954-03
-3.4	1.0000	2.7452	3.7452	35.668	1.8947-03
-3.2	1.0000	2.7452	3.7452	35.208	3.0029-03
-3.0	1.0000	2.7452	3.7452	34.747	4.7593-03
-2.8	1.0000	2.7452	3.7452	34.286	7.5429-03
-2.6	1.0000	2.7452	3.7452	33.826	1.1961-02
-2.4	1.0000	2.7452	3.7452	33.365	1.8958-02
-2.2	1.0000	2.7452	3.7452	32.905	3.0047-02
-2.0	1.0000	2.7452	3.7452	32.444	4.7622-02
-1.8	1.0000	2.7452	3.7452	31.983	7.5477-02
-1.6	1.0000	2.7452	3.7452	31.523	1.1963-01
-1.4	1.0001	2.7452	3.7452	31.062	1.8960-01
-1.2	1.0001	2.7451	3.7452	30.602	3.0049-01
-1.0	1.0001	2.7451	3.7452	30.141	4.7626-01
-0.8	1.0002	2.7451	3.7453	29.681	7.5479-01
-0.6	1.0004	2.7454	3.7458	29.219	1.1959 00
-0.4	1.0006	2.7453	3.7459	28.754	1.8957 00
-0.2	1.0008	2.7453	3.7461	28.288	3.0052 00
0.0	1.0013	2.7451	3.7465	27.828	4.7657 00
0.2	1.0021	2.7449	3.7470	27.373	7.5584 00
0.4	1.0034	2.7444	3.7478	26.906	1.1996 01
0.6	1.0053	2.7441	3.7494	26.439	1.9047 01
0.8	1.0084	2.7435	3.7519	25.971	3.0280 01
1.0	1.0133	2.7425	3.7558	25.514	4.8224 01
1.2	1.0212	2.7407	3.7619	25.040	7.7027 01

$$T = 1400^{\circ}\text{K}$$

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	P
-7.0	1.0000	2.7779	3.7779	44.194	5.1254-07
-6.8	1.0000	2.7779	3.7779	43.734	8.1232-07
-6.6	1.0000	2.7779	3.7779	43.273	1.2874-06
-6.4	1.0000	2.7779	3.7779	42.813	2.0404-06
-6.2	1.0000	2.7779	3.7779	42.352	3.2339-06
-6.0	1.0000	2.7779	3.7779	41.892	5.1254-06
-5.8	1.0000	2.7779	3.7779	41.431	8.1232-06
-5.6	1.0000	2.7779	3.7779	40.971	1.2874-05
-5.4	1.0000	2.7779	3.7779	40.510	2.0404-05
-5.2	1.0000	2.7779	3.7779	40.050	3.2339-05
-5.0	1.0000	2.7779	3.7779	39.589	5.1254-05
-4.8	1.0000	2.7779	3.7779	39.129	8.1232-05
-4.6	1.0000	2.7779	3.7779	38.668	1.2874-04
-4.4	1.0000	2.7779	3.7779	38.207	2.0404-04
-4.2	1.0000	2.7779	3.7779	37.747	3.2339-04
-4.0	1.0000	2.7779	3.7779	37.286	5.1254-04
-3.8	1.0000	2.7779	3.7779	36.826	8.1232-04
-3.6	1.0000	2.7779	3.7779	36.365	1.2874-03
-3.4	1.0000	2.7779	3.7779	35.905	2.0404-03
-3.2	1.0000	2.7779	3.7779	35.444	3.2339-03
-3.0	1.0000	2.7779	3.7779	34.984	5.1254-03
-2.8	1.0000	2.7779	3.7779	34.523	8.1232-03
-2.6	1.0000	2.7779	3.7779	34.063	1.2882-02
-2.4	1.0000	2.7778	3.7778	33.602	2.0416-02
-2.2	1.0000	2.7778	3.7778	33.142	3.2358-02
-2.0	1.0000	2.7778	3.7778	32.681	5.1284-02
-1.8	1.0000	2.7777	3.7777	32.220	8.1280-02
-1.6	1.0000	2.7777	3.7777	31.760	1.2882-01
-1.4	1.0001	2.7776	3.7777	31.299	2.0418-01
-1.2	1.0001	2.7776	3.7777	30.839	3.2361-01
-1.0	1.0001	2.7776	3.7777	30.378	5.1291-01
-0.8	1.0002	2.7776	3.7778	29.917	8.1278-01
-0.6	1.0004	2.7777	3.7781	29.454	1.2879 00
-0.4	1.0005	2.7777	3.7782	28.990	2.0415 00
-0.2	1.0009	2.7776	3.7785	28.533	3.2367 00
0.0	1.0013	2.7776	3.7789	28.064	5.1322 00
0.2	1.0021	2.7775	3.7796	27.608	8.1406 00
0.4	1.0034	2.7767	3.7802	27.135	1.2918 01
0.6	1.0053	2.7763	3.7815	26.666	2.0511 01
0.8	1.0084	2.7758	3.7842	26.209	3.2610 01
1.0	1.0134	2.7757	3.7893	25.742	5.1942 01
1.2	1.0215	2.7741	3.7957	25.280	8.2979 01

T = 1500°K

Log $\rho/\rho_0$	Z	E/RT	H/RT	S/R	p
-7.0	1.0000	2.8106	3.8106	44.420	5.4915-07
-6.8	1.0000	2.8106	3.8106	43.960	8.7040-07
-6.6	1.0000	2.8106	3.8106	43.499	1.3794-06
-6.4	1.0000	2.8106	3.8106	43.061	2.1365-06
-6.2	1.0000	2.8106	3.8106	42.526	3.4649-06
-6.0	1.0000	2.8106	3.8106	42.117	5.4915-06
-5.8	1.0000	2.8106	3.8106	41.657	8.7040-06
-5.6	1.0000	2.8106	3.8106	41.196	1.3794-05
-5.4	1.0000	2.8106	3.8106	40.759	2.1365-05
-5.2	1.0000	2.8106	3.8106	40.223	3.4649-05
-5.0	1.0000	2.8106	3.8106	39.815	5.4915-05
-4.8	1.0000	2.8106	3.8106	39.355	8.7040-05
-4.6	1.0000	2.8106	3.8106	38.894	1.3794-04
-4.4	1.0000	2.8106	3.8106	38.456	2.1365-04
-4.2	1.0000	2.8106	3.8106	37.921	3.4649-04
-4.0	1.0000	2.8106	3.8106	37.512	5.4915-04
-3.8	1.0000	2.8106	3.8106	37.052	8.7040-04
-3.6	1.0000	2.8106	3.8106	36.591	1.3794-03
-3.4	1.0000	2.8106	3.8106	36.153	2.1365-03
-3.2	1.0000	2.8106	3.8106	35.618	3.4649-03
-3.0	1.0000	2.8106	3.8106	35.209	5.4915-03
-2.8	1.0000	2.8106	3.8106	34.749	8.7040-03
-2.6	1.0000	2.8105	3.8105	34.288	1.3802-02
-2.4	1.0000	2.8104	3.8104	33.827	2.1874-02
-2.2	1.0000	2.8102	3.8102	33.367	3.4669-02
-2.0	1.0000	2.8101	3.8101	32.906	5.4947-02
-1.8	1.0000	2.8099	3.8099	32.445	8.7087-02
-1.6	1.0001	2.8099	3.8099	31.985	1.3803-01
-1.4	1.0001	2.8098	3.8099	31.524	2.1876-01
-1.2	1.0001	2.8098	3.8099	31.064	3.4672-01
-1.0	1.0002	2.8097	3.8099	30.603	5.4956-01
-0.8	1.0002	2.8098	3.8100	30.146	8.7070-01
-0.6	1.0003	2.8099	3.8102	29.685	1.3798 00
-0.4	1.0006	2.8098	3.8103	29.219	2.1873 00
-0.2	1.0009	2.8097	3.8106	28.755	3.4680 00
0.0	1.0014	2.8096	3.8110	28.297	5.4989 00
0.2	1.0022	2.8095	3.8117	27.838	8.7222 00
0.4	1.0035	2.8092	3.8128	27.371	1.3842 01
0.6	1.0054	2.8091	3.8145	26.897	2.1979 01
0.8	1.0085	2.8088	3.8173	26.432	3.4941 01
1.0	1.0121	2.8084	3.8205	26.069	5.0042 01
1.2	1.0216	2.8070	3.8286	25.493	8.8911 01