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# A COMPREHENSIVE REPORT ON NINETEEN CONDENSATION NUCLEI (PART II)

By

Richard D. H. Low

January 1971

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Technical Report ECOM-5358

A COMPREHENSIVE REPORT ON NINETEEN CONDENSATION NUCLEI  
(PART II)

By

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January 1971

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#### ABSTRACT

This is Part II of "A Comprehensive Report on Nineteen Condensation Nuclei," which contains tabulations of the growth times of these nuclei under various assumed supersaturations. The growth time of each nucleus at a given supersaturation is obtained from a newly developed growth rate equation which utilizes a single parameter to denote the hygroscopicity of the nucleus and which includes an additional term to reflect the inefficiency of the condensation process. This volume and its predecessor serve as a valuable reference for the experimental cloud physicist in his study of the growth behaviors of condensation nuclei and for the field cloud physicist in his selection of the proper artificial nuclei for warm fog or cloud modification.



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## INTRODUCTION

This is the second part of a two-part report on the study of 19 electrolytic condensation nuclei. Part I [1] deals with their equilibrium droplet radii versus saturation at 20C and one atmosphere. Utilizing the values of Part I, this portion extends the study to their growth times, an important parameter for determining their relative efficiencies in warm fog or cloud modification.

To compute the growth rate (from which the growth time can be obtained), an expression is developed on a more physically consistent basis than heretofore presented. This expression formally takes into account the hygroscopicity of a nucleus in terms of its water activity as well as the condensation process in a thin hypothetical layer [2] that envelops the nucleus. The growth times of each of these 19 condensation nuclei are presented in seven tables, corresponding to nucleus masses between  $10^{-12}$  and  $10^{-6}$  grams, and each table contains six supersaturations between 0.01% and 5%. It is expected that these tables, covering nearly all the possible combinations of nucleus sizes and humidity conditions, will find practical application in warm fog or cloud seeding experiments.

## GROWTH RATE EQUATIONS

There are a number of steady-state versions of the growth rate equation [3-13]. These versions are all derived from the same set of classical transport equations, with varying degrees of mathematical and physical approximations. Most of them are used in connection with numerical modeling, and they serve this purpose reasonably well in simulating the growth of a population of droplets.

In theoretical work on the growth of a single particle, such approximations should be avoided and the physical processes involved fully accounted for. Two processes of major importance which have not been handled adequately in the growth of an isolated solution droplet in a stationary medium of moist air are hygroscopicity and condensation.

In the past, hygroscopicity has been represented by either the van't Hoff factor [5] or the molal osmotic coefficient [14]. Both require additional parameters to form the solute term. In accord with modern practice in physical chemistry, the term can now be completely described by a single parameter; namely, the water activity [15]. Condensation, on the other hand, has generally been lumped with diffusion of water

vapor in air to make up the so-called modified [16]\* or compensated [3]\*\* diffusion coefficient and has not been recognized as a distinct process as it should have. As a result, the physical process of condensation becomes intractable in the usual growth rate equation. Moreover, in the case of electrolytes, we suspect that how efficiently water molecules will condense on a liquid solution droplet may depend upon the ionic property and concentration of solution at a given temperature and pressure.

### THE LAYER CONCEPT

To render the condensation process tractable mathematically and physically, we employ the concept of boundary layer over a solution droplet. Langmuir [2] used this approach in his study of hydrogen dissociation in a light bulb. Borovikov, et al. [11] called it the parietal layer and came up with a modified coefficient. Fukuta and Walter [17] introduced the idea of Knudsen flow in the layer and derived separate correction factors to the diffusion coefficient and thermal conductivity. Since the layer concept has been well accepted, it is proposed to treat diffusion and condensation as two distinct processes.

Outside the boundary, the transport of water molecules, being caused by an imbalance of partial vapor pressures between the ambient air and the layer, is governed by diffusion theory in gas kinetics. As is obvious, this imbalance is brought about by the hygroscopic property of electrolytic solution. Inside the layer, to the author's knowledge, there is yet no adequate theory to deal with the interface problem of condensation, except for the use of a nondimensional "fudge" factor, called condensation coefficient, to denote the inefficiency of the condensation process [18]. Under the circumstances, the existing theory of gas kinetics will be utilized to formulate a condensation term to be included in the growth rate equation.

As condensation takes place and the latent heat of condensation is liberated, the droplet becomes warmer than the ambient air and so does the layer due to heat conduction, both convection and radiation being

---

\* Rooth's formula for determining the thickness of an air layer is at variance with that given by Mordy [8]. The Mordy version appears to be correct.

\*\* Fukuta and Walter [17] consider the use of the Cunningham factor as unjustified.

negligible in the present case [19]. Following the scheme outlined by Langmuir [2], it is possible to derive a separate term for heat transfer in the layer, but according to his calculations the temperature at the outer boundary of the layer is not significantly different from the droplet temperature under normal atmospheric pressures. Thus, we may dispense with the heat transfer term in droplet growth and assume that both the droplet and layer are at the same temperature.

#### DERIVATION OF THE EQUATION

The underlying assumptions leading to the use of the classical laws of diffusion and thermal conductivity have been discussed in some detail in the literature [19, 10, 14] and will not be repeated. We may now proceed to develop the new growth rate equation.

#### Condensation

By the kinetic theory of gas [8] on effusive flow, we may formulate an expression for the amount of material condensed per unit time onto a spherical surface as follows:

$$\frac{dm}{dt} = 4\pi r_d^2 \beta \left( \frac{R_v T_r}{2\pi} \right)^{1/2} (\rho_\Delta - \rho_r), \quad (1)$$

where  $m$  is the mass of the solution droplet,  $r_d$  its radius,  $T_r$  its temperature,  $t$  the time,  $R_v$  the gas constant of water vapor,  $\rho_\Delta$  the vapor density of the parietal layer whose thickness is  $\Delta$  at  $T_r$ ,  $\rho_r$  the equilibrium vapor density at  $T_r$  over the droplet, and  $\beta$  the condensation coefficient (which Kenner [18] called the evaporation coefficient) that denotes the fraction of impinging water molecules that do condense. There are some experimental data on this coefficient for pure water [17], but none for electrolytic solution. Unlike the diffusion coefficient, it cannot be calculated as no pertinent theory has been developed. For numerical computation in this paper, a value of 0.045 is used for no other reason than that it is given for 20C.

The above equation of condensation can be expressed in terms of the droplet radius

$$\frac{dr_d}{dt} = \frac{\beta}{\rho_d} \left( \frac{R_v T_r}{2\pi} \right)^{1/2} (\rho_\Delta - \rho_r), \quad (2)$$

where  $\rho_d$  is the density of the droplet.

Solving for the vapor density of the layer, we obtain

$$\rho_r = \frac{\rho_d}{B} \left( \frac{2\pi}{R T_r} \right)^{1/2} \frac{dr_d}{dt} + \rho_r \quad (3)$$

It should, however, be noted that (2) does not hold when a saturated solution droplet has a radius comparable to or less than the layer thickness; hence, soluble Aitken nuclei are excluded. Diffusional and condensational growth of this type of nuclei may be handled by the theory developed by Frisch and Collins [20].

### Diffusion

Outside the layer, Fick's law of diffusion is given by

$$r \frac{dr}{dt} = \frac{D}{\rho_d} (\rho - \rho_r), \quad (4)$$

where  $r = (r_d + \Delta)$  is the radius of the layer,  $\rho_d$ , the combined density of the layer and droplet,  $D$  the diffusivity of water vapor in air, and  $\rho$  the vapor density at the ambient temperature  $T$ . Since we deal only with large and giant nuclei, it is easily seen that  $r \approx r_d$  and  $\rho_d \approx \rho_d^*$ . Substitution of (3) into (4) gives:

$$r \frac{dr}{dt} = \frac{D}{\rho_d} \left[ \rho - \frac{\rho_d}{B} \left( \frac{2\pi}{R T_r} \right)^{1/2} \frac{dr}{dt} - \rho_r \right]. \quad (5)$$

This equation expresses the continuity of vapor diffusion and condensation. However, the layer together with the droplet, being at a higher temperature than the ambient due to the release of the latent heat of condensation, resists the diffusive flow of vapor toward the layer due to the imbalance of vapor pressures. To incorporate this effect, we divide and multiply the right-hand side of (5) by  $\rho_o(T_r)$ , the saturation vapor density at the droplet temperature,

$$r \frac{dr}{dt} = \frac{D \rho_o(T_r)}{\rho_d} \left[ \frac{\rho}{\rho_o(T_r)} - \frac{\rho_d}{B \rho_o(T_r)} \left( \frac{2\pi}{R T_r} \right)^{1/2} \frac{dr}{dt} - \frac{\rho_r}{\rho_o(T_r)} \right]. \quad (6)$$

This equation takes into account the fact that the droplet together with the layer experiences a slight reduction of the vapor gradient. It may be observed that the last term in the bracket denotes the equilibrium saturation ratio over the droplet at the droplet temper-

ature. If this temperature is known, (6) can be solved for the rate of droplet growth. Usually, neither the droplet temperature nor the derived quantity,  $\rho_0(T_r)$ , is known, and then it is necessary to establish relationships between the known quantities and the unknowns.

### Thermal Conductivity

The law of thermal conductivity, as applied to moist air, is given by

$$r \frac{dr}{dt} = \frac{K}{L\rho_d} (T_r - T), \quad (7)$$

where  $K$  is the thermal conductivity of water vapor,  $L$  the latent heat of condensation, and  $T$  the ambient temperature. The droplet temperature can now be expressed in terms of the ambient temperature,

$$T_r = \frac{rL\rho_d}{K} \frac{dr}{dt} + T = T \left( 1 + \frac{rL\rho_d}{KT} \frac{dr}{dt} \right). \quad (8)$$

Let  $\xi = rL\rho_d/KT(dr/dt)$ , and we have

$$T_r = T(1 + \xi). \quad (9)$$

The magnitude of  $\xi$  under a given supersaturation and temperature can be estimated. For instance, at 1% supersaturation and 20C,  $rdr/dt$  is approximately of the order of  $10^{-7}$  in the early state of growth,  $L$  about  $6 \times 10^2$ ,  $K$  about  $4 \times 10^{-5}$ , and  $T$  about  $3 \times 10^2$ . Then,  $\xi$  is at least of the order of  $10^{-3}$ . However, as the droplet grows larger,  $\xi$  will become proportionally smaller.

### The Clapeyron-Clausius Equation

To convert the saturation vapor density over a plane surface of pure water at the droplet temperature to that at the ambient, we make use of the Clapeyron-Clausius equation in the following form:

$$\frac{dp}{dT} = \frac{L}{TV}, \quad (10)$$

where  $V$  is the specific volume of water vapor, the volume occupied by liquid water droplets being negligible. With the aid of the perfect gas law, we may integrate (10) in the same manner as shown in the literature [7] to the saturation vapor pressure over a plane surface

of pure water at the droplet temperature,  $\rho_o(T_r)$ , as a function of that at the ambient,  $\rho_o(T)$ . From (9) and the perfect gas law, an expression in terms of saturation vapor densities is obtained. Dropping the parenthesized ambient temperature notations, we have

$$\begin{aligned}\rho_o(T_r) &= \frac{1}{1 + \xi} \rho_o \exp [L \xi / R_V T (1 + \xi)] \\ &= (1 - \xi) \rho_o \exp(L \xi / R_V T).\end{aligned}\quad (11)$$

Substitution of (11) into (6) results in a term,  $\rho/\rho_o$ , which is equivalent to the ambient saturation ratio, usually denoted by  $S_o$ . The other similar term,  $\rho_r/\rho_o(T_r)$ , is the equilibrium saturation ratio at the droplet temperature,  $S_r(T_r)$ , which will be dealt with in the next section. With the new notation (6) becomes

$$\begin{aligned}\frac{dr}{dt} &= \frac{D \rho_o}{\rho_d} \left[ S_o - \frac{\rho_d}{\beta \rho_o} (1 - \xi/2) \left( \frac{2\pi}{R_V T} \right)^{1/2} \frac{dr}{dt} \right. \\ &\quad \left. - (1 - \xi) S_r(T_r) \exp(L \xi / R_V T) \right].\end{aligned}\quad (12)$$

### Hygroscopicity

According to modern practice in physical chemistry, the proper parameter to represent the hygroscopicity of a substance is its water activity,  $a$ , which varies with concentration but which remains sensibly constant under moderate temperature variations. The water activities of the 19 condensation nuclei are tabulated at different molalities in Part I [1] of this report. The equilibrium saturation ratio at the droplet temperature expressed in terms of the curvature and solute effects is, according to Low [21],

$$\begin{aligned}S_r(T_r) &= a \cdot \exp (2\sigma' / r \rho_d R_V T_r) \\ &= a \cdot \exp [2\sigma' (1 - \xi) / r \rho_d R_V T] \\ &= a \cdot \exp (2\sigma' / r \rho_d R_V T) \exp(-2\sigma' \xi / r \rho_d R_V T),\end{aligned}\quad (13)$$

where  $\sigma'$  is the surface tension of the solution droplet, assumed constant with moderate temperature variations.

The first two factors on the right-hand side of (13) are seen to denote the equilibrium saturation ratio at the ambient temperature,  $S_r$ . The above expression then becomes

$$S_r(T_r) = S_r \exp(-2\sigma' \xi / r \rho_d R_v T). \quad (14)$$

### The New Growth Rate Equation

The desired equation for the growth rate of a single isolated solution droplet in a stationary medium of humid air follows upon substitution of (14) into (12),

$$\begin{aligned} r \frac{dr}{dt} = \frac{D \rho_o}{\rho_d} \left\{ S_o - (1 - \xi/2) \frac{\rho_d}{\beta \rho_o} \left( \frac{2\pi}{R_v T} \right)^{1/2} \frac{dr}{dt} \right. \\ \left. - (1 - \xi) S_r \exp\left[ \left( \frac{L}{R_v T} - \frac{2\sigma'}{r \rho_d R_v T} \right) \xi \right] \right\}. \end{aligned} \quad (15)$$

This equation now takes into account all the important physical processes contributing to the growth of a solution droplet. Being more physically complete, it can be reduced to the various versions in the literature. Silverman and Kunkel's version [13] will result if we drop the  $(1 - \xi/2)$ ,  $(1 - \xi)$ , and  $(2\sigma' / r \rho_d R_v T)$  terms and use instead their approximate expression for the solute effect. Neiburger and Chien's version [9] will be obtained if we further neglect the condensation term and replace the solute effect with their consolidated hygroscopic term. Others will follow readily if we further expand the exponential factor in series and discard the higher-order terms. However, it will be well to remember the implications resulting from these approximations, since we are dealing with rather small numerical quantities in the growth rate equation. After all, the supersaturations which are normally encountered in a natural fog or cloud are in the neighborhood of  $10^{-2}$ . For this reason, quantities of the order of  $10^{-3}$  or greater should be retained.

### NUMERICAL SOLUTION

An analytical solution of (15) appears to be an insurmountable problem. An iterative technique is used to calculate growth rates (from which growth times are derived), utilizing the equilibrium radii at different saturation ratios of the various electrolytic nuclei from Part I [1].



The coefficients and constants used in numerical integration at one atmosphere are listed below:

$$\rho_0 = 1.73 \times 10^{-5} \text{ g/cm}^3$$

$$R_v = 4.615 \times 10^6 \text{ ergs/g } ^\circ\text{K}$$

$$T = 293^\circ\text{K}$$

$$D = 0.257 \text{ cm}^2/\text{sec}$$

$$K = 4.132 \times 10^{-5} \text{ cal/cm sec } ^\circ\text{K (in water vaopr)}$$

$$L = 586.0 \text{ cal/g}$$

$$\beta = 0.045$$

Both droplet density and surface tension are allowed to vary with concentration.

On the basis of the numerical quantities listed above, it is possible to reduce the algebraic complexities in numerical computation by making some approximations. The curvature correction term due to heating,  $2\sigma'/r\rho_d R_v T$ , in the exponent is at least four orders of magnitude lower than the first term in the exponent,  $L/R_v T$ , and can, therefore, be dropped. The heating term,  $\xi$ , in  $(1 - \xi)$ , is of the order of  $10^{-3}$  during the early stage of growth under moderate supersaturation, but will decrease to  $10^{-5}$ , as claimed by Neiburger and Chien [9] and by Silverman and Kunkel [13], only when a solution droplet becomes sufficiently large and, hence, rather dilute. Since we are interested in the detailed life history of droplet growth, it would not be reasonable to discard a term which is only three orders of magnitude lower than unity.

In contrast, the  $(1 - \xi/2)$  factor in the condensation term may be approximated by unity in view of the smaller magnitudes of the other factors, when compared with natural supersaturations. However, it may be noted that the smaller the condensation coefficient is, the more significant the condensation term becomes. With the approximations discussed above, (15) is rewritten as:

$$r \frac{dr}{dt} = \frac{D\rho_0}{\rho_d} \left[ S_0 - \frac{\rho_d}{\beta\rho_0} \left( \frac{2\pi}{R_v T} \right)^{1/2} \frac{dr}{dt} - (1 - \xi) S_r \exp(L \xi / R_v T) \right] \quad (16)$$

which can be further manipulated to yield

$$\frac{dr}{dt} = \frac{Dp_o}{\rho_d} [S_o - (1 - \xi) S_r \exp(\frac{L\xi}{R_v T})] / [r + \frac{D}{\beta} \sqrt{\frac{2\pi}{R_v T}}]. \quad (17)$$

To facilitate numerical computation of the growth rates, it is necessary to transform (17) into a form amenable to iteration. Upon replacing  $\xi$  with  $Lr\rho_d/KT(dr/dt)$  and letting

$$A = \frac{\rho_d}{Dp_o} (r + \frac{D}{\beta} \sqrt{\frac{2\pi}{R_v T}})$$

$$B = r\rho_d S_r L/KT$$

$$C = KR_v T^2 / r\rho_d JL^2$$

$$u = dr/dt,$$

a deceptively simple expression follows

$$u = C \ln\left(\frac{S_o - Au}{S_r - Bu}\right). \quad (18)$$

With the values of  $S_r$  and  $r$  as given in Part I [1] and an assumed value of  $S_o$ , successive approximation can be applied to (18) to obtain  $u$  at each discrete  $r$ , from which the growth times are computed for the intermediate values between the successive  $r$ 's, the initial  $r$  being that of a saturated droplet for a given nucleus mass. Except for the initial growth time which is calculated at the initial growth rate for a half interval, the subsequent values are for full intervals. At the initial size, the growth time is taken to be zero; this implies that it takes negligible time for a dry particle to become a saturated droplet.

#### ILLUSTRATIONS AND COMPARISONS

Having developed a more rigorous expression for the growth rate of a liquid solution droplet, it seems apropos to present a few examples to illustrate the use of the equation and to compare the data so generated. Two figures are presented for the illustrative purposes.

Figure 1 is a study of lithium chloride (LiCl) at 1% supersaturation and 20C. LiCl is illustrated in four different nucleus masses of  $10^{-7}$ ,  $10^{-9}$ ,  $10^{-11}$ , and  $10^{-13}$  grams whose crystal sizes in microns are shown as black dots along the radius axis. A graph such as this is valuable to weather modification as it enables a field cloud physicist to select, in a given time frame, what optimum size of nucleus to use under a given humidity and updraft condition. It is quite obvious that larger nuclei enjoy the advantage of being able to grow into larger droplets in a relatively shorter time. However, when residence time is not a factor, all growth curves eventually join together one after the other.

In Figure 2, the growth times of four different nuclei of the same mass at 1% supersaturation and 20C are given. Their dry particles are about the same size, but at 0.1 second in a supersaturated environment their different hygroscopicities have already set them apart. Again, when residence time is not a factor, all nuclei, irrespective of their initial sizes and hygroscopicities, grow to the same size. With the aid of a graph such as this, it is possible to determine the proper condensation nucleus to use.

The next six figures are offered for comparative purposes. Figures 3 and 4 are comparisons with the previously published theoretical values, and Figures 5 through 8 with empirical values. As may be expected, the new growth rate equation will give a lower rate of growth and, hence, a longer time, than the other versions.

As noted earlier, (15) can be made identical to Neiburger and Chien's [9] version. Figure 3 shows such a comparison in terms of growth rates at 1% supersaturation and 5C. A NaCl particle of  $2.656 \times 10^{-12}$  gram in mass or 1 micron in radius is used for this purpose. It is seen that the new equation predicts a lower rate, about 52%, during the early stage of growth and less than 1% when the droplet reaches 100 microns. Again, the same statement also applies to a lesser extent to Figure 4, which is a comparison with Jiusto's [22] values in terms of growth times at 0.1% and 1.0% supersaturations and 20C. The NaCl nucleus used has a mass of  $10^{-11}$  gram. Although the curves in Figure 4 do not depart from one another appreciably, about 11% on the average, it should be noted that such a comparison is by no means fair since the accumulative effect of successive summations has completely masked their differences in the beginning of growth. Equation (15) approaches Fletcher's [10], which Jiusto [22] utilized for his computations, as the droplet grows larger. In infinite dilution, it becomes Mason's [7] or Byers' [14].

In using empirical data, we have to be satisfied with a comparison of the growth time despite its drawback. Moreover, since these data

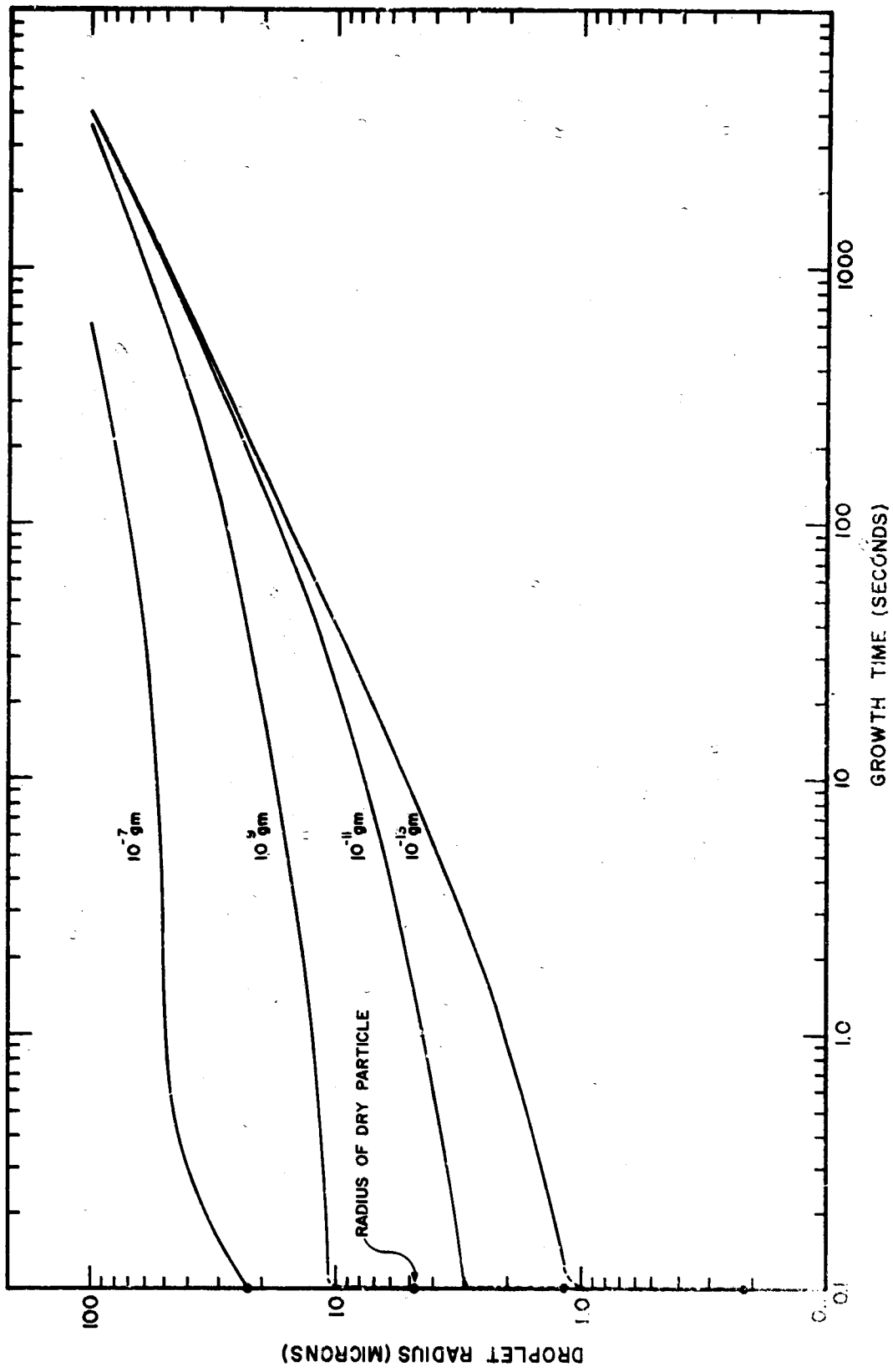


Figure 1. Growth times of lithium chloride at 1% supersaturation and 20°C.



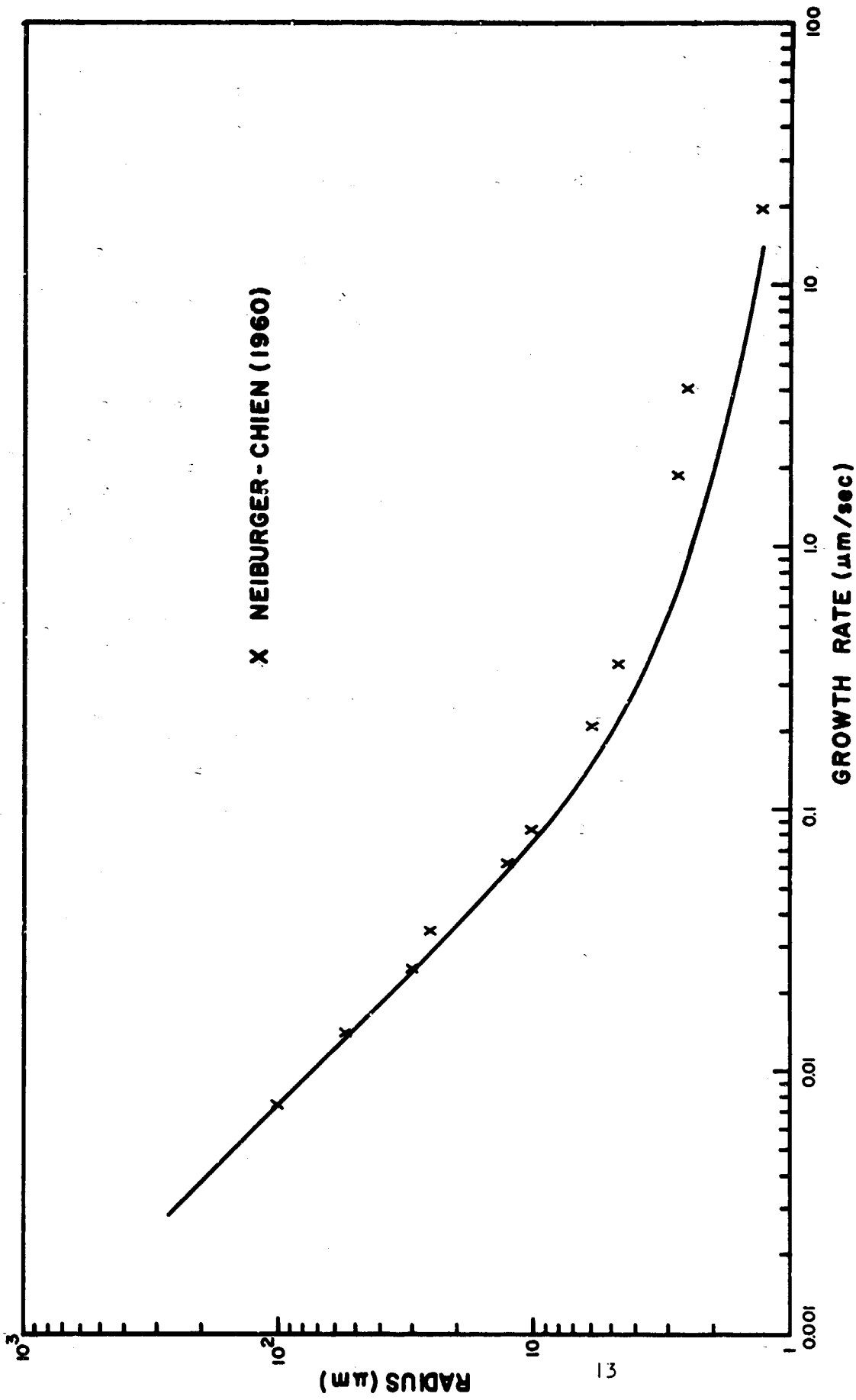


Figure 3. Comparison with Neiburger and Chien's calculated growth rate of NaCl nucleus of mass =  $2.656 \times 10^{-12}$  g at 1% supersaturation and  $5^\circ\text{C}$ .

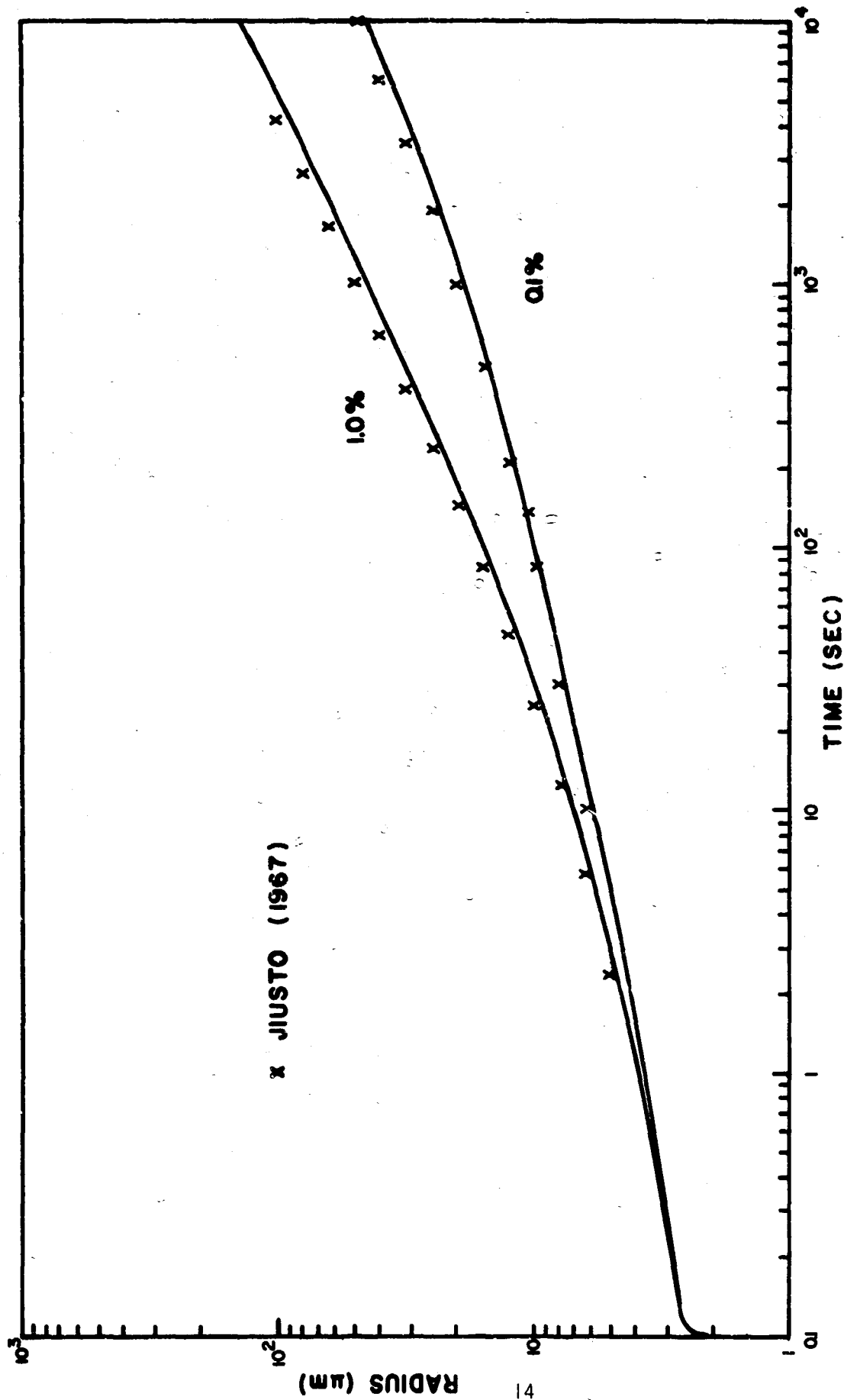


Figure 4. Comparison with Jiusto's calculated growth times of NaCl nucleus of mass =  $10^{-11}$  g at 0.1% and 1% supersaturations and 20°C.

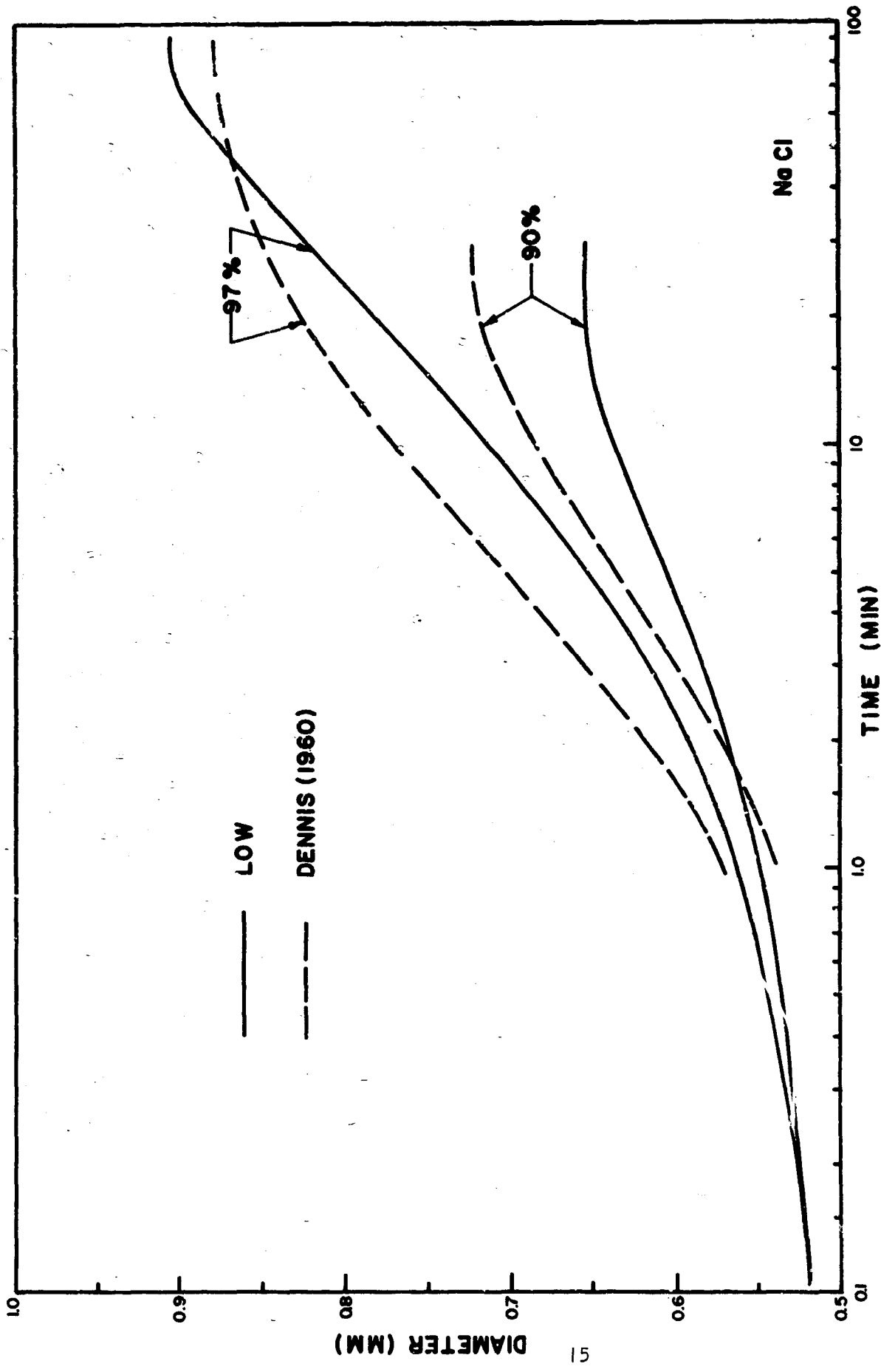


Figure 5. Comparison with Dennis' empirical growth times of NaCl nucleus of mass =  $2.33 \times 10^{-5}$  g at 90% and 97% relative humidities and 25°C.



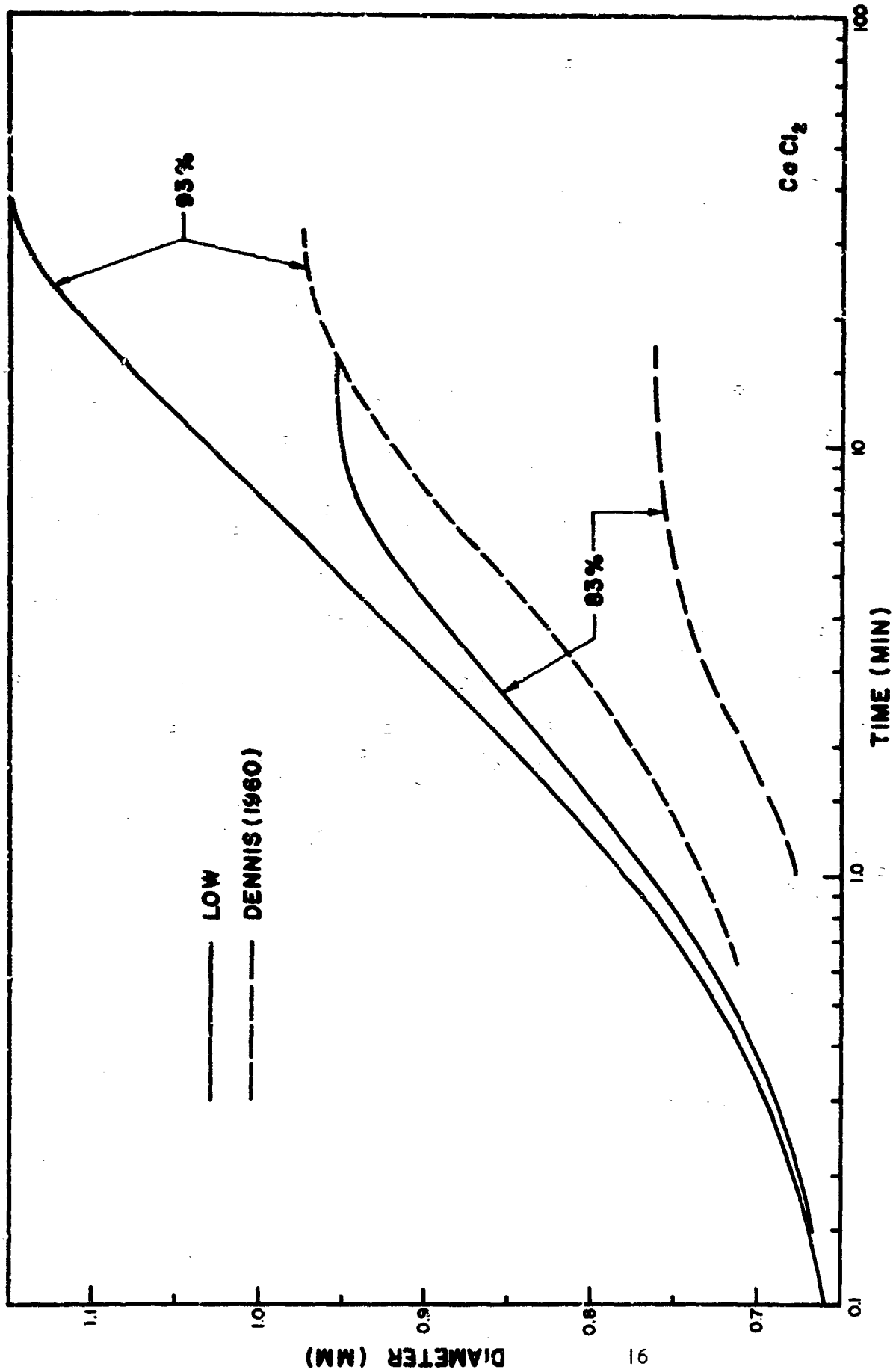


Figure 6. Comparison with Dennis' empirical growth times of  $\text{CaCl}_2$  nucleus of mass =  $1.22 \times 10^{-4}$  g at 83% and 93% relative humidities and 25°C.

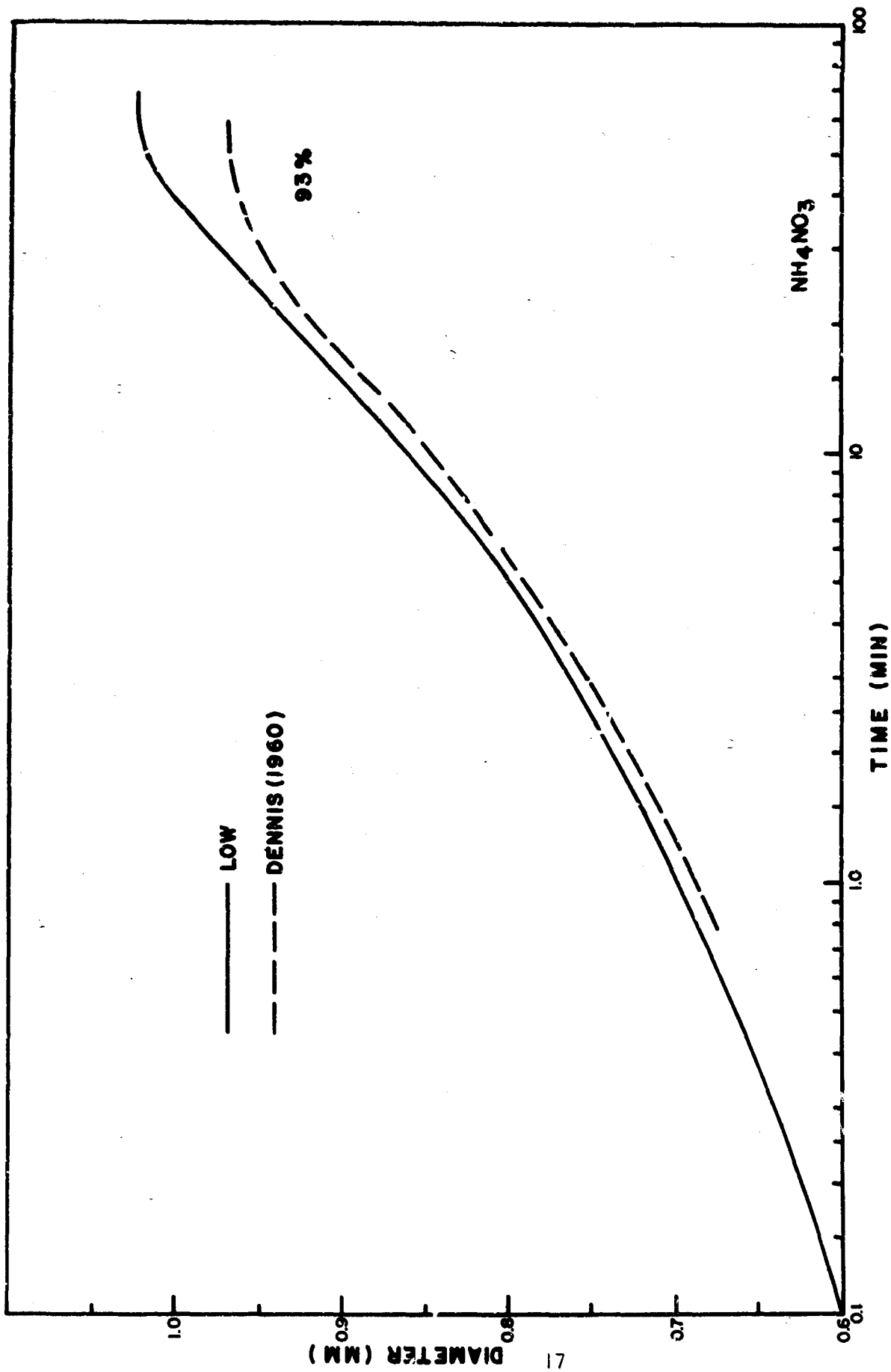


Figure 7. Comparison with Dennis' empirical growth time of  $\text{NH}_4\text{NO}_3$  nucleus of mass =  $1.19 \times 10^{-4}$  g at 93% relative humidity and 25°C.

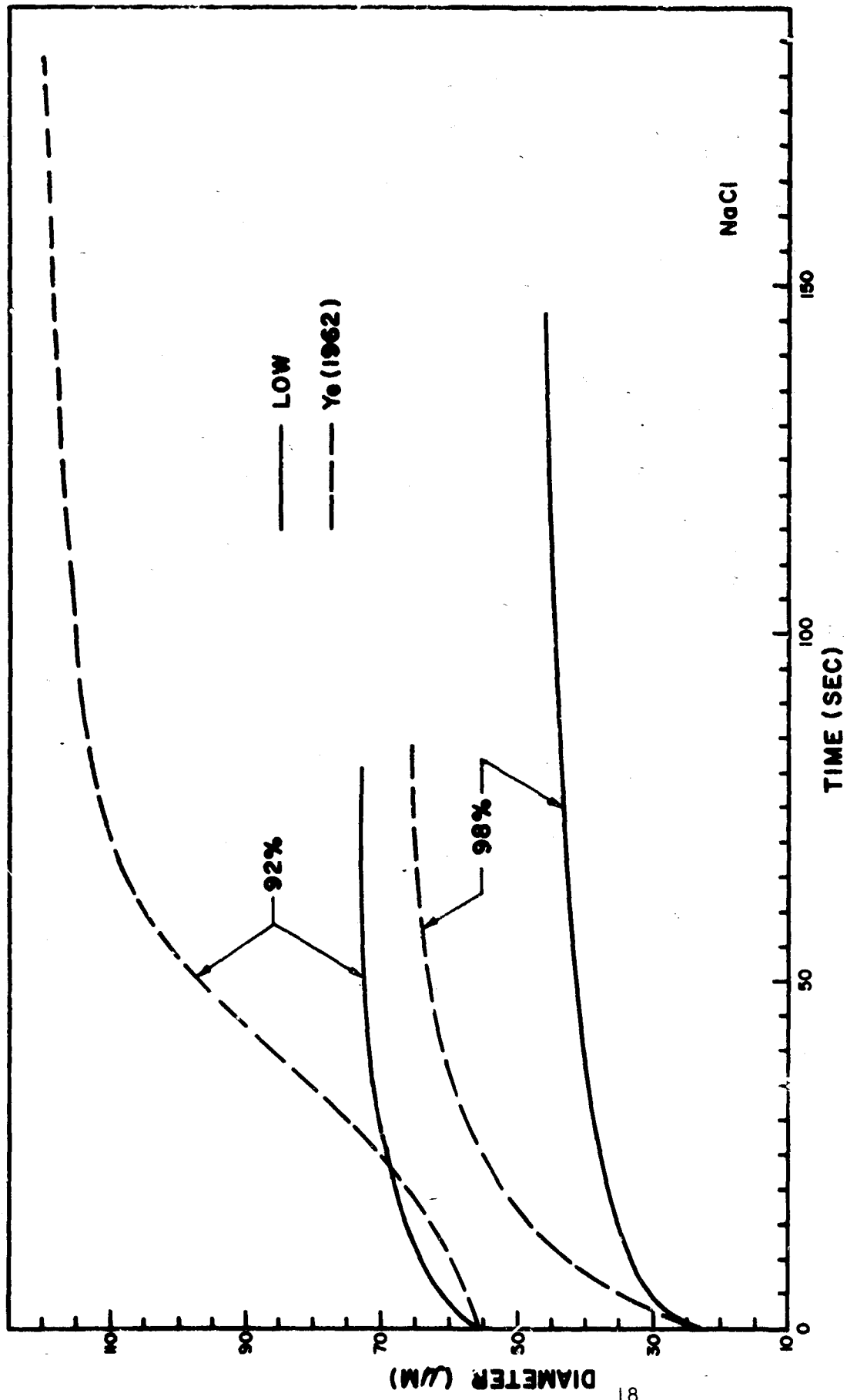


Figure 8. Comparison with Ye's empirical growth times of NaCl nuclei of masses =  $2.89 \times 10^{-8}$  g and  $1.58 \times 10^{-9}$  g at 92% and 98% relative humidities and at 18°C and 17°C, respectively.

are presented in graphical form, there is the added difficulty of extracting pertinent values from small graphs. Nonetheless, comparisons are made with three of Dennis' [23] six figures which illustrate the growth times of submillimeter drops of sodium chloride, ammonium nitrate, and calcium chloride at various subsaturations and with one of Ye's [24], which deals with sodium chloride, as the others are too small to be reproducible.

With the exception of NaCl, the new equation predicts a higher than actual rate of growth, as is readily seen in these figures. To test whether theory generally overestimates other electrolytic nuclei, Table I is presented, which shows a comparison between droplet sizes at a fixed length of time (Column 9) and a comparison between equilibrium droplet sizes regardless of the length of time (Column 11) under the same subsaturations and temperatures, as specified by Ye [24]. Although the percentage differences are somewhat disconcerting at first glance, it should be borne in mind that the inherent difficulty in performing this type of experiment, especially in the micron-sized range, is quite formidable. However, some comfort may be drawn from the simple analysis that theory either overestimates or underestimates half of the time. Near saturation, experiments appear to confirm theory. If we can assume that their data are reasonably consistent, a question may be raised as to why theory, if defective, does not consistently overestimate or consistently underestimate. The answer appears to lie in the use of the appropriate condensation coefficients for different electrolytic nuclei, a problem yet unexplored in chemical physics.

#### CONCLUDING REMARKS

A new expression for the growth rate of a single isolated solution droplet in a stationary medium of humid air has been presented, which takes into account the hygroscopicity of a condensation nucleus in terms of a single parameter in consonance with the modern practice of physical chemistry and which includes an explicit term to reflect the inefficiency of the condensation process. The expression is then programmed to compute the growth times of 19 important condensation nuclei in seven different sizes under six assumed supersaturations.

The basic properties of the 19 electrolytic nuclei, as depicted in Parts I and II of this report, will fill a need for the investigators of applied cloud physics, not only as a handy reference to the nuclei considered, but also, for those who desire to use it, as an illustration of a meaningful method for studying other prospective seeding materials.



LITHIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-12 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
1.019E-04	0.000	0.000	0.000	0.000	0.000	0.000
1.032E-04	0.001	0.001	0.001	0.001	0.001	0.001
1.061E-04	0.002	0.003	0.003	0.003	0.003	0.003
1.093E-04	0.005	0.005	0.005	0.005	0.005	0.005
1.131E-04	0.007	0.009	0.009	0.009	0.009	0.009
1.176E-04	0.011	0.013	0.014	0.014	0.014	0.014
1.230E-04	0.017	0.020	0.021	0.021	0.021	0.021
1.296E-04	0.025	0.031	0.032	0.033	0.033	0.033
1.383E-04	0.038	0.049	0.050	0.052	0.052	0.052
1.456E-04	0.052	0.069	0.071	0.074	0.074	0.075
1.509E-04	0.063	0.085	0.089	0.093	0.093	0.093
1.571E-04	0.078	0.107	0.113	0.118	0.119	0.119
1.646E-04	0.097	0.139	0.147	0.155	0.156	0.157
1.739E-04	0.124	0.185	0.199	0.211	0.213	0.214
1.821E-04	0.151	0.236	0.256	0.274	0.277	0.279
1.889E-04	0.175	0.283	0.309	0.333	0.337	0.340
1.968E-04	0.205	0.344	0.380	0.414	0.419	0.423
2.064E-04	0.244	0.429	0.479	0.529	0.537	0.543
2.181E-04	0.297	0.551	0.624	0.702	0.713	0.723
2.333E-04	0.371	0.736	0.852	0.981	1.000	1.016
2.539E-04	0.485	1.043	1.243	1.481	1.519	1.550
2.851E-04	0.680	1.628	2.025	2.554	2.644	2.721
3.436E-04	1.109	3.095	4.135	5.803	6.128	6.419
3.898E-04	1.543	4.841	6.955	11.372	12.470	13.555
4.045E-04	1.687	5.428	7.918	13.350	14.749	16.149
4.218E-04	1.862	6.157	9.134	15.961	17.798	19.671

4.420E-04	2.080	7.087	10.711	19.530	22.038	24.659
4.681E-04	2.364	8.317	12.836	24.641	28.238	32.135
5.009E-04	2.749	10.025	15.851	32.430	37.952	44.243
5.456E-04	3.313	12.579	20.461	45.416	54.760	66.213
6.131E-04	4.243	16.892	28.436	70.406	88.850	114.339
7.395E-04	6.219	26.271	46.247	134.205	183.102	266.840
8.392E-04	8.152	35.666	64.606	212.315	314.879	559.560
8.710E-04	8.789	38.771	70.690	238.713	360.225	665.098
9.083E-04	9.563	42.554	78.125	271.631	417.863	810.546
9.530E-04	10.530	47.288	87.458	313.804	493.227	1014.110
1.008E-03	11.781	53.427	99.592	369.797	595.466	1315.604
1.079E-03	13.481	61.785	116.162	447.887	741.333	1793.072
1.175E-03	15.965	74.028	140.500	565.037	965.431	2624.795
1.321E-03	20.066	94.280	180.866	763.422	1354.346	4305.141
1.593E-03	28.792	137.456	267.138	1195.837	2222.920	8808.281
1.808E-03	37.377	179.989	352.296	1629.740	3113.041	14421.025
1.876E-03	40.210	194.024	380.400	1773.115	3407.661	16310.862
1.957E-03	43.657	211.107	414.611	1947.838	3767.214	18653.130
2.053E-03	47.967	232.465	457.390	2160.526	4217.791	21629.774
2.172E-03	53.551	260.135	512.816	2450.079	4802.594	25531.950
2.324E-03	61.150	297.796	588.257	2836.217	5599.503	30889.784
2.532E-03	72.282	352.955	698.752	3401.848	6767.036	38755.008
2.845E-03	90.706	444.244	881.613	4337.519	8697.377	51681.818
3.432E-03	130.055	639.168	1271.999	6332.527	12806.183	78697.453
3.895E-03	168.976	831.892	1657.829	8298.207	16838.398	104099.854
4.043E-03	181.828	895.524	1785.210	8946.842	18168.057	112420.998
4.216E-03	197.482	973.026	1940.345	9736.355	19765.316	122465.557
4.423E-03	217.070	1070.001	2134.445	10723.531	21805.787	134909.453
4.679E-03	242.473	1195.746	2386.108	12002.517	24421.005	150862.875
5.007E-03	277.086	1367.067	2728.945	13743.410	27976.887	172319.336
5.455E-03	327.851	1618.301	3231.638	16293.395	33178.364	203300.949
6.130E-03	412.012	2034.744	4064.762	20514.243	41773.943	253703.398
7.394E-03	592.130	2925.819	5847.050	29528.787	60093.088	358977.758
8.392E-03	770.821	3809.568	7614.135	38444.280	78153.477	459783.945
8.711E-03	829.856	4101.521	8197.880	41388.524	84115.178	492933.977
9.084E-03	901.798	4457.294	8909.197	44974.865	91373.669	533123.510

9-531E-03	991.874	4902.717	9799.713	49462.971	100452.554	583165.648
1-008E-02	1108.758	5480.676	10955.136	55283.560	112220.230	647696.195
1-079E-02	1268.140	6268.735	12530.479	63215.553	128246.509	735096.930
1-176E-02	1502.119	7425.544	14842.790	74851.680	151740.102	867401.111



LITHIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-11 GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
2.194E-04	0.000	0.000	0.000	0.000	0.000	0.000
2.223E-04	0.002	0.003	0.003	0.003	0.003	0.003
2.285E-04	0.008	0.009	0.009	0.010	0.010	0.010
2.356E-04	0.016	0.018	0.018	0.019	0.019	0.019
2.437E-04	0.026	0.030	0.030	0.031	0.031	0.031
2.534E-04	0.040	0.047	0.048	0.048	0.049	0.049
2.649E-04	0.060	0.071	0.073	0.075	0.075	0.075
2.793E-04	0.090	0.110	0.113	0.116	0.116	0.116
2.979E-04	0.138	0.174	0.180	0.186	0.186	0.187
3.137E-04	0.190	0.249	0.259	0.268	0.269	0.270
3.251E-04	0.251	0.310	0.324	0.337	0.339	0.340
3.385E-04	0.285	0.394	0.414	0.433	0.435	0.437
3.546E-04	0.357	0.512	0.543	0.571	0.575	0.578
3.746E-04	0.459	0.688	0.737	0.782	0.788	0.793
3.924E-04	0.564	0.883	0.955	1.024	1.033	1.041
4.070E-04	0.656	1.061	1.158	1.251	1.264	1.274
4.241E-04	0.773	1.299	1.431	1.562	1.581	1.596
4.446E-04	0.926	1.628	1.816	2.007	2.034	2.057
4.700E-04	1.133	2.102	2.383	2.678	2.721	2.757
5.025E-04	1.429	2.830	3.275	3.768	3.842	3.904
5.470E-04	1.883	4.047	4.820	5.739	5.883	6.005
6.142E-04	2.671	6.391	7.943	9.996	10.343	10.641
7.402E-04	4.435	12.353	16.466	23.007	24.271	25.402
8.398E-04	6.256	19.599	28.092	45.556	49.826	54.007
8.716E-04	6.860	22.045	32.075	53.579	59.016	64.408
9.088E-04	7.598	25.091	37.115	64.181	71.317	78.519

9.535E-04	8.524	28.992	43.680	78.701	88.431	98.488
1.009E-03	9.730	34.172	52.562	99.526	113.467	128.358
1.079E-03	11.378	41.405	65.225	131.324	152.684	176.577
1.176E-03	13.800	52.279	84.692	184.460	220.498	263.635
1.321E-03	17.823	70.770	118.614	287.036	357.870	452.188
1.593E-03	26.435	111.345	195.086	550.282	737.002	1037.530
1.808E-03	34.968	152.543	275.058	876.447	1267.593	2102.091
1.877E-03	37.784	166.181	301.611	986.914	1450.334	2485.671
1.957E-03	41.213	182.832	334.133	1124.997	1682.894	2999.622
2.053E-03	45.504	203.716	375.050	1302.414	1987.488	3714.003
2.172E-03	51.066	230.857	428.394	1538.766	2401.689	4755.171
2.324E-03	58.640	267.915	501.457	1869.745	2994.651	6372.683
2.532E-03	69.743	322.366	609.145	2368.782	3910.080	9127.177
2.845E-03	88.130	412.772	788.496	3219.322	5510.012	14551.812
3.432E-03	127.427	606.429	1173.846	5089.588	9122.799	28750.475
3.895E-03	166.321	798.519	1557.158	6991.982	12897.547	46522.882
4.043E-03	179.164	861.961	1683.789	7621.763	14150.400	52537.141
4.216E-03	194.809	939.256	1838.109	8390.821	15684.173	60045.865
4.423E-03	214.387	1036.003	2031.310	9355.531	17612.908	69673.392
4.679E-03	239.777	1161.492	2281.970	10609.478	20125.762	82456.266
5.007E-03	274.375	1332.515	2623.656	12321.836	23564.855	100275.349
5.455E-03	325.119	1583.388	3124.973	14838.203	28629.066	126963.784
6.130E-03	409.247	1999.344	3956.310	19016.846	37053.071	172022.471
7.394E-03	589.284	2889.551	5735.708	27969.659	55124.051	269736.223
8.391E-03	767.884	3772.622	7500.869	36852.215	73058.262	366895.164
8.710E-03	826.879	4064.313	8083.919	39786.004	78980.789	398954.687
9.083E-03	898.769	4419.751	8794.380	43360.582	86196.136	437965.410
9.530E-03	988.770	4864.725	9683.793	47834.792	95225.857	486716.777
1.008E-02	1105.542	5442.042	10837.707	53638.600	106936.064	549809.031
1.079E-02	1264.743	6229.100	12410.795	61548.957	122892.244	635579.008
1.175E-02	1498.386	7384.132	14719.258	73153.589	146290.814	760931.414

LITHIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-10 GM · TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
4.728E-04	0.000	0.000	0.000	0.000	0.000	0.000
4.790E-04	0.009	0.010	0.011	0.011	0.011	0.011
4.923E-04	0.032	0.036	0.037	0.037	0.037	0.037
5.075E-04	0.062	0.071	0.072	0.073	0.073	0.073
5.251E-04	0.103	0.118	0.120	0.122	0.122	0.122
5.459E-04	0.159	0.185	0.189	0.192	0.192	0.193
5.708E-04	0.240	0.284	0.291	0.297	0.297	0.298
6.017E-04	0.362	0.440	0.452	0.463	0.464	0.465
6.417E-04	0.558	0.701	0.725	0.746	0.749	0.751
6.758E-04	0.769	1.005	1.047	1.084	1.088	1.092
7.004E-04	0.939	1.258	1.316	1.367	1.374	1.380
7.293E-04	1.162	1.603	1.687	1.762	1.772	1.780
7.641E-04	1.464	2.094	2.220	2.335	2.350	2.363
8.070E-04	1.889	2.828	3.028	3.214	3.239	3.259
8.454E-04	2.328	3.641	3.940	4.223	4.262	4.294
8.768E-04	2.716	4.391	4.790	5.175	5.229	5.272
9.137E-04	3.210	5.393	5.942	6.484	6.560	6.622
9.579E-04	3.859	6.782	7.555	8.360	8.474	8.567
1.012E-03	4.742	8.794	9.965	11.201	11.381	11.530
1.083E-03	6.007	11.893	13.760	15.829	16.140	16.399
1.171E-03	7.958	17.102	20.364	24.238	24.847	25.360
1.323E-03	11.367	27.194	33.784	42.486	43.954	45.217
1.595E-03	19.060	53.064	70.691	98.583	103.957	108.758
1.809E-03	27.097	84.888	121.574	196.502	214.686	232.436
1.878E-03	29.767	95.648	139.034	231.375	254.533	277.417
1.958E-03	33.035	109.074	161.167	277.503	307.903	338.453

2.054E-03	37.147	126.300	190.058	340.739	382.192	424.823
2.173E-03	42.507	149.226	229.234	431.539	490.923	553.965
2.325E-03	49.851	181.315	285.201	570.354	661.305	762.250
2.533E-03	60.678	229.708	371.514	802.666	956.009	1137.629
2.846E-03	78.719	312.285	522.457	1251.987	1551.044	1947.803
3.432E-03	117.516	494.323	864.352	2408.454	3200.908	4444.671
3.895E-03	156.156	680.402	1224.460	3850.013	5510.574	8902.981
4.043E-03	168.925	742.052	1344.148	4338.738	6306.450	10504.125
4.216E-03	184.488	817.399	1490.893	4950.365	7319.966	12641.442
4.423E-03	203.977	912.004	1675.735	5737.302	8648.607	15599.498
4.679E-03	229.268	1035.102	1917.026	6787.316	10457.456	19889.025
5.007E-03	263.753	1203.397	2247.994	8260.519	13051.060	26514.915
5.455E-03	314.365	1451.055	2736.635	10486.954	17063.709	37723.763
6.130E-03	398.327	1862.993	3552.085	14292.926	24099.278	59642.717
7.394E-03	578.122	2747.431	5308.611	22696.081	40063.027	116667.444
8.391E-03	756.597	3627.598	7062.281	31296.923	56884.700	188224.531
8.710E-03	815.555	3918.421	7641.905	34146.639	62474.652	212479.105
9.083E-03	887.402	4272.913	8348.644	37629.788	69327.510	242823.781
9.529E-03	977.354	4716.842	9233.961	42005.572	77957.837	281840.109
1.008E-02	1094.070	5292.983	10383.285	47695.164	89221.231	333835.125
1.079E-02	1253.201	6078.677	11951.099	55477.342	104666.022	406676.086
1.175E-02	1486.750	7232.049	14253.254	66930.567	127460.674	516497.277

LITHIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-09 GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
1.019E-03	0.000	0.000	0.000	0.000	0.000	0.000
1.032E-03	0.040	0.044	0.045	0.045	0.046	0.046
1.061E-03	0.138	0.154	0.156	0.158	0.158	0.157
1.093E-03	0.266	0.300	0.305	0.309	0.310	0.310
1.131E-03	0.440	0.502	0.511	0.519	0.520	0.521
1.176E-03	0.682	0.790	0.806	0.819	0.821	0.823
1.230E-03	1.031	1.218	1.247	1.271	1.274	1.276
1.296E-03	1.560	1.890	1.943	1.988	1.993	1.998
1.382E-03	2.408	3.025	3.129	3.218	3.229	3.238
1.456E-03	3.332	4.350	4.530	4.687	4.708	4.725
1.509E-03	4.074	5.452	5.704	5.926	5.955	5.979
1.571E-03	5.051	6.963	7.328	7.653	7.696	7.731
1.646E-03	6.377	9.116	9.666	10.164	10.230	10.284
1.739E-03	8.250	12.342	13.216	14.025	14.134	14.223
1.821E-03	10.168	15.927	17.233	18.472	18.642	18.780
1.899E-03	11.903	19.236	20.984	22.672	22.906	23.097
1.968E-03	14.094	23.670	26.078	28.457	28.791	29.064
2.064E-03	16.974	29.822	33.264	36.763	37.262	37.672
2.181E-03	20.902	36.756	43.916	49.359	50.152	50.808
2.32E-03	26.540	52.543	60.790	69.928	71.300	72.444
2.539E-03	35.264	75.779	90.227	107.380	110.074	112.345
2.851E-03	50.552	120.938	150.230	188.867	195.385	200.983
3.436E-03	85.197	237.168	315.855	440.145	464.052	485.403
3.898E-03	121.612	381.006	545.490	880.447	961.471	1040.440
4.045E-03	133.715	429.683	624.349	1037.337	1140.538	1242.346
4.21E-03	148.549	490.474	724.405	1244.970	1380.456	1516.361

4.426E-03	167.226	568.547	855.132	1529.766	1714.537	1904.134
4.681E-03	191.603	672.566	1032.589	1938.950	2203.660	2483.909
5.009E-03	225.035	816.345	1286.413	2564.931	2970.336	3418.728
5.456E-03	274.393	1038.513	1678.427	3613.350	4296.744	5102.381
6.131E-03	356.774	1414.847	2365.180	5643.119	6984.414	8731.235
7.394E-03	534.285	2246.314	3924.295	10875.071	14404.160	19882.402
8.392E-03	711.597	3098.978	5572.109	17415.673	24813.497	39646.796
8.710E-03	770.211	3381.602	6120.039	19634.240	28401.310	46735.611
9.083E-03	841.685	3727.173	6792.171	22412.262	32971.728	56184.656
9.530E-03	931.228	4161.287	7639.273	25988.781	38965.473	69239.478
1.008E-02	1047.488	4726.462	8745.760	30764.460	47130.017	88132.966
1.079E-02	1206.101	5497.639	10264.506	37471.010	58845.567	117253.239
1.175E-02	1439.038	6638.246	12508.571	47617.533	76989.602	166389.689

LITHIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-08 GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
2.194E-03	0.000	0.000	0.000	0.000	0.000	0.000
2.223E-03	0.178	0.197	0.199	0.202	0.202	0.202
2.285E-03	0.612	0.684	0.694	0.702	0.703	0.704
2.356E-03	1.185	1.336	1.358	1.376	1.378	1.380
2.437E-03	1.961	2.236	2.277	2.310	2.315	2.318
2.534E-03	3.043	3.521	3.593	3.653	3.660	3.667
2.649E-03	4.608	5.436	5.564	5.671	5.685	5.696
2.793E-03	6.980	8.451	8.686	8.885	8.910	8.931
2.978E-03	10.793	13.550	14.012	14.408	14.460	14.501
3.137E-03	14.955	19.512	20.320	21.024	21.116	21.190
3.251E-03	18.301	24.477	25.609	26.605	26.736	26.842
3.385E-03	22.710	31.293	32.931	34.391	34.584	34.740
3.546E-03	28.704	41.018	43.489	45.727	46.026	46.268
3.746E-03	37.179	55.602	59.538	63.183	63.675	64.075
3.924E-03	45.964	71.836	77.725	83.313	84.078	84.702
4.070E-03	53.742	86.832	94.719	102.340	103.394	104.256
4.241E-03	63.687	106.940	117.816	128.565	130.072	131.307
4.446E-03	76.771	134.867	150.430	166.252	168.507	170.362
4.699E-03	94.636	175.459	198.820	223.456	227.045	230.014
5.025E-03	120.308	238.171	275.556	316.966	323.187	328.370
5.470E-03	160.083	344.003	409.585	487.426	499.650	509.951
6.142E-03	229.899	549.996	683.181	858.783	888.393	913.826
7.402E-03	388.419	1081.232	1439.778	2005.657	2114.426	2211.537
8.398E-03	555.523	1740.557	2491.643	4019.125	4388.057	4747.374
8.715E-03	611.085	1963.772	2853.001	4736.745	5206.698	5669.950
9.088E-03	679.207	2242.656	3311.680	5686.705	6303.731	6922.119

9.534E-03	765.025	2600.994	3911.235	6990.063	7831.583	8694.229
1.008E-02	877.082	3078.667	4725.516	8863.214	10068.879	11343.714
1.079E-02	1030.651	3748.507	5890.899	11729.749	13576.247	15615.264
1.175E-02	1258.021	4760.856	7691.983	16532.601	19645.111	23306.568



## LITHIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-07 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
4.728E-03	0.000	0.000	0.000	0.000	0.000	0.000
4.790E-03	0.808	0.894	0.906	0.916	0.918	0.919
4.923E-03	2.783	3.108	3.154	3.193	3.198	3.202
5.075E-03	5.392	6.077	6.176	6.259	6.269	6.278
5.251E-03	8.928	10.177	10.361	10.513	10.533	10.549
5.458E-03	13.862	16.033	16.359	16.631	16.666	16.694
5.708E-03	21.006	24.770	25.350	25.836	25.899	25.949
6.017E-03	31.838	38.534	39.603	40.508	40.624	40.718
6.417E-03	49.272	61.834	63.940	65.746	65.980	66.169
6.758E-03	68.317	89.110	92.797	96.009	96.428	96.767
7.004E-03	83.637	111.333	117.002	121.551	122.148	122.631
7.293E-03	103.638	143.047	150.531	157.202	158.084	158.798
7.640E-03	131.308	187.604	198.901	209.136	210.502	211.609
8.070E-03	170.181	254.465	272.474	289.151	291.404	293.235
8.454E-03	210.497	328.938	355.901	381.486	384.989	387.845
8.768E-03	246.209	397.761	433.886	468.794	473.623	477.570
9.137E-03	291.887	490.078	539.920	589.176	596.080	601.739
9.579E-03	352.004	618.346	689.700	762.241	772.579	781.086
1.012E-02	434.138	804.877	912.039	1025.049	1041.514	1055.135
1.083E-02	552.222	1093.201	1264.799	1454.866	1483.413	1507.203
1.178E-02	735.295	1580.078	1881.302	2238.798	2294.932	2342.236

LITHIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-06 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
1.019E-02	0.000	0.000	0.000	0.000	0.000	0.000
1.032E-02	3.713	4.109	4.165	4.211	4.217	4.222
1.061E-02	12.794	14.285	14.499	14.676	14.698	14.716
1.093E-02	24.796	27.940	28.396	28.774	28.822	28.861
1.131E-02	41.065	46.800	47.645	48.347	48.436	48.508
1.176E-02	63.776	73.752	75.251	76.500	76.659	76.787

AMMONIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS =  $1.00E-12$  GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
9.212E-05	0.000	0.000	0.000	0.000	0.000	0.000
9.463E-05	0.002	0.002	0.002	0.002	0.002	0.002
9.831E-05	0.005	0.005	0.006	0.006	0.006	0.006
1.008E-04	0.007	0.008	0.008	0.008	0.008	0.009
1.037E-04	0.010	0.011	0.012	0.012	0.012	0.012
1.071E-04	0.013	0.016	0.016	0.017	0.017	0.017
1.111E-04	0.018	0.022	0.022	0.023	0.023	0.023
1.159E-04	0.024	0.030	0.031	0.032	0.032	0.032
1.219E-04	0.033	0.042	0.044	0.045	0.046	0.046
1.296E-04	0.046	0.062	0.064	0.067	0.067	0.067
1.363E-04	0.060	0.083	0.087	0.091	0.091	0.092
1.411E-04	0.070	0.100	0.105	0.110	0.111	0.112
1.468E-04	0.084	0.122	0.130	0.137	0.138	0.139
1.536E-04	0.102	0.154	0.164	0.175	0.176	0.177
1.621E-04	0.127	0.199	0.215	0.230	0.233	0.234
1.696E-04	0.152	0.247	0.270	0.293	0.296	0.298
1.758E-04	0.173	0.291	0.321	0.350	0.354	0.358
1.831E-04	0.200	0.349	0.389	0.428	0.434	0.438
1.919E-04	0.235	0.428	0.482	0.538	0.546	0.552
2.027E-04	0.282	0.540	0.617	0.700	0.712	0.722
2.166E-04	0.348	0.708	0.826	0.959	0.979	0.996
2.357E-04	0.448	0.984	1.180	1.419	1.457	1.490
2.645E-04	0.618	1.503	1.881	2.391	2.479	2.555
3.186E-04	0.993	2.794	3.748	5.296	5.600	5.875
3.613E-04	1.369	4.313	6.210	10.197	11.195	12.184
3.750E-04	1.493	4.825	7.051	11.937	13.204	14.476

3.910E-04	1.645	5.458	8.110	14.230	15.888	17.584
4.101E-04	1.834	6.266	9.483	17.360	19.615	21.982
4.338E-04	2.080	7.333	11.332	21.837	25.060	28.567
4.642E-04	2.413	8.814	13.951	28.651	33.582	39.226
5.056E-04	2.901	11.027	17.950	39.996	48.313	58.578
5.680E-04	3.704	14.758	24.861	61.801	78.169	100.954
6.851E-04	5.410	22.863	40.272	117.388	160.666	235.622
7.775E-04	7.075	30.966	56.123	185.281	275.910	496.401
8.070E-04	7.624	33.643	61.374	208.219	315.561	591.493
8.415E-04	8.291	36.904	67.790	236.810	365.949	720.695
8.829E-04	9.123	40.984	75.839	273.424	431.810	903.234
9.339E-04	10.200	46.273	86.302	322.011	521.122	1174.482
9.994E-04	11.662	53.471	100.583	389.730	648.478	1605.778
1.089E-03	13.799	64.009	121.550	491.242	843.985	2360.478
1.223E-03	17.325	81.433	156.303	662.975	1182.894	3893.686
1.476E-03	24.823	118.554	230.523	1036.817	1938.472	8025.486
1.675E-03	32.194	155.087	303.704	1411.182	2710.487	13172.552
1.738E-03	34.625	167.140	327.851	1534.848	2965.889	14903.740
1.813E-03	37.584	181.809	357.241	1685.507	3277.437	17046.010
1.902E-03	41.283	200.146	393.985	1874.015	3667.655	19761.170
2.012E-03	46.074	223.899	441.504	2118.342	4173.816	23315.170
2.153E-03	52.594	256.221	506.356	2450.924	4863.084	28177.819
2.345E-03	62.142	303.550	601.201	2937.869	5872.126	35283.970
2.636E-03	77.942	381.860	758.116	3742.919	7538.837	46898.651
3.179E-03	111.676	549.015	1092.985	5458.228	11082.503	71005.381
3.608E-03	145.029	714.204	1423.767	7146.573	14554.088	93438.457
3.745E-03	156.041	768.741	1532.966	7703.622	15698.684	100777.604
3.906E-03	169.454	835.161	1665.947	8381.546	17090.455	109623.260
4.098E-03	186.237	918.263	1832.312	9229.046	18828.727	120562.487
4.335E-03	208.000	1026.011	2047.995	10326.899	21078.125	134565.412
4.639E-03	237.651	1172.798	2341.787	11820.909	24135.447	153360.793
5.053E-03	281.135	1388.032	2772.520	14008.867	28606.276	180451.654
5.679E-03	353.216	1744.754	3486.277	17629.367	35991.063	224415.576
6.850E-03	507.460	2507.923	5012.940	25359.375	51721.654	315974.746
7.775E-03	660.451	3264.644	6526.188	33000.768	67217.998	403317.836
8.070E-03	710.994	3514.625	7026.062	35524.019	72332.628	432026.730

8.415E-03	772.586	3819.240	7635.155	38597.381	78559.080	466808.047
8.830E-03	849.699	4200.601	8397.667	42443.200	86346.484	510104.187
9.340E-03	949.760	4695.417	9386.962	47430.396	96438.667	565897.156
9.996E-03	1086.197	5370.078	10735.732	54226.051	110180.764	641396.508
1.089E-02	1286.482	6360.379	12715.368	64194.262	130322.454	751291.070

AMMONIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-11 GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
1.985E-04	0.000	0.000	0.000	0.000	0.000	0.000
2.039E-04	0.006	0.006	0.006	0.007	0.007	0.007
2.118E-04	0.016	0.019	0.019	0.019	0.019	0.019
2.172E-04	0.023	0.028	0.028	0.029	0.029	0.029
2.235E-04	0.033	0.039	0.041	0.041	0.042	0.042
2.307E-04	0.045	0.055	0.056	0.058	0.058	0.058
2.393E-04	0.061	0.076	0.078	0.080	0.080	0.080
2.496E-04	0.084	0.105	0.109	0.112	0.112	0.112
2.625E-04	0.115	0.149	0.155	0.159	0.160	0.161
2.793E-04	0.164	0.219	0.228	0.237	0.238	0.239
2.936E-04	0.214	0.295	0.311	0.324	0.326	0.326
3.040E-04	0.253	0.358	0.378	0.397	0.399	0.401
3.102E-04	0.304	0.442	0.470	0.495	0.498	0.501
3.309E-04	0.372	0.558	0.598	0.634	0.639	0.643
3.492E-04	0.465	0.728	0.787	0.843	0.851	0.857
3.655E-04	0.559	0.912	0.996	1.077	1.089	1.098
3.788E-04	0.642	1.079	1.188	1.295	1.310	1.323
3.946E-04	0.746	1.300	1.445	1.591	1.612	1.629
4.134E-04	0.881	1.602	1.802	2.010	2.040	2.065
4.367E-04	1.064	2.033	2.323	2.634	2.680	2.718
4.667E-04	1.323	2.667	3.133	3.636	3.713	3.776
5.078E-04	1.718	3.770	4.521	5.428	5.572	5.694
5.698E-04	2.402	5.833	7.290	9.244	9.578	9.865
6.863E-04	3.926	11.029	14.760	20.752	21.921	22.969
7.784E-04	5.494	17.288	24.826	40.398	44.223	47.976
8.078E-04	6.014	19.400	28.272	47.382	52.236	57.061

8.423E-04	6.649	22.029	32.630	56.599	62.948	69.371
8.836E-04	7.447	25.394	38.302	69.207	77.833	86.771
9.346E-04	8.484	29.858	45.971	87.267	99.582	112.768
1.000E-03	9.901	36.088	56.890	114.811	133.609	154.693
1.089E-03	11.984	45.450	73.666	160.785	192.386	230.322
1.224E-03	15.443	61.357	102.874	249.433	311.327	394.028
1.476E-03	22.844	96.240	168.660	476.666	639.285	902.269
1.675E-03	30.166	131.622	237.375	757.776	1097.754	1828.200
1.739E-03	32.583	143.333	260.189	852.968	1255.641	2162.006
1.813E-03	35.526	157.630	288.125	971.935	1456.539	2609.527
1.902E-03	39.208	175.559	323.268	1124.756	1719.612	3231.931
2.012E-03	43.980	198.856	369.075	1328.287	2077.272	4139.687
2.153E-03	50.478	230.659	431.801	1613.215	2589.148	5551.238
2.346E-03	60.001	277.379	524.233	2042.660	3379.072	7957.396
2.636E-03	75.769	354.929	678.130	2774.263	4758.969	12701.668
3.179E-03	109.457	520.995	1008.671	4382.027	7872.586	25130.525
3.608E-03	142.786	685.637	1337.289	6015.840	11121.540	40682.679
3.745E-03	153.792	740.011	1445.843	6556.651	12199.701	45944.796
3.905E-03	167.196	806.253	1578.124	7216.966	13519.331	52510.327
4.098E-03	183.970	889.158	1743.719	8045.137	15178.334	60923.547
4.335E-03	205.722	996.685	1958.541	9121.438	17339.259	72087.972
4.639E-03	235.360	1143.216	2251.347	10590.904	20295.881	87636.968
5.053E-03	278.826	1358.139	2680.898	12749.924	24648.327	110907.063
5.678E-03	350.879	1714.443	3393.125	16334.184	31885.348	150136.299
6.849E-03	505.053	2476.867	4917.308	24010.986	47402.046	235036.027
7.774E-03	657.966	3233.005	6428.901	31623.952	62788.950	319197.371
8.068E-03	708.475	3482.761	6928.179	34138.248	67869.974	346950.770
8.414E-03	770.021	3787.089	7536.540	37201.485	74059.092	380707.422
8.828E-03	847.071	4168.065	8298.107	41035.451	81803.943	422874.824
9.339E-03	947.036	4662.331	9286.110	46008.248	91846.729	477411.797
9.994E-03	1083.318	5336.136	10632.949	52785.346	105528.605	551504.477
1.089E-02	1283.316	6324.914	12609.292	62726.460	125589.067	659678.320

AMMONIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-10 GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
4.276E-04	0.000	0.000	0.000	0.000	0.000	0.000
4.392E-04	0.021	0.025	0.025	0.025	0.025	0.026
4.563E-04	0.061	0.072	0.074	0.075	0.075	0.075
4.680E-04	0.091	0.108	0.111	0.113	0.113	0.113
4.815E-04	0.129	0.154	0.158	0.162	0.162	0.162
4.971E-04	0.177	0.215	0.221	0.226	0.227	0.227
5.155E-04	0.242	0.298	0.306	0.314	0.315	0.316
5.378E-04	0.331	0.415	0.429	0.440	0.442	0.443
5.656E-04	0.459	0.590	0.613	0.632	0.634	0.636
6.017E-04	0.655	0.872	0.911	0.945	0.949	0.953
6.326E-04	0.860	1.185	1.246	1.300	1.308	1.313
6.549E-04	1.021	1.440	1.521	1.595	1.604	1.612
6.813E-04	1.230	1.783	1.895	1.997	2.011	2.022
7.129E-04	1.508	2.263	2.423	2.570	2.590	2.607
7.522E-04	1.895	2.965	3.206	3.433	3.464	3.490
7.874E-04	2.268	3.728	4.072	4.405	4.451	4.489
8.162E-04	2.634	4.426	4.873	5.313	5.374	5.425
8.500E-04	3.072	5.349	5.947	6.549	6.634	6.704
8.907E-04	3.643	6.616	7.444	8.302	8.426	8.528
9.409E-04	4.415	8.433	9.635	10.927	11.117	11.275
1.006E-03	5.516	11.201	13.060	15.154	15.473	15.738
1.094E-03	7.207	15.810	18.956	22.752	23.355	23.864
1.228E-03	10.149	24.645	30.789	39.011	40.413	41.620
1.479E-03	16.767	47.086	62.964	88.348	93.278	97.695
1.677E-03	23.661	74.460	106.830	173.219	189.394	205.210
1.740E-03	25.952	83.715	121.870	203.421	223.953	244.279



1.313E-03	28.750	5.257	140.835	243.322	270.182	277.227
1.904E-03	32.283	110.028	185.794	297.959	334.454	372.060
2.013E-03	36.881	129.747	199.479	376.322	428.413	483.820
2.134E-03	41.174	157.295	247.570	495.990	575.478	663.868
2.347E-03	52.462	198.823	321.872	696.047	829.589	988.017
2.637E-03	67.930	265.657	451. .	1082.587	1343.701	1688.971
3.180E-03	101.184	425.751	744.514	2075.513	2761.872	3834.872
3.609E-03	134.291	585.221	1053.212	3314.108	4746.981	7681.387
3.745E-03	145.231	638.058	1155.811	3733.658	5431.031	9063.929
3.906E-03	158.385	702.626	1281.590	4258.853	6302.064	10907.111
4.098E-03	175.262	783.691	1440.011	4934.034	7443.757	13458.355
4.325E-03	198.928	889.165	1646.793	5835.079	8997.892	17158.884
4.639E-03	226.467	1013.351	1930.406	7099.060	11225.674	22876.167
5.043E-03	269.818	1245.512	2349.079	9009.008	14672.312	32551.272
5.679E-03	341.726	1598.389	3047.675	12273.226	20713.560	51477.717
6.449E-03	455.691	2355.833	4552.242	19478.188	34416.737	107729.220
7.774E-03	648.496	3109.674	6053.974	26849.279	48847.083	162504.072
8.068E-03	698.970	3338.484	6550.414	29291.420	53642.147	183444.768
8.414E-03	760.479	3661.999	7153.482	32276.213	59519.912	209639.645
8.820E-03	837.487	4042.078	7913.533	35044.043	66921.560	241312.236
9.338E-03	937.403	4535.334	8897.605	40900.647	76580.381	284181.777
9.994E-03	1073.625	5207.968	10239.924	47967.913	89823.401	351018.223
1.069E-02	1273.541	6195.320	12210.854	57379.115	109374.582	441711.312

AMMONIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-09 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
9.212E-04	0.000	0.000	0.000	0.000	0.000	0.000
9.462E-04	0.040	0.103	0.105	0.107	0.107	0.107
9.831E-04	0.259	0.305	0.312	0.317	0.318	0.319
1.000E-03	0.386	0.458	0.469	0.478	0.479	0.480
1.037E-03	0.547	0.654	0.671	0.685	0.687	0.688
1.071E-03	0.754	0.913	0.938	0.959	0.962	0.964
1.111E-03	1.031	1.266	1.304	1.337	1.341	1.344
1.159E-03	1.413	1.764	1.828	1.879	1.885	1.890
1.219E-03	1.966	2.525	2.620	2.703	2.713	2.722
1.296E-03	2.817	3.743	3.909	4.054	4.073	4.089
1.363E-03	3.704	5.100	5.363	5.597	5.628	5.653
1.411E-03	4.707	6.210	6.561	6.876	6.918	6.952
1.468E-03	5.319	7.706	8.190	8.629	8.687	8.735
1.536E-03	6.558	9.800	10.493	11.132	11.219	11.289
1.621E-03	8.235	12.877	13.922	14.909	15.044	15.154
1.696E-03	9.467	16.230	17.727	19.174	19.374	19.538
1.758E-03	11.490	19.298	21.246	23.165	23.433	23.653
1.831E-03	13.423	23.368	25.978	28.607	28.979	29.286
1.919E-03	15.950	28.962	32.587	36.242	36.883	37.330
2.027E-03	19.376	37.000	42.276	47.941	48.775	49.467
2.166E-03	24.270	49.277	57.453	64.665	68.063	69.232
2.357E-03	31.809	69.778	83.657	100.398	103.053	105.298
2.645E-03	44.968	109.200	136.410	172.783	178.976	184.311
3.186E-03	74.704	209.773	280.428	393.155	415.011	434.580
3.613E-03	105.884	333.253	477.966	773.826	845.652	915.767
3.749E-03	116.251	375.037	545.779	909.364	1000.552	1090.661

3.910E-03	128.955	427.146	631.759	1088.234	1207.840	1327.722
4.101E-03	144.951	494.155	744.021	1334.010	1496.138	1662.795
4.328E-03	165.826	583.334	896.317	1686.315	1917.746	2163.173
4.642E-03	194.434	708.274	1114.032	2224.726	2577.857	2909.051
5.056E-03	236.718	896.914	1450.108	3125.566	3718.644	4418.885
5.680E-03	307.256	1219.277	2038.611	4867.996	6027.786	7540.475
6.851E-03	459.239	1931.380	3374.179	9353.463	12396.516	17124.365
7.775E-03	611.626	2661.363	4785.156	14960.651	21322.874	34099.351
8.069E-03	661.203	2903.336	5254.335	16851.823	24349.358	40187.733
8.415E-03	722.388	3199.195	5829.845	19242.253	28510.062	48303.282
8.829E-03	799.046	3570.849	6553.145	22306.614	33456.754	59515.462
9.339E-03	898.566	4054.691	7502.493	26398.189	40456.072	75744.067
9.994E-03	1034.330	4716.579	8802.751	32143.399	50498.276	100756.353
1.089E-02	1233.715	5641.255	10723.889	40834.633	66049.143	142964.459

AMMONIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-08 GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
1.985E-03	0.000	0.000	0.000	0.000	0.000	0.000
2.039E-03	0.399	0.458	0.466	0.474	0.474	0.475
2.118E-03	1.151	1.351	1.381	1.407	1.410	1.412
2.172E-03	1.716	2.031	2.079	2.120	2.125	2.129
2.235E-03	2.430	2.904	2.978	3.040	3.048	3.055
2.307E-03	3.355	4.057	4.168	4.262	4.274	4.284
2.393E-03	4.590	5.633	5.802	5.944	5.953	5.977
2.496E-03	6.299	7.880	8.141	8.364	8.393	8.416
2.625E-03	8.777	11.260	11.685	12.051	12.099	12.137
2.793E-03	12.593	16.722	17.462	18.108	18.193	18.261
2.936E-03	16.584	22.817	23.994	25.038	25.176	25.287
3.040E-03	19.747	27.810	29.380	30.789	30.976	31.128
3.162E-03	23.854	34.545	36.710	38.677	38.940	39.153
3.304E-03	29.356	43.984	47.090	49.959	50.346	50.660
3.491E-03	37.022	57.869	62.565	66.999	67.404	68.098
3.655E-03	44.856	73.026	79.757	86.267	87.168	87.904
3.788E-03	51.752	86.902	95.674	104.312	105.521	106.511
3.945E-03	60.514	105.329	117.093	128.939	130.618	131.998
4.134E-03	71.975	130.675	147.034	163.975	166.416	168.430
4.367E-03	87.537	167.139	190.972	216.560	220.329	223.456
4.667E-03	109.785	222.900	259.882	301.242	307.867	313.152
5.077E-03	144.113	316.137	379.016	454.828	466.858	477.023
5.648E-03	204.129	495.720	619.219	784.624	812.309	836.496
6.863E-03	340.042	954.842	1276.287	1788.674	1887.936	1976.786
7.784E-03	482.448	1520.294	2180.187	3227.354	3853.874	4172.380
8.078E-03	530.547	1711.725	2490.616	4146.583	4561.161	4970.500

8.423E-03	588.642	1950.793	2884.384	4965.365	5507.843	6052.423
8.836E-03	662.279	2257.854	3398.765	6087.512	6824.753	7581.741
9.345E-03	758.168	2667.037	4096.968	7698.512	8750.959	9865.522
1.000E-02	889.741	3240.670	5095.709	10161.355	11767.297	13543.228
1.089E-02	1084.110	4107.412	6638.558	14283.851	16980.902	20157.777

AMMONIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS =  $1.00E-07$  GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
4.276E-03	0.000	0.000	0.000	0.000	0.000	0.000
4.392E-03	1.809	2.076	2.115	2.148	2.152	2.156
4.503E-03	5.225	6.133	6.271	6.386	6.401	6.413
4.680E-03	7.797	9.223	9.442	9.626	9.650	9.669
4.814E-03	11.048	13.197	13.532	13.813	13.849	13.878
4.970E-03	15.259	18.444	18.948	19.372	19.427	19.471
5.155E-03	20.884	25.622	26.385	27.032	27.116	27.183
5.378E-03	28.677	35.859	37.047	38.060	38.191	38.297
5.656E-03	39.985	51.279	53.211	54.876	55.092	55.267
6.017E-03	57.415	76.212	79.582	82.527	82.912	83.223
6.325E-03	75.664	104.071	109.433	114.193	114.821	115.330
6.549E-03	90.134	126.899	134.063	140.489	141.342	142.032
6.812E-03	108.934	157.714	167.592	176.568	177.768	178.740
7.124E-03	134.126	200.920	215.103	228.206	229.972	231.408
7.522E-03	169.257	264.519	285.979	306.243	309.010	311.265
7.874E-03	205.181	333.992	364.774	394.544	398.664	402.033
8.162E-03	236.814	397.618	437.751	477.275	482.803	487.333
8.500E-03	277.029	482.147	535.997	590.224	597.908	604.223
8.906E-03	329.654	598.472	673.394	750.980	762.160	771.383
9.409E-03	401.146	765.901	875.120	992.373	1009.644	1023.969
1.000E-02	503.413	1022.082	1191.661	1382.686	1411.684	1435.914
1.044E-02	661.313	1450.717	1739.256	2087.110	2142.299	2188.935

AMMONIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-06 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
9.212E-03	0.000	0.000	0.000	0.000	0.000	0.000
9.462E-03	8.309	9.532	9.713	9.863	9.882	9.898
9.831E-03	24.025	28.175	28.807	29.335	29.401	29.457
1.008E-02	35.832	42.376	43.383	44.226	44.334	44.420
1.037E-02	50.780	60.646	62.182	63.472	63.638	63.771
1.071E-02	70.151	84.777	87.088	89.038	89.288	89.490
1.111E-02	96.036	117.794	121.301	124.273	124.656	124.964
1.159E-02	131.904	164.907	170.363	175.020	175.622	176.106

MAGNESIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-12 GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT						
	5.00	1.00	0.50	0.10	0.05	0.01	
8.268E-05	0.000	0.000	0.000	0.000	0.000	0.000	
8.693E-05	0.001	0.002	0.002	0.002	0.002	0.002	
9.034E-05	0.003	0.003	0.003	0.003	0.003	0.003	
9.444E-05	0.005	0.005	0.005	0.005	0.005	0.005	
9.951E-05	0.008	0.009	0.009	0.009	0.009	0.009	
1.060E-04	0.013	0.015	0.015	0.016	0.016	0.016	
1.116E-04	0.017	0.023	0.023	0.024	0.024	0.024	
1.156E-04	0.024	0.029	0.030	0.030	0.030	0.031	
1.204E-04	0.031	0.038	0.039	0.040	0.040	0.040	
1.261E-04	0.040	0.051	0.053	0.054	0.054	0.055	
1.331E-04	0.054	0.071	0.074	0.077	0.077	0.077	
1.394E-04	0.068	0.093	0.098	0.103	0.103	0.104	
1.445E-04	0.081	0.115	0.121	0.127	0.128	0.129	
1.505E-04	0.097	0.143	0.153	0.162	0.163	0.164	
1.578E-04	0.115	0.183	0.198	0.212	0.214	0.215	
1.667E-04	0.149	0.242	0.265	0.287	0.290	0.293	
1.782E-04	0.192	0.334	0.372	0.411	0.416	0.421	
1.939E-04	0.258	0.490	0.561	0.637	0.648	0.657	
2.177E-04	0.373	0.796	0.948	1.127	1.156	1.180	
2.623E-04	0.630	1.590	2.025	2.635	2.743	2.837	
2.975E-04	0.892	2.579	3.545	5.305	5.692	6.054	
3.087E-04	0.979	2.913	4.065	6.250	6.744	7.212	
3.219E-04	1.084	3.327	4.723	7.492	8.141	8.764	
3.377E-04	1.216	3.858	5.581	9.189	10.074	10.940	
3.572E-04	1.387	4.563	6.745	11.622	12.892	14.165	
3.822E-04	1.615	5.547	8.409	15.348	17.302	19.334	



4.16JE-04	1.959	7.028	10.980	21.624	24.959	28.627
4.678E-04	2.518	9.545	15.487	33.930	40.665	48.792
5.042E-04	3.705	15.061	25.717	66.405	85.278	112.440
6.402E-04	4.861	20.628	36.460	108.623	151.934	236.608
6.645E-04	5.242	22.468	40.027	123.011	175.127	282.058
6.930E-04	5.705	24.712	44.394	141.111	204.973	344.138
7.271E-04	6.283	27.521	49.885	164.522	244.540	432.513
7.691E-04	7.029	31.165	57.038	195.915	299.053	565.256
8.230E-04	8.042	36.127	66.820	240.162	378.191	779.720
8.966E-04	9.521	43.395	81.209	307.278	502.150	1164.390
1.008E-03	11.959	55.413	105.100	422.234	721.955	1978.003
1.215E-03	17.137	81.013	156.188	675.641	1224.341	4328.669
1.379E-03	22.215	106.161	206.579	932.412	1751.139	7652.408
1.432E-03	23.990	114.483	223.206	1017.322	1925.842	8788.780
1.493E-03	25.928	124.583	243.440	1120.865	2139.456	10219.561
1.566E-03	28.474	137.207	268.733	1250.535	2407.625	12065.731
1.657E-03	31.770	153.553	301.492	1418.739	2756.215	14524.182
1.773E-03	36.254	175.788	346.058	1647.855	3231.820	17944.712
1.932E-03	42.817	208.332	411.292	1983.494	3929.283	23024.895
2.171E-03	53.670	262.147	519.164	2533.543	5082.830	31436.369
2.618E-03	76.823	376.926	749.205	3720.947	7536.795	49035.001
2.971E-03	99.687	490.218	976.168	4883.551	9938.687	65381.814
3.084E-03	107.235	527.615	1051.081	5267.063	10730.388	70721.938
3.216E-03	116.426	573.151	1142.291	5733.685	11692.799	77150.059
3.374E-03	127.925	630.114	1256.377	6316.881	12894.442	85086.930
3.570E-03	142.833	703.953	1404.248	7072.119	14448.692	95219.736
3.820E-03	163.140	804.519	1605.616	8099.487	16560.027	108783.682
4.161E-03	192.911	951.937	1900.749	9603.329	19645.331	128261.187
4.676E-03	242.247	1196.182	2389.628	12090.454	24737.641	159742.035
5.641E-03	347.775	1718.485	3434.805	17396.529	35572.041	224926.895
6.402E-03	452.385	2236.042	4470.071	22635.625	46226.304	286554.953
6.645E-03	486.941	2407.001	4812.020	24365.341	49741.961	306781.609
6.930E-03	529.049	2615.304	5228.640	26471.824	54020.767	331260.574
7.271E-03	581.763	2876.061	5750.138	29107.189	59370.203	361681.035
7.692E-03	650.156	3214.356	6426.657	32524.053	66301.104	400832.059
8.232E-03	743.404	3675.549	7348.870	37178.737	75734.993	453721.887

8.968E-03 880.270 4352.412 8702.219 44004.420 89556.084 530545.234  
1.008E-02 1107.418 5475.644 10947.808 55320.237 112443.547 656496.211

MAGNESIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-11 GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
1.781E-04	0.000	0.000	0.000	0.000	0.000	0.000
1.810E-04	0.001	0.001	0.001	0.001	0.001	0.001
1.873E-04	0.005	0.005	0.005	0.005	0.005	0.005
1.946E-04	0.009	0.010	0.010	0.010	0.010	0.010
2.035E-04	0.016	0.018	0.018	0.018	0.018	0.018
2.144E-04	0.027	0.030	0.030	0.031	0.031	0.031
2.285E-04	0.045	0.051	0.052	0.053	0.053	0.053
2.405E-04	0.067	0.078	0.080	0.081	0.081	0.081
2.492E-04	0.084	0.100	0.103	0.105	0.105	0.106
2.593E-04	0.108	0.132	0.136	0.140	0.140	0.140
2.716E-04	0.142	0.179	0.185	0.191	0.192	0.192
2.867E-04	0.191	0.251	0.262	0.272	0.273	0.274
3.003E-04	0.244	0.334	0.352	0.367	0.369	0.371
3.113E-04	0.291	0.412	0.437	0.459	0.462	0.464
3.243E-04	0.353	0.519	0.554	0.587	0.591	0.594
3.399E-04	0.434	0.669	0.722	0.772	0.779	0.784
3.592E-04	0.547	0.890	0.974	1.055	1.066	1.076
3.840E-04	0.711	1.238	1.379	1.522	1.543	1.560
4.178E-04	0.966	1.836	2.099	2.383	2.424	2.459
4.690E-04	1.417	3.022	3.593	4.269	4.375	4.465
5.650E-04	2.441	6.148	7.813	10.135	10.541	10.895
6.409E-04	3.512	10.140	13.904	20.667	22.132	23.497
6.651E-04	3.867	11.491	15.996	24.402	26.273	28.034
6.935E-04	4.301	13.179	18.653	29.325	31.784	34.128
7.276E-04	4.847	15.349	22.132	36.064	39.418	42.670
7.695E-04	5.557	18.244	26.871	45.749	50.559	55.333

8.234E-04	6.527	22.311	33.687	60.621	68.013	75.603
8.969E-04	7.956	28.471	44.288	85.743	98.332	111.937
1.008E-03	10.325	39.035	63.029	135.166	160.488	190.237
1.215E-03	15.414	62.443	106.045	266.220	336.669	453.422
1.379E-03	20.444	86.460	152.018	438.460	599.124	885.252
1.432E-03	22.105	94.419	167.319	497.280	690.451	1048.996
1.493E-03	24.127	104.146	186.104	571.457	808.012	1269.998
1.566E-03	26.657	116.359	209.794	667.669	963.976	1580.049
1.657E-03	29.935	132.246	240.754	797.145	1179.144	2037.471
1.773E-03	34.397	153.957	283.258	980.429	1492.200	2759.796
1.932E-03	40.935	185.884	346.051	1259.989	1984.430	4017.916
2.171E-03	51.757	238.928	450.861	1742.351	2862.822	6578.683
2.618E-03	74.865	352.602	676.498	2816.783	4893.181	13628.602
2.971E-03	97.707	465.341	901.256	3923.863	7069.610	23215.211
3.084E-03	105.246	502.573	975.513	4290.818	7793.890	26495.481
3.216E-03	114.432	547.931	1066.012	4739.457	8682.835	30637.636
3.374E-03	125.922	604.696	1179.315	5302.893	9803.561	36012.851
3.570E-03	140.820	678.314	1326.312	6036.074	11267.381	43239.126
3.820E-03	161.115	778.626	1526.680	7038.323	13275.531	53440.777
4.161E-03	190.871	925.738	1820.626	8512.580	16239.384	68920.690
4.676E-03	240.183	1169.581	2307.989	10962.690	21179.832	95390.610
5.641E-03	345.657	1691.207	3350.794	16214.912	31795.503	153462.787
6.402E-03	450.210	2208.284	4384.596	21425.977	42339.254	211678.398
6.645E-03	484.743	2379.065	4726.039	23147.040	45821.299	230898.889
6.929E-03	526.618	2587.145	5142.050	25243.754	50062.937	254290.412
7.270E-03	579.488	2847.611	5662.787	27868.005	55371.150	283520.840
7.690E-03	647.815	3185.497	6338.291	31271.625	62254.300	321354.414
8.230E-03	740.954	3646.067	7259.037	35909.713	71630.870	372740.371
8.966E-03	877.623	4321.849	8609.962	42712.476	85377.500	447801.027
1.008E-02	1104.325	5442.743	10850.548	53989.751	108152.808	571495.437

MAGNESIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-10 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
3.830E-04	0.000	0.000	0.000	0.000	0.000	0.000
3.900E-04	0.005	0.005	0.005	0.005	0.005	0.005
4.035E-04	0.017	0.018	0.018	0.019	0.019	0.019
4.193E-04	0.035	0.037	0.038	0.038	0.038	0.038
4.383E-04	0.061	0.067	0.067	0.068	0.068	0.068
4.619E-04	0.103	0.114	0.114	0.117	0.117	0.117
4.922E-04	0.175	0.198	0.202	0.205	0.205	0.205
5.181E-04	0.261	0.304	0.310	0.316	0.316	0.317
5.368E-04	0.331	0.394	0.404	0.412	0.413	0.414
5.587E-04	0.428	0.522	0.537	0.550	0.551	0.553
5.851E-04	0.564	0.710	0.735	0.756	0.759	0.761
6.177E-04	0.761	1.003	1.046	1.084	1.089	1.093
6.469E-04	0.980	1.367	1.411	1.474	1.482	1.488
6.707E-04	1.174	1.661	1.759	1.848	1.860	1.869
6.987E-04	1.427	2.098	2.241	2.372	2.390	2.404
7.323E-04	1.765	2.718	2.933	3.136	3.164	3.186
7.730E-04	2.234	3.635	3.976	4.308	4.354	4.392
8.272E-04	2.919	5.084	5.663	6.251	6.333	6.404
9.001E-04	3.995	7.590	8.676	9.848	10.021	10.164
1.010E-03	5.907	12.600	14.976	17.787	18.227	18.598
1.217E-03	10.296	25.925	32.924	42.654	44.355	45.830
1.381E-03	14.955	43.193	59.184	87.741	93.687	99.604
1.455E-03	16.504	49.049	68.220	103.749	111.606	118.980
1.494E-03	18.401	56.381	79.719	124.083	135.213	145.032
1.567E-03	20.791	65.830	94.812	153.856	167.956	181.576
1.650E-03	23.909	78.475	115.430	195.565	215.789	235.776

1.774E-03	28.185	96.294	145.168	259.718	290.859	322.559
1.932E-03	34.495	123.362	191.591	368.292	421.242	478.037
2.171E-03	45.036	170.041	274.024	582.377	688.806	812.456
2.619E-03	67.728	274.026	464.327	1151.810	1447.390	1045.681
2.972E-03	90.355	381.636	669.531	1974.706	2577.970	3734.411
3.084E-03	57.833	417.316	737.913	2162.086	2971.471	4416.656
3.216E-03	106.948	461.023	821.977	2487.056	3478.204	5333.951
3.275E-03	118.364	515.947	928.152	2909.167	4150.822	6614.909
3.570E-03	133.177	587.505	1067.132	3478.189	5079.494	8494.115
3.820E-03	153.377	685.462	1258.289	4285.370	6432.338	11441.343
4.162E-03	183.020	829.792	1541.300	5519.784	8563.466	16531.284
4.676E-03	232.191	1070.151	2014.901	7656.993	12377.680	26781.669
5.641E-03	337.462	1586.770	3037.836	12440.427	21238.273	54649.901
6.402E-03	441.911	2101.328	4061.639	17407.323	30828.026	92233.472
6.645E-03	476.412	2271.558	4400.102	19055.426	34024.055	105099.207
6.929E-03	518.453	2478.621	4812.877	21072.764	37953.123	121356.602
7.270E-03	571.083	2738.186	5330.054	23609.574	42915.625	142489.727
7.690E-03	639.365	3075.063	6001.582	26915.498	49410.963	170979.932
8.230E-03	732.450	3534.469	6917.774	31441.995	58343.226	211375.527
1.965E-03	869.047	4208.849	8263.279	38112.869	71563.660	273054.543
1.007E-02	1095.640	5327.898	10496.916	49224.887	93676.123	379514.648

MAGNESIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-09 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
8.268E-04	0.000	0.010	0.000	0.000	0.000	0.000
6.402E-04	0.020	0.021	0.021	0.021	0.021	0.021
8.693E-04	0.071	0.076	0.076	0.077	0.077	0.077
9.034E-04	0.145	0.156	0.157	0.158	0.158	0.159
9.443E-04	0.256	0.278	0.281	0.284	0.284	0.284
9.951E-04	0.435	0.479	0.485	0.490	0.491	0.491
1.060E-03	0.742	0.837	0.851	0.853	0.865	0.866
1.116E-03	1.106	1.288	1.315	1.339	1.342	1.344
1.156E-03	1.411	1.674	1.716	1.751	1.756	1.759
1.204E-03	1.828	2.224	2.289	2.344	2.351	2.357
1.261E-03	2.417	3.038	3.144	3.235	3.247	3.257
1.331E-03	3.285	4.307	4.491	4.653	4.674	4.691
1.394E-03	4.223	5.780	6.079	6.346	6.382	6.410
1.445E-03	5.071	7.171	7.593	7.975	8.026	8.068
1.505E-03	6.177	9.079	9.693	10.261	10.338	10.400
1.578E-03	7.655	11.788	12.719	13.600	13.721	13.819
1.667E-03	9.720	15.810	17.292	18.737	18.938	19.103
1.782E-03	12.736	22.181	24.707	27.275	27.641	27.942
1.939E-03	17.494	33.242	37.996	43.125	43.882	44.511
2.177E-03	25.988	55.432	65.880	78.232	80.166	81.795
2.622E-03	45.577	114.754	145.700	186.658	196.158	202.662
2.975E-03	66.536	192.213	263.305	389.939	417.116	442.373
3.087E-03	73.509	218.506	303.812	461.453	496.208	528.793
3.219E-03	82.063	251.467	355.420	555.943	601.665	645.048
3.377E-03	92.846	293.998	423.238	685.587	748.007	808.208
3.572E-03	106.938	350.995	516.004	872.380	961.942	1050.290

3.822E-03	126.296	431.439	650.007	1159.965	1297.690	1437.999
4.163E-03	154.925	553.955	859.566	1647.187	1881.777	2132.593
4.678E-03	202.801	765.450	1232.497	2609.020	3080.563	3625.707
5.641E-03	306.175	1238.139	2095.914	5171.583	6480.582	8229.851
6.402E-03	409.647	1729.329	3030.956	8569.956	11550.881	16592.386
6.645E-03	443.859	1892.374	3342.739	9732.288	13315.903	19609.138
6.930E-03	485.586	2092.018	3726.261	11200.729	15589.318	23659.056
7.270E-03	537.871	2343.179	4211.007	13109.413	18607.852	29304.521
7.691E-03	605.768	2670.644	4846.025	15684.481	22777.253	37569.534
8.210E-03	658.415	3119.283	5720.226	19340.903	28854.611	50494.927
8.966E-03	834.496	3780.928	7015.812	24939.534	38436.729	72747.432
1.007E-02	1060.443	4884.014	9186.553	34648.345	55609.989	117383.542



MAGNESIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-08 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
1.781E-03	0.000	0.000	0.000	0.000	0.000	0.000
1.810E-03	0.087	0.092	0.092	0.093	0.093	0.093
1.873E-03	0.312	0.332	0.335	0.337	0.337	0.338
1.946E-03	0.638	0.664	0.690	0.696	0.696	0.697
2.032E-03	1.131	1.225	1.239	1.249	1.251	1.252
2.144E-03	1.921	2.115	2.142	2.165	2.168	2.170
2.285E-03	3.268	3.709	3.771	3.822	3.829	3.834
2.405E-03	4.916	5.717	5.840	5.943	5.956	5.966
2.491E-03	6.277	7.445	7.629	7.784	7.804	7.820
2.593E-03	8.143	9.906	10.193	10.438	10.469	10.455
2.716E-03	10.787	13.522	14.025	14.429	14.482	14.525
2.867E-03	14.687	19.245	20.098	20.790	20.884	20.961
3.002E-03	18.907	25.866	27.204	28.399	28.558	28.686
3.113E-03	22.725	32.126	34.015	35.729	35.958	36.143
3.243E-03	27.712	40.721	43.474	46.025	46.369	46.648
3.399E-03	34.406	52.941	57.124	61.081	61.621	62.062
3.592E-03	43.721	71.103	77.770	84.270	85.174	85.914
3.839E-03	57.376	99.917	111.299	122.865	124.513	125.859
4.178E-03	78.955	150.023	171.481	194.623	198.041	200.878
4.690E-03	117.550	250.743	297.995	353.846	362.589	369.950
5.650E-03	206.798	520.671	661.018	855.713	889.689	919.148
6.409E-03	302.645	874.424	1197.724	1772.937	1896.236	2010.763
6.651E-03	334.548	994.569	1382.674	2098.942	2236.646	2404.420
6.935E-03	373.705	1145.259	1618.437	2529.853	2737.360	2934.127
7.275E-03	423.098	1339.826	1928.431	3121.320	3404.666	3677.738
7.695E-03	487.690	1600.743	2352.735	3973.883	4380.512	4781.284

8.234E-03	576.477	1969.274	2966.099	5287.083	5912.498	6548.946
8.969E-03	707.902	2531.039	3926.134	7513.047	8578.474	9715.899
1.008E-02	927.897	3501.812	5636.366	11909.983	14051.591	16522.185

MAGNESIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-07 GM TEMPERATURE = 20C.

RADIUS (CM)	SUPERSATURATION IN PERCENT						
	5.00	1.00	0.50	0.10	0.05	0.01	
3.638E-03	0.000	0.000	0.000	0.000	0.000	0.000	
3.900E-03	0.391	0.413	0.416	0.418	0.419	0.419	
4.035E-03	1.411	1.501	1.513	1.523	1.524	1.525	
4.193E-03	2.688	3.094	3.122	3.145	3.148	3.150	
4.383E-03	5.123	5.548	5.607	5.655	5.662	5.667	
4.619E-03	8.713	9.586	9.710	9.812	9.825	9.835	
4.922E-03	14.930	16.835	17.115	17.346	17.376	17.400	
5.181E-03	22.352	25.980	26.537	27.004	27.064	27.112	
5.368E-03	28.553	33.855	34.591	35.396	35.487	35.560	
5.587E-03	37.070	45.077	46.384	47.496	47.639	47.755	
5.851E-03	49.142	61.719	63.864	65.712	65.952	66.145	
6.177E-03	66.963	87.723	91.474	94.762	95.192	95.541	
6.469E-03	86.264	117.994	124.094	129.547	130.269	130.854	
6.707E-03	103.736	146.627	155.248	163.068	164.112	164.959	
6.987E-03	126.569	185.965	198.552	210.182	211.751	213.027	
7.323E-03	157.237	241.918	261.031	279.111	281.582	283.597	
7.738E-03	199.939	325.136	355.620	385.344	389.478	392.860	
8.272E-03	262.574	457.248	509.334	562.264	569.806	576.012	
9.001E-03	361.646	687.164	785.452	891.446	907.101	920.094	
1.010E-02	539.008	1149.758	1366.422	1622.480	1662.559	1696.305	

MAGNESIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-06 GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
8.268E-03	0.000	0.000	0.000	0.000	0.000	0.000
8.402E-03	1.792	1.892	1.905	1.916	1.917	1.918
8.692E-03	6.471	6.878	6.933	6.978	6.984	6.988
9.033E-03	13.245	14.186	14.315	14.420	14.434	14.444
9.443E-03	23.510	25.452	25.722	25.945	25.971	25.993
9.950E-03	40.005	44.002	44.570	45.037	45.096	45.143
1.060E-02	68.590	77.324	78.606	79.669	79.805	79.913
1.116E-02	102.740	119.396	121.953	124.095	124.369	124.590
1.156E-02	131.286	155.637	159.477	162.715	163.131	163.466

SODIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-12 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
9.090E-05	0.000	0.000	0.000	0.000	0.000	0.000
9.258E-05	0.001	0.001	0.001	0.001	0.001	0.001
9.519E-05	0.003	0.004	0.004	0.004	0.004	0.004
9.816E-05	0.006	0.007	0.007	0.007	0.007	0.007
1.016E-04	0.009	0.011	0.011	0.011	0.011	0.011
1.056E-04	0.013	0.016	0.017	0.017	0.017	0.017
1.205E-04	0.019	0.024	0.025	0.025	0.025	0.025
1.165E-04	0.028	0.035	0.037	0.038	0.038	0.038
1.243E-04	0.041	0.053	0.056	0.058	0.058	0.058
1.309E-04	0.054	0.073	0.077	0.080	0.081	0.081
1.357E-04	0.064	0.089	0.094	0.099	0.099	0.100
1.413E-04	0.077	0.111	0.118	0.124	0.124	0.125
1.480E-04	0.095	0.141	0.150	0.159	0.160	0.161
1.563E-04	0.119	0.184	0.198	0.211	0.213	0.215
1.638E-04	0.143	0.230	0.250	0.270	0.273	0.275
1.699E-04	0.163	0.272	0.298	0.324	0.328	0.331
1.770E-04	0.190	0.327	0.362	0.397	0.402	0.407
1.856E-04	0.223	0.401	0.450	0.501	0.508	0.514
1.961E-04	0.268	0.507	0.578	0.654	0.665	0.674
2.097E-04	0.332	0.667	0.776	0.898	0.917	0.932
2.283E-04	0.427	0.929	1.112	1.332	1.367	1.397
2.563E-04	0.590	1.424	1.776	2.250	2.330	2.400
3.089E-04	0.947	2.650	3.546	4.994	5.277	5.532
3.505E-04	1.305	4.095	5.887	9.646	10.586	11.517
3.637E-04	1.423	4.581	6.685	11.298	12.492	13.691
3.793E-04	1.567	5.183	7.691	13.474	15.039	16.640

3.979E-04	1.747	5.950	8.996	16.446	18.577	20.814
4.209E-04	1.980	6.963	10.751	20.697	23.748	27.068
4.504E-04	2.297	8.369	13.237	27.167	31.842	37.194
4.906E-04	2.759	10.467	17.032	37.943	45.838	55.591
5.512E-04	3.521	14.005	23.586	58.651	74.214	95.913
6.648E-04	5.136	21.684	38.192	111.433	152.649	224.266
7.545E-04	6.711	29.354	53.200	175.866	262.243	473.847
7.831E-04	7.230	31.888	58.172	197.632	299.946	564.932
8.167E-04	7.861	34.974	64.244	224.757	347.856	688.783
8.568E-04	8.649	38.834	71.863	259.487	410.476	863.956
9.064E-04	9.667	43.836	81.763	305.565	495.377	1124.603
9.700E-04	11.050	50.644	95.274	369.771	616.421	1539.632
1.057E-03	13.070	60.609	115.105	465.988	802.184	2267.379
1.187E-03	16.402	77.080	147.968	628.700	1124.060	3749.219
1.432E-03	23.487	112.163	218.127	982.721	1841.185	7750.883
1.625E-03	30.445	146.675	287.272	1336.951	2573.078	12736.830
1.687E-03	32.745	158.061	310.086	1453.952	2815.168	14412.294
1.759E-03	35.540	171.916	337.851	1596.475	3110.429	16484.665
1.846E-03	39.033	189.236	372.562	1774.780	3480.174	19110.535
1.953E-03	43.557	211.669	417.522	2005.850	3955.659	22542.452
2.090E-03	49.713	242.192	478.699	2320.338	4612.438	27231.632
2.276E-03	58.728	286.884	563.271	2780.710	5567.779	34075.671
2.558E-03	73.644	360.821	716.442	3541.666	7145.252	45236.227
3.085E-03	105.486	518.621	1032.603	5162.503	10497.492	68329.860
3.502E-03	136.964	674.533	1344.836	6757.224	13779.476	89738.591
3.632E-03	147.357	726.007	1447.908	7283.356	14861.426	96738.274
3.790E-03	160.015	788.693	1573.424	7923.624	16176.968	105169.544
3.977E-03	175.853	867.121	1730.446	8724.009	17819.894	115594.912
4.207E-03	196.390	958.805	1934.007	9760.746	19945.648	128929.467
4.502E-03	224.370	1107.327	2211.279	11171.491	22834.564	146614.160
4.904E-03	255.401	1310.433	2617.767	13237.270	27058.530	172571.602
5.211E-03	333.413	1647.039	3291.312	16655.360	34034.568	214335.514
6.648E-03	478.942	2367.122	4731.854	23952.099	48890.952	301237.402
7.545E-03	623.277	3081.055	6159.592	31163.623	63521.272	393993.734
7.832E-03	670.960	3316.897	6631.214	33545.191	68350.148	411194.316
8.167E-03	729.065	3604.280	7205.870	36445.633	74228.398	444133.625

485127.303  
557151.656

81579.751  
71106.276

40074.434  
44781.260

7925.254  
8856.543

3964.063  
4430.873

801.813  
856.207

8.5642-03  
4.0651-03

SODIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-11 GM TEMPERATURE = 20C

RADIUS (UM)	SUPER SATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
1.928E-04	0.000	0.000	0.000	0.000	0.000	0.000
1.963E-04	0.001	0.001	0.001	0.001	0.001	0.001
1.995E-04	0.004	0.005	0.005	0.005	0.005	0.005
2.051E-04	0.011	0.013	0.013	0.013	0.013	0.013
2.115E-04	0.020	0.023	0.024	0.024	0.024	0.024
2.189E-04	0.031	0.037	0.038	0.039	0.039	0.039
2.276E-04	0.046	0.056	0.057	0.059	0.059	0.059
2.368E-04	0.067	0.083	0.085	0.088	0.088	0.088
2.510E-04	0.098	0.123	0.128	0.131	0.132	0.132
2.677E-04	0.144	0.187	0.196	0.203	0.204	0.205
2.820E-04	0.192	0.261	0.274	0.285	0.286	0.287
2.923E-04	0.230	0.320	0.337	0.352	0.354	0.356
3.043E-04	0.279	0.399	0.422	0.444	0.446	0.449
3.186E-04	0.344	0.508	0.543	0.574	0.578	0.582
3.368E-04	0.433	0.669	0.721	0.770	0.776	0.782
3.528E-04	0.524	0.842	0.917	0.987	0.997	1.007
3.659E-04	0.603	1.000	1.098	1.193	1.206	1.217
3.813E-04	0.703	1.209	1.340	1.470	1.489	1.504
3.998E-04	0.832	1.494	1.670	1.863	1.890	1.912
4.225E-04	1.007	1.902	2.158	2.446	2.490	2.524
4.516E-04	1.254	2.521	2.931	3.387	3.459	3.517
4.918E-04	1.631	3.547	4.240	5.014	5.203	5.317
5.522E-04	2.282	5.500	6.854	8.660	8.997	9.232
6.652E-04	3.730	10.421	13.913	19.492	20.576	21.567
7.550E-04	5.216	16.354	23.448	34.072	41.658	43.176
7.835E-04	5.711	18.355	26.712	44.676	49.232	51.758



8.171E-04	6.513	20.843	50.838	53.333	54.359	65.391
8.272E-04	7.068	24.031	36.208	62.318	73.434	81.834
9.067E-04	8.051	28.258	43.467	82.404	94.004	106.421
9.793E-04	9.392	34.155	53.802	103.464	120.394	140.075
1.027E-03	11.363	43.014	69.677	151.966	181.809	217.634
1.188E-03	14.634	58.051	97.307	235.850	294.374	372.600
1.432E-03	21.621	91.041	159.313	450.853	604.806	824.028
1.626E-03	28.248	124.474	224.453	716.763	1038.617	1732.384
1.687E-03	30.812	135.534	246.011	806.801	1188.274	2043.094
1.759E-03	33.612	149.046	272.407	919.315	1378.435	2473.779
1.846E-03	37.029	165.982	303.610	1063.832	1627.434	3004.867
1.953E-03	41.596	187.988	345.883	1256.288	1965.943	3926.568
2.090E-03	47.753	218.026	406.124	1525.680	2450.368	5267.549
2.276E-03	56.725	262.145	495.634	1931.644	3197.826	7224.128
2.558E-03	71.612	335.370	640.765	2623.175	4503.315	12065.269
3.086E-03	103.413	492.149	952.853	4142.301	7448.097	23887.121
3.502E-03	134.869	647.551	1263.051	5685.539	10519.391	38676.683
3.635E-03	145.255	698.871	1365.517	6196.350	11538.487	43080.211
3.790E-03	157.905	761.390	1493.374	6819.955	12785.718	49422.319
3.977E-03	173.735	839.635	1646.571	7602.089	14353.654	57921.822
4.207E-03	194.262	941.114	1849.422	8618.474	16395.741	68533.030
4.502E-03	222.230	1079.396	2125.764	10006.057	19189.416	83306.700
4.904E-03	263.245	1282.211	2531.140	12044.542	23301.384	103410.747
5.511E-03	331.231	1618.424	3203.243	15428.409	30137.410	142655.641
6.647E-03	476.694	2337.808	4641.450	22674.982	44791.584	223199.973
7.344E-03	620.956	3051.193	6067.625	29829.748	59319.327	302928.274
7.831E-03	668.607	3286.824	6538.687	32232.867	64116.547	329219.961
8.166E-03	726.670	3573.937	7112.656	35123.751	69959.739	361198.008
8.568E-03	799.357	3933.357	7831.150	38741.864	77271.165	401119.027
9.045E-03	893.662	4399.649	8763.269	43434.605	86751.046	452749.953
9.699E-03	1022.224	5035.306	10033.900	49829.724	99605.782	522865.391
1.057E-02	1210.890	5968.088	11898.372	59210.264	118600.388	625230.508
1.187E-02	1523.885	7515.458	14991.093	74762.642	149972.504	793404.359

SODIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-10 GM TEMPERATURE = 20C

RADIUS(CM)	SUPEKSATURATIUM IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
4.219E-04	0.000	0.000	0.000	0.000	0.000	0.000
4.230E-04	0.002	0.002	0.002	0.002	0.002	0.002
4.297E-04	0.015	0.018	0.018	0.018	0.018	0.019
4.418E-04	0.042	0.049	0.050	0.051	0.051	0.051
4.556E-04	0.077	0.090	0.092	0.094	0.094	0.094
4.716E-04	0.122	0.144	0.148	0.151	0.151	0.151
4.903E-04	0.182	0.219	0.225	0.230	0.230	0.231
5.128E-04	0.265	0.326	0.336	0.344	0.345	0.347
5.408E-04	0.387	0.487	0.504	0.519	0.520	0.522
5.763E-04	0.574	0.749	0.780	0.806	0.810	0.813
6.075E-04	0.765	1.042	1.092	1.136	1.142	1.147
6.296E-04	0.924	1.281	1.349	1.410	1.418	1.424
6.557E-04	1.123	1.603	1.698	1.784	1.795	1.804
6.869E-04	1.390	2.053	2.191	2.318	2.335	2.349
7.250E-04	1.760	2.714	2.923	3.123	3.150	3.172
7.601E-04	2.137	3.433	3.738	4.030	4.070	4.103
7.884E-04	2.467	4.090	4.488	4.878	4.932	4.976
8.215E-04	2.885	4.960	5.496	6.032	6.108	6.170
8.613E-04	3.430	6.154	6.901	7.670	7.781	7.872
9.103E-04	4.166	7.868	8.960	10.126	10.297	10.439
9.734E-04	5.215	10.482	12.183	14.087	14.375	14.616
1.060E-03	6.824	14.835	17.734	21.210	21.759	22.223
1.195E-03	9.619	23.181	28.880	36.459	37.745	38.852
1.434E-03	15.895	44.388	59.218	82.801	87.362	91.444
1.627E-03	22.426	70.293	100.700	162.911	178.641	192.825
1.688E-03	24.594	79.047	114.922	191.413	210.640	229.660

1.760E-03	27.247	89.963	132.938	229.078	254.258	279.595
1.347E-03	30.584	103.959	156.436	280.660	314.914	350.168
1.953E-03	34.932	122.574	188.274	354.656	403.608	455.646
2.090E-03	40.886	148.614	233.724	467.674	542.462	625.587
2.277E-03	49.660	187.860	303.764	656.636	782.414	931.626
2.559E-03	64.274	254.782	426.155	1021.762	1268.109	1591.738
3.086E-03	95.680	402.206	703.152	1960.623	2607.561	3625.621
3.502E-03	126.935	552.768	994.616	3129.548	4483.245	7259.618
3.635E-03	137.262	602.646	1091.477	3525.792	5129.513	8565.024
3.791E-03	149.845	663.597	1210.218	4021.599	5952.369	10307.962
3.977E-03	165.608	740.117	1359.768	4659.407	7030.925	12720.864
4.207E-03	186.057	839.671	1554.960	5510.269	8499.050	16220.952
4.502E-03	213.935	975.758	1822.651	6703.806	10603.680	21629.564
4.904E-03	254.845	1175.985	2217.797	8507.124	13859.043	30783.152
5.511E-03	322.700	1508.965	2877.083	11588.862	19565.031	48694.296
6.647E-03	467.973	2223.705	4296.841	16390.027	32505.665	95305.558
7.544E-03	612.135	2934.753	5713.755	25346.841	46129.949	153767.672
7.831E-03	659.755	3169.686	6182.055	27651.689	50657.004	173583.994
8.166E-03	717.784	3456.038	6753.022	30468.613	56205.868	198370.596
8.568E-03	790.434	3814.618	7468.219	34005.410	63193.121	230230.469
9.063E-03	884.693	4279.963	8396.637	38607.348	72310.845	272681.000
9.699E-03	1013.201	4914.523	9663.017	44898.865	84810.942	332114.500
1.057E-02	1201.792	5845.968	11522.399	54157.024	103255.544	421685.965
1.187E-02	1514.666	7391.536	14608.514	69555.273	134013.150	574112.875

SODIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-09 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
9.090E-04	0.000	0.000	0.000	0.000	0.000	0.000
9.113E-04	0.009	0.010	0.010	0.010	0.010	0.010
9.258E-04	0.065	0.075	0.076	0.078	0.078	0.078
9.519E-04	0.175	0.207	0.212	0.215	0.216	0.216
9.816E-04	0.325	0.360	0.388	0.395	0.396	0.397
1.016E-03	0.515	0.610	0.625	0.637	0.639	0.640
1.056E-03	0.772	0.928	0.953	0.974	0.976	0.978
1.105E-03	1.130	1.386	1.427	1.462	1.467	1.470
1.165E-03	1.652	2.079	2.151	2.212	2.219	2.226
1.243E-03	2.460	3.207	3.338	3.452	3.466	3.478
1.309E-03	3.307	4.474	4.689	4.879	4.904	4.924
1.357E-03	3.978	5.511	5.804	6.064	6.099	6.127
1.413E-03	4.849	6.911	7.321	7.690	7.739	7.779
1.480E-03	6.014	8.876	9.472	10.019	10.092	10.152
1.565E-03	7.635	11.764	12.678	13.534	13.651	13.746
1.638E-03	9.288	14.917	16.240	17.510	17.685	17.828
1.698E-03	10.741	17.801	19.534	21.229	21.465	21.659
1.770E-03	12.584	21.630	23.967	26.304	26.634	26.904
1.855E-03	14.991	26.892	30.160	33.520	34.002	34.399
1.961E-03	18.254	34.464	39.252	44.358	45.105	45.726
2.097E-03	22.910	46.043	53.514	61.877	63.142	64.197
2.283E-03	30.075	65.382	78.154	93.459	95.878	97.920
2.563E-03	42.563	102.578	127.784	161.271	166.949	171.833
3.089E-03	70.736	197.523	263.441	368.046	388.243	406.304
3.505E-03	100.247	314.278	450.078	727.020	794.127	859.589
3.637E-03	110.052	353.768	514.125	854.810	940.102	1024.322

3.793E-03	122.005	403.059	595.332	1023.775	1135.496	1247.673
3.979E-03	137.187	466.329	701.360	1255.323	1407.319	1563.452
4.209E-03	156.916	550.582	845.195	1587.698	1804.930	2075.154
4.504E-03	183.965	668.602	1050.800	2095.734	2427.595	2780.033
4.906E-03	223.887	846.762	1368.152	2945.884	3503.909	4122.483
5.512E-03	250.495	1151.147	1923.793	4590.430	5682.955	7107.489
6.648E-03	433.965	1823.324	3184.510	8825.956	11693.688	16151.743
7.545E-03	577.208	2512.264	4516.122	14116.450	20119.528	32178.895
7.831E-03	624.557	2740.606	4958.880	15910.795	23023.476	37927.574
8.166E-03	682.292	3019.787	5501.959	18157.390	26722.234	45590.193
8.568E-03	754.618	3370.475	6186.362	21049.418	31572.500	56177.324
9.064E-03	848.518	3827.005	7080.255	24910.727	38178.809	71501.230
9.699E-03	976.615	4451.503	8307.095	30332.411	47657.064	95122.510
1.057E-02	1164.723	5371.077	10119.667	38533.991	62334.506	134989.365
1.187E-02	1476.993	6901.800	13147.052	52571.278	88101.373	212759.279

SODIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-08 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
1.958E-03	0.000	0.000	0.000	0.000	0.000	0.000
1.963E-03	0.038	0.044	0.045	0.045	0.045	0.045
1.995E-03	0.289	0.332	0.338	0.343	0.344	0.344
2.051E-03	0.793	0.918	0.936	0.952	0.954	0.955
2.115E-03	1.440	1.682	1.719	1.750	1.754	1.757
2.189E-03	2.288	2.707	2.771	2.825	2.832	2.837
2.276E-03	3.432	4.123	4.231	4.323	4.334	4.344
2.380E-03	5.030	6.163	6.345	6.500	6.520	6.536
2.510E-03	7.364	9.260	9.576	9.847	9.882	9.910
2.677E-03	10.982	14.309	14.891	15.396	15.462	15.515
2.820E-03	14.789	19.993	20.953	21.801	21.912	22.002
2.923E-03	17.805	24.652	25.958	27.122	27.276	27.400
3.043E-03	21.723	30.948	32.779	34.431	34.651	34.829
3.188E-03	26.975	39.794	42.464	44.914	45.243	45.511
3.368E-03	34.289	52.817	56.915	60.759	61.282	61.708
3.528E-03	41.764	67.055	72.996	78.704	79.491	80.133
3.659E-03	48.336	80.069	87.884	95.509	96.571	97.441
3.813E-03	56.683	97.405	107.929	118.454	119.939	121.159
3.998E-03	67.593	121.236	135.965	151.113	153.286	155.078
4.225E-03	82.401	155.561	177.169	200.208	203.588	206.388
4.518E-03	103.556	208.110	241.882	279.677	285.392	290.161
4.918E-03	136.160	296.008	353.829	423.102	434.048	443.288
5.522E-03	193.082	465.358	579.687	731.508	757.239	779.372
6.655E-03	321.792	898.571	1198.299	1673.498	1765.176	1847.132
7.550E-03	457.041	1433.019	2051.955	3312.337	3617.237	3914.437
7.830E-03	501.999	1613.864	2345.025	3895.906	4283.463	4665.833

8.171E-03	557.104	2716.785	4667.721	5175.420	5684.708
8.572E-03	626.505	3202.423	5725.731	6416.516	7125.301
9.067E-03	717.102	3861.601	7244.952	8232.272	9277.170
9.703E-03	841.385	4804.474	9567.917	11076.273	12743.340
1.057E-02	1024.957	6260.903	13456.827	15993.069	18979.004
1.188E-02	1331.491	8813.235	20983.660	25948.566	32399.999
	1839.700				
	2129.737				
	2516.190				
	3057.880				
	3876.220				
	5275.622				

SODIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-07 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
4.219E-03	0.000	0.000	0.000	0.000	0.000	0.000
4.230E-03	0.174	0.198	0.202	0.205	0.205	0.206
4.297E-03	1.314	1.504	1.532	1.556	1.559	1.561
4.418E-03	3.602	4.165	4.249	4.319	4.328	4.335
4.556E-03	6.535	7.637	7.803	7.942	7.960	7.974
4.715E-03	10.398	12.294	12.585	12.830	12.861	12.886
4.903E-03	15.606	18.737	19.229	19.642	19.695	19.738
5.128E-03	22.885	28.024	28.852	29.553	29.644	29.716
5.408E-03	33.527	42.140	43.577	44.806	44.966	45.094
5.768E-03	50.041	65.173	67.822	70.120	70.419	70.661
6.075E-03	67.436	91.134	95.511	99.370	99.877	100.287
6.296E-03	81.226	112.427	118.381	123.684	124.385	124.953
6.557E-03	99.149	141.217	149.566	157.099	158.102	158.915
6.869E-03	123.186	181.667	193.874	205.056	206.558	207.778
7.256E-03	156.690	241.310	260.030	277.588	279.977	281.921
7.601E-03	190.949	306.542	333.701	359.790	363.386	366.324
7.883E-03	221.087	366.282	401.932	436.801	441.659	445.636
8.215E-03	259.380	445.689	493.840	541.994	548.790	554.371
8.612E-03	309.459	555.017	622.447	691.791	701.741	709.943
9.103E-03	377.461	712.570	811.551	917.087	932.567	945.393
9.734E-03	474.674	953.919	1108.725	1281.963	1308.153	1330.014
1.060E-02	624.595	1357.889	1623.134	1940.876	1991.079	2033.454
1.190E-02	886.569	2136.833	2661.774	3358.710	3476.808	3578.384



SODIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS =  $1.00E-06$  GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
9.090E-03	0.000	0.000	0.000	0.000	0.000	0.000
9.113E-03	0.798	0.911	0.928	0.941	0.943	0.944
9.258E-03	6.032	6.906	7.036	7.143	7.156	7.167
9.518E-03	16.548	19.126	19.511	19.832	19.873	19.906
9.816E-03	30.045	35.041	35.843	36.479	36.560	36.626
1.016E-02	47.783	56.483	57.821	58.942	59.085	59.200
1.056E-02	71.734	86.110	88.365	90.264	90.508	90.703
1.105E-02	105.224	128.829	132.629	135.851	136.266	136.600
1.165E-02	154.209	193.790	200.391	206.040	206.771	207.360

CALCIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-12 GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
6.459E-05	0.000	0.000	0.000	0.000	0.000	0.000
7.095E-05	0.001	0.001	0.001	0.001	0.001	0.001
7.246E-05	0.001	0.001	0.001	0.001	0.001	0.001
7.412E-05	0.001	0.001	0.001	0.001	0.001	0.001
7.596E-05	0.001	0.001	0.001	0.001	0.001	0.001
7.804E-05	0.002	0.002	0.002	0.002	0.002	0.002
8.041E-05	0.003	0.002	0.002	0.002	0.002	0.002
8.313E-05	0.004	0.004	0.004	0.004	0.004	0.004
8.634E-05	0.005	0.005	0.005	0.005	0.005	0.005
9.019E-05	0.007	0.008	0.008	0.008	0.008	0.008
9.496E-05	0.011	0.011	0.012	0.012	0.012	0.012
1.011E-04	0.016	0.018	0.018	0.018	0.019	0.019
1.063E-04	0.022	0.026	0.026	0.027	0.027	0.027
1.101E-04	0.027	0.032	0.033	0.034	0.034	0.034
1.146E-04	0.034	0.041	0.042	0.043	0.044	0.044
1.199E-04	0.043	0.054	0.056	0.058	0.058	0.058
1.266E-04	0.056	0.074	0.077	0.080	0.080	0.080
1.325E-04	0.069	0.096	0.101	0.105	0.106	0.106
1.373E-04	0.082	0.116	0.123	0.130	0.130	0.131
1.430E-04	0.097	0.144	0.154	0.163	0.164	0.165
1.499E-04	0.118	0.182	0.197	0.211	0.213	0.215
1.583E-04	0.145	0.238	0.261	0.283	0.287	0.289
1.692E-04	0.185	0.325	0.362	0.401	0.407	0.411
1.841E-04	0.247	0.471	0.540	0.615	0.627	0.636
2.065E-04	0.353	0.757	0.903	1.077	1.105	1.128
2.488E-04	0.590	1.494	1.906	2.489	2.592	2.682

2.821E-04	0.831	2.403	3.307	4.961	5.326	5.069
2.928E-04	0.910	2.710	3.780	5.835	6.301	6.742
3.053E-04	1.007	3.091	4.392	6.984	7.594	8.181
3.202E-04	1.127	3.578	5.181	8.551	9.382	10.196
3.387E-04	1.284	4.224	6.249	10.797	11.984	13.179
3.624E-04	1.496	5.126	7.776	14.229	16.055	17.958
3.947E-04	1.806	6.481	10.132	20.008	23.118	26.547
4.435E-04	2.317	8.782	14.259	31.322	37.596	45.187
5.349E-04	3.400	13.820	23.612	61.373	76.710	104.105
6.070E-04	4.453	18.895	33.414	99.911	140.139	219.719
6.300E-04	4.800	20.572	36.668	113.110	161.513	262.094
6.570E-04	5.221	22.617	40.651	129.111	189.018	320.070
6.893E-04	5.747	25.175	45.657	151.174	225.478	402.769
7.292E-04	6.426	28.494	52.176	179.945	275.702	527.297
7.803E-04	7.348	33.011	61.089	220.477	348.595	729.154
8.501E-04	8.693	39.625	74.192	281.920	462.729	1092.871
9.552E-04	10.909	50.557	95.938	387.073	664.950	1866.662
1.122E-03	15.614	73.829	142.406	618.615	1126.595	4120.952
1.308E-03	20.224	96.687	188.195	852.815	1609.455	7331.297
1.357E-03	21.744	104.226	203.301	930.240	1769.531	8429.020
1.415E-03	23.594	113.398	221.682	1024.630	1965.170	9810.625
1.485E-03	25.904	124.859	244.655	1142.803	2210.661	11591.149
1.571E-03	28.896	139.697	274.403	1296.044	2529.607	13959.026
1.681E-03	32.964	159.878	314.866	1504.697	2964.503	17245.573
1.831E-03	38.917	189.409	374.082	1810.221	3601.789	22108.951
2.058E-03	48.760	238.230	471.974	2315.206	4654.873	30120.474
2.482E-03	69.723	342.326	680.663	3390.239	6892.628	46756.142
2.817E-03	90.475	445.029	886.458	4446.256	9079.431	62035.608
2.924E-03	97.316	478.929	954.379	4794.559	9800.054	67021.119
3.049E-03	105.646	520.205	1037.072	5218.296	10675.877	71011.944
3.199E-03	116.066	571.833	1140.495	5747.814	11769.132	80397.939
3.384E-03	129.575	638.754	1274.535	6433.409	13182.774	89810.523
3.622E-03	147.974	729.889	1457.050	7365.862	15102.616	102385.631
3.945E-03	174.947	863.470	1724.523	8730.538	17907.265	120406.149
4.434E-03	219.041	1084.763	2167.533	10986.920	22534.103	149451.787
5.348E-03	315.227	1557.918	3114.476	15799.140	32373.368	209429.555

6.070E-03 409.965 2026.675 4052.223 20548.478 42041.379 265886.758

CALCIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-11 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT				
	5.00	1.00	0.50	0.10	0.05
1.392E-04	0.000	0.000	0.000	0.000	0.000
1.424E-04	0.001	0.001	0.001	0.001	0.001
1.447E-04	0.001	0.002	0.001	0.001	0.001
1.472E-04	0.002	0.002	0.002	0.002	0.002
1.499E-04	0.003	0.003	0.003	0.003	0.003
1.529E-04	0.004	0.004	0.004	0.004	0.004
1.561E-04	0.005	0.006	0.005	0.005	0.005
1.597E-04	0.007	0.007	0.007	0.007	0.007
1.637E-04	0.008	0.009	0.008	0.008	0.008
1.681E-04	0.010	0.011	0.011	0.011	0.011
1.732E-04	0.013	0.014	0.013	0.014	0.014
1.791E-04	0.016	0.017	0.017	0.017	0.017
1.860E-04	0.021	0.023	0.023	0.023	0.023
1.943E-04	0.029	0.031	0.031	0.031	0.031
2.046E-04	0.040	0.044	0.044	0.044	0.045
2.178E-04	0.058	0.066	0.067	0.068	0.068
2.291E-04	0.080	0.093	0.095	0.096	0.097
2.373E-04	0.097	0.116	0.118	0.121	0.121
2.469E-04	0.121	0.147	0.152	0.155	0.156
2.584E-04	0.153	0.194	0.200	0.206	0.208
2.727E-04	0.201	0.264	0.276	0.286	0.288
2.854E-04	0.250	0.344	0.362	0.379	0.383
2.959E-04	0.295	0.419	0.444	0.467	0.473
3.082E-04	0.353	0.521	0.556	0.590	0.598
3.229E-04	0.429	0.663	0.716	0.767	0.774
3.411E-04	0.534	0.872	0.955	1.036	1.048

3.645E-04	0.685	1.197	1.336	1.478	1.498	1.515
3.965E-04	0.921	1.755	2.009	2.286	2.328	2.362
4.450E-04	1.324	2.853	3.398	4.047	4.150	4.236
5.359E-04	2.271	5.732	7.296	9.492	9.879	10.215
6.078E-04	3.248	9.380	12.873	19.169	20.537	21.813
6.308E-04	3.571	10.614	14.786	22.597	24.341	25.985
6.577E-04	3.967	12.154	17.215	27.112	29.400	31.583
6.899E-04	4.464	14.133	20.392	33.286	36.400	39.423
7.297E-04	5.110	16.773	24.717	42.151	46.605	51.033
7.808E-04	5.993	20.478	30.932	55.751	62.580	69.603
8.505E-04	7.293	26.087	40.592	78.702	90.306	102.866
9.555E-04	9.451	35.698	57.656	123.814	147.101	174.507
1.152E-03	14.070	56.980	96.787	243.330	307.975	396.985
1.308E-03	18.638	78.795	138.560	400.226	547.475	810.844
1.357E-03	20.145	86.022	152.462	453.799	630.810	960.279
1.416E-03	21.981	94.855	169.527	521.348	738.077	1163.459
1.485E-03	24.276	105.943	191.044	608.950	880.370	1447.814
1.571E-03	27.251	120.365	219.159	726.817	1076.643	1867.565
1.681E-03	31.300	140.070	257.750	893.616	1362.178	2530.935
1.831E-03	37.231	169.041	314.749	1147.960	1811.030	3687.542
2.058E-03	47.046	217.164	409.862	1586.646	2611.726	6044.775
2.482E-03	67.998	320.259	614.555	2563.274	4461.386	12543.301
2.817E-03	88.700	422.461	818.350	3568.754	6442.078	21391.663
2.924E-03	95.534	456.211	885.677	3901.995	7101.094	24418.970
3.049E-03	103.657	497.324	967.724	4309.362	7909.805	28241.132
3.199E-03	114.270	548.774	1070.437	4820.901	8929.170	33199.764
3.384E-03	127.770	615.494	1203.685	5486.445	10260.297	39863.248
3.622E-03	146.158	706.399	1385.294	6396.082	12085.959	49266.780
3.945E-03	173.117	839.703	1651.692	7733.847	14779.639	63526.242
4.434E-03	217.789	1060.632	2093.318	9956.569	19268.052	87877.950
5.348E-03	313.327	1533.174	3038.116	14719.938	28908.013	141213.361
6.069E-03	408.013	2001.496	3974.533	19443.825	38475.482	194520.393
6.300E-03	439.286	2156.170	4283.803	21003.885	41634.993	212112.812
6.569E-03	477.389	2344.621	4660.604	22904.403	45483.445	233513.713
6.893E-03	525.084	2580.506	5132.241	25282.938	50298.963	260250.434
7.291E-03	586.956	2886.496	5744.030	28367.581	56542.183	294826.848

7.803E-03	671.293	3303.571	6577.888	32570.687	65046.034	341767.703
8.500E-03	795.041	3915.506	7801.266	38734.821	77511.311	410276.141
9.552E-03	1000.300	4930.444	9830.189	48952.183	98159.415	523074.836
1.152E-02	1439.874	7103.757	14174.326	70811.230	142290.338	762028.016

CALCIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-10 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
2.998E-04	0.000	0.000	0.000	0.000	0.000	0.000
3.021E-04	0.001	0.001	0.001	0.001	0.001	0.001
3.067E-04	0.003	0.003	0.003	0.003	0.003	0.003
3.117E-04	0.006	0.006	0.006	0.006	0.006	0.006
3.171E-04	0.008	0.009	0.009	0.009	0.009	0.009
3.230E-04	0.011	0.012	0.012	0.012	0.012	0.012
3.293E-04	0.015	0.015	0.015	0.015	0.015	0.015
3.363E-04	0.019	0.019	0.020	0.020	0.020	0.020
3.440E-04	0.023	0.025	0.025	0.025	0.025	0.025
3.526E-04	0.029	0.031	0.031	0.031	0.031	0.031
3.622E-04	0.037	0.039	0.039	0.039	0.039	0.039
3.732E-04	0.047	0.049	0.049	0.050	0.050	0.050
3.859E-04	0.060	0.063	0.064	0.064	0.064	0.064
4.007E-04	0.078	0.084	0.085	0.085	0.085	0.085
4.186E-04	0.106	0.115	0.116	0.117	0.117	0.117
4.407E-04	0.149	0.164	0.166	0.168	0.168	0.168
4.693E-04	0.222	0.251	0.255	0.258	0.259	0.259
4.936E-04	0.307	0.357	0.365	0.371	0.372	0.373
5.112E-04	0.376	0.447	0.458	0.466	0.469	0.470
5.319E-04	0.470	0.574	0.591	0.606	0.608	0.609
5.567E-04	0.601	0.759	0.786	0.810	0.813	0.815
5.874E-04	0.792	1.043	1.089	1.130	1.135	1.139
6.150E-04	0.995	1.368	1.441	1.507	1.515	1.522
6.375E-04	1.177	1.673	1.774	1.866	1.879	1.889
6.639E-04	1.413	2.088	2.233	2.358	2.386	2.401
6.956E-04	1.727	2.672	2.888	3.093	3.122	3.145



7.349E-04	2.161	3.532	3.870	4.202	4.248	4.286
7.853E-04	2.792	4.883	5.450	6.029	6.112	6.180
8.543E-04	3.779	7.208	8.255	9.392	9.561	9.701
9.586E-04	5.528	11.826	14.082	16.766	17.188	17.544
1.155E-03	9.529	24.046	30.592	39.745	41.352	42.748
1.309E-03	13.762	39.770	54.539	80.993	86.700	92.015
1.359E-03	15.169	45.100	62.775	95.626	102.909	109.753
1.417E-03	16.892	51.770	73.248	114.927	124.487	133.578
1.486E-03	19.062	60.361	86.986	141.363	154.381	166.968
1.572E-03	21.893	71.853	105.739	179.386	198.015	216.445
1.682E-03	25.774	88.039	132.771	237.820	266.390	295.597
1.832E-03	31.503	112.633	174.943	336.634	385.170	437.288
2.059E-03	41.061	154.976	249.784	531.310	628.638	741.833
2.483E-03	61.637	249.301	422.463	1048.721	1318.385	1682.250
2.818E-03	82.146	346.856	608.534	1732.239	2345.627	3401.737
2.924E-03	88.923	379.218	670.537	1965.886	2703.150	4022.239
3.050E-03	97.184	418.819	746.752	2260.864	3163.520	4857.257
3.200E-03	107.529	468.602	843.007	2643.974	3774.549	6023.496
3.385E-03	120.953	533.456	968.990	3160.352	4618.104	7734.689
3.622E-03	139.255	622.229	1142.253	3892.777	5846.847	10419.149
3.946E-03	166.112	753.013	1398.742	5012.686	7782.159	15056.550
4.434E-03	210.657	970.765	1827.905	6951.286	11245.338	24399.562
5.348E-03	306.012	1438.797	2754.706	11289.096	19288.398	49813.469
6.069E-03	400.603	1904.838	3682.065	15791.524	27989.132	84095.935
6.300E-03	431.848	2058.832	3988.637	17285.419	30888.598	95829.336
6.569E-03	469.919	2246.543	4362.506	19113.698	34452.849	110657.956
6.893E-03	517.578	2481.614	4830.920	21413.107	38954.200	129930.958
7.291E-03	579.410	2786.689	5439.106	24409.118	44845.230	155913.193
7.803E-03	663.698	3202.711	6268.841	28510.969	52945.315	192743.324
8.500E-03	787.381	3813.377	7487.313	34555.513	64932.764	248966.877
9.552E-03	992.542	4826.644	9509.947	44622.715	84979.620	345954.414
1.152E-02	1431.890	6997.150	13644.257	66262.651	128237.892	561688.758

CALCIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-09 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
6.459E-04	0.000	0.000	0.000	0.000	0.000	0.000
6.507E-04	0.004	0.004	0.004	0.004	0.004	0.004
6.608E-04	0.012	0.013	0.013	0.013	0.013	0.013
6.716E-04	0.021	0.022	0.022	0.022	0.022	0.022
6.832E-04	0.032	0.033	0.033	0.033	0.033	0.033
6.958E-04	0.044	0.046	0.046	0.046	0.046	0.046
7.095E-04	0.058	0.060	0.060	0.060	0.060	0.060
7.245E-04	0.074	0.077	0.077	0.078	0.078	0.078
7.411E-04	0.093	0.097	0.098	0.098	0.098	0.098
7.590E-04	0.117	0.122	0.123	0.124	0.124	0.124
7.804E-04	0.148	0.155	0.156	0.157	0.157	0.157
8.040E-04	0.188	0.198	0.199	0.200	0.200	0.200
8.313E-04	0.243	0.257	0.259	0.260	0.260	0.261
8.634E-04	0.321	0.342	0.345	0.347	0.347	0.348
9.019E-04	0.436	0.470	0.475	0.479	0.479	0.480
9.495E-04	0.618	0.678	0.687	0.694	0.694	0.695
1.011E-03	0.928	1.046	1.063	1.078	1.080	1.081
1.063E-03	1.289	1.499	1.532	1.559	1.563	1.565
1.101E-03	1.587	1.885	1.933	1.973	1.978	1.983
1.146E-03	1.991	2.429	2.501	2.563	2.571	2.577
1.199E-03	2.557	3.225	3.340	3.440	3.453	3.464
1.266E-03	3.381	4.452	4.649	4.822	4.844	4.863
1.325E-03	4.262	5.861	6.173	6.454	6.491	6.521
1.373E-03	5.055	7.184	7.618	8.014	8.067	8.110
1.430E-03	6.084	8.989	9.613	10.194	10.273	10.336
1.499E-03	7.457	11.536	12.469	13.358	13.479	13.579

1.583E-03	9.358	15.298	16.764	18.202	18.402	18.567
1.692E-03	12.129	21.224	23.687	26.206	26.566	26.863
1.841E-03	16.485	31.457	36.028	40.988	41.723	42.334
2.065E-03	24.233	51.862	61.752	73.513	75.362	76.920
2.488E-03	42.057	106.148	135.014	175.315	182.382	188.517
2.821E-03	61.068	176.550	242.057	359.065	384.236	407.649
2.928E-03	67.393	200.441	278.909	424.303	456.435	486.588
3.053E-03	75.150	230.375	325.829	510.423	552.612	592.679
3.202E-03	84.928	268.984	387.449	628.479	685.954	741.434
3.387E-03	97.703	320.702	471.686	798.434	880.713	961.948
3.624E-03	115.248	393.665	593.300	1059.877	1186.105	1314.807
3.947E-03	141.192	504.748	783.389	1502.468	1716.954	1946.452
4.435E-03	184.570	696.440	1121.506	2375.539	2805.612	3303.202
5.349E-03	278.215	1124.732	1903.993	4699.973	5891.056	7484.023
6.070E-03	371.923	1569.625	2751.004	7780.395	10488.928	15074.028
6.300E-03	402.907	1717.301	3033.426	8833.948	12089.489	17812.217
6.570E-03	440.695	1898.119	3380.821	10164.863	14150.888	21488.140
6.893E-03	488.043	2125.587	3819.881	11894.653	16887.736	26612.232
7.292E-03	549.527	2422.147	4395.019	14228.168	20667.771	34113.484
7.803E-03	633.420	2828.426	5186.746	17541.388	26177.318	45847.688
8.500E-03	756.636	3427.570	6360.034	22614.089	34863.249	66048.804
9.552E-03	961.214	4426.394	8325.733	31409.987	50428.646	106574.233
1.152E-02	1359.720	6576.102	12577.674	51137.986	86665.791	216277.336

CALCIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-08 GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
1.392E-03	0.000	0.000	0.000	0.000	0.000	0.000
1.402E-03	0.016	0.017	0.017	0.017	0.017	0.017
1.424E-03	0.052	0.054	0.054	0.054	0.054	0.054
1.447E-03	0.091	0.095	0.095	0.095	0.095	0.095
1.472E-03	0.136	0.141	0.142	0.142	0.142	0.142
1.499E-03	0.187	0.194	0.195	0.196	0.196	0.196
1.529E-03	0.246	0.256	0.257	0.258	0.258	0.258
1.561E-03	0.316	0.329	0.331	0.332	0.332	0.332
1.597E-03	0.400	0.417	0.419	0.421	0.421	0.421
1.637E-03	0.505	0.527	0.530	0.532	0.532	0.533
1.681E-03	0.638	0.668	0.672	0.675	0.676	0.676
1.732E-03	0.814	0.855	0.861	0.865	0.866	0.866
1.791E-03	1.055	1.114	1.122	1.129	1.130	1.130
1.860E-03	1.397	1.488	1.500	1.510	1.512	1.513
1.943E-03	1.908	2.055	2.076	2.092	2.094	2.096
2.046E-03	2.714	2.974	3.011	3.042	3.045	3.049
2.176E-03	4.091	4.607	4.683	4.746	4.754	4.761
2.291E-03	5.695	6.624	6.768	6.889	6.904	6.917
2.373E-03	7.025	8.346	8.557	8.735	8.758	8.776
2.469E-03	8.836	10.773	11.094	11.368	11.403	11.432
2.584E-03	11.368	14.333	14.846	15.291	15.349	15.396
2.727E-03	15.065	19.832	20.708	21.479	21.580	21.662
2.854E-03	19.024	26.157	27.550	28.802	28.968	29.103
2.959E-03	22.586	32.100	34.041	35.813	36.050	36.242
3.082E-03	27.222	40.219	43.015	45.614	45.965	46.252
3.229E-03	33.414	51.690	55.875	59.857	60.403	60.848

3.411E-03	41.956	68.657	75.239	81.694	82.595	83.333
3.645E-03	54.524	95.420	106.499	117.826	119.446	120.780
3.965E-03	74.256	141.717	162.314	184.662	187.975	190.727
4.450E-03	109.426	234.221	278.890	331.991	340.335	347.367
5.359E-03	190.551	480.975	611.719	794.131	826.097	853.847
6.078E-03	277.421	802.222	1099.779	1630.614	1744.661	1850.684
6.308E-03	306.337	911.297	1267.889	1927.714	2073.327	2209.889
6.577E-03	341.821	1048.040	1482.052	2320.071	2511.297	2692.781
6.899E-03	386.574	1224.523	1763.477	2858.159	3118.725	3370.050
7.297E-03	445.090	1461.097	2148.463	3633.143	4006.243	4374.260
7.808E-03	525.513	1795.123	2704.703	4825.903	5398.405	5961.432
8.504E-03	644.541	2304.127	3574.920	6846.178	7819.112	8858.481
9.555E-03	843.761	3183.472	5124.502	10833.993	12784.950	15036.839
1.152E-02	1274.411	5150.958	8715.724	21459.816	26862.421	34058.887

CALCIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-07 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT						
	5.00	1.00	0.50	0.10	0.05	0.01	
2.998E-03	0.000	0.000	0.000	0.000	0.000	0.000	
3.020E-03	0.073	0.075	0.076	0.076	0.076	0.076	
3.067E-03	0.230	0.238	0.239	0.240	0.240	0.240	
3.117E-03	0.407	0.421	0.423	0.424	0.425	0.425	
3.171E-03	0.607	0.628	0.631	0.634	0.634	0.634	
3.230E-03	0.835	0.866	0.870	0.873	0.874	0.874	
3.293E-03	1.101	1.142	1.148	1.152	1.153	1.153	
3.363E-03	1.414	1.469	1.476	1.482	1.483	1.484	
3.440E-03	1.793	1.865	1.875	1.883	1.884	1.884	
3.526E-03	2.262	2.359	2.372	2.382	2.383	2.384	
3.622E-03	2.864	2.994	3.012	3.026	3.028	3.029	
3.732E-03	3.657	3.839	3.864	3.883	3.886	3.888	
3.859E-03	4.745	5.009	5.044	5.073	5.077	5.080	
4.007E-03	6.296	6.699	6.754	6.799	6.805	6.809	
4.186E-03	8.611	9.269	9.360	9.435	9.445	9.452	
4.407E-03	12.269	13.437	13.604	13.741	13.758	13.772	
4.693E-03	18.530	20.854	21.198	21.484	21.520	21.550	
4.936E-03	25.848	30.036	30.687	31.234	31.304	31.360	
5.112E-03	31.909	37.878	38.831	39.639	39.743	39.826	
5.319E-03	40.144	48.936	50.391	51.636	51.797	51.926	
5.567E-03	51.697	65.169	67.503	69.523	69.786	69.998	
5.874E-03	68.579	90.269	94.252	97.762	98.223	98.596	
6.150E-03	86.675	119.163	125.509	131.212	131.970	132.584	
6.375E-03	102.972	146.324	155.176	163.250	164.332	165.209	
6.639E-03	124.176	183.454	196.211	208.066	209.670	210.975	
6.956E-03	152.520	235.943	255.049	273.228	275.721	277.754	

7.348E-03	191.836	313.633	343.702	373.196	377.312	380.683
7.853E-03	249.271	436.257	466.922	558.715	546.121	552.221
8.543E-03	339.808	648.566	742.840	845.121	860.285	872.881
9.586E-03	501.343	1073.190	1277.066	1521.144	1559.368	1591.582
1.155E-02	874.432	2207.279	2807.183	3643.896	3790.486	3917.730

CALCIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-06 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
6.459E-03	0.000	0.000	0.000	0.000	0.000	0.000
6.507E-03	0.332	0.343	0.345	0.346	0.346	0.346
6.608E-03	1.048	1.084	1.089	1.093	1.093	1.093
6.716E-03	1.852	1.917	1.925	1.932	1.933	1.933
6.832E-03	2.763	2.861	2.874	2.884	2.886	2.887
6.958E-03	3.807	3.945	3.963	3.976	3.980	3.981
7.095E-03	5.019	5.205	5.230	5.250	5.252	5.254
7.245E-03	6.450	6.698	6.731	6.757	6.761	6.763
7.411E-03	8.181	8.508	8.552	8.587	8.591	8.595
7.596E-03	10.330	10.766	10.824	10.871	10.876	10.881
7.804E-03	13.082	13.673	13.752	13.816	13.824	13.830
8.040E-03	16.718	17.542	17.653	17.742	17.754	17.763
8.313E-03	21.704	22.901	23.063	23.194	23.211	23.224
8.633E-03	28.819	30.653	30.904	31.109	31.135	31.155
9.018E-03	39.443	42.444	42.862	43.204	43.247	43.282
9.495E-03	56.246	61.585	62.346	62.973	63.052	63.116
1.011E-02	85.022	95.665	97.242	98.551	98.718	98.852
1.063E-02	118.684	137.891	140.875	143.382	143.704	143.962
1.101E-02	146.567	173.961	178.339	182.045	182.522	182.906
1.146E-02	184.470	224.845	231.530	237.245	237.984	238.580
1.199E-02	237.662	299.569	310.294	319.581	320.790	321.765



POTASSIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-12 GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
9.311E-05	0.000	0.000	0.000	0.000	0.000	0.000
9.479E-05	0.002	0.002	0.002	0.002	0.002	0.002
9.846E-05	0.006	0.008	0.008	0.008	0.008	0.008
1.029E-04	0.012	0.015	0.016	0.017	0.017	0.017
1.083E-04	0.020	0.027	0.028	0.029	0.029	0.029
1.154E-04	0.032	0.044	0.046	0.048	0.048	0.049
1.214E-04	0.044	0.063	0.066	0.069	0.070	0.070
1.258E-04	0.054	0.078	0.082	0.087	0.087	0.088
1.309E-04	0.066	0.098	0.104	0.110	0.111	0.112
1.371E-04	0.081	0.125	0.134	0.143	0.144	0.145
1.447E-04	0.103	0.164	0.178	0.191	0.193	0.195
1.515E-04	0.124	0.206	0.226	0.245	0.247	0.250
1.571E-04	0.142	0.244	0.269	0.294	0.298	0.300
1.637E-04	0.166	0.293	0.327	0.360	0.365	0.369
1.715E-04	0.195	0.360	0.406	0.453	0.460	0.466
1.812E-04	0.235	0.454	0.520	0.591	0.601	0.610
1.937E-04	0.290	0.596	0.696	0.809	0.827	0.841
2.108E-04	0.374	0.827	0.994	1.196	1.228	1.255
2.366E-04	0.516	1.261	1.579	2.009	2.083	2.146
2.850E-04	0.826	2.352	3.130	4.427	4.683	4.914
3.233E-04	1.135	3.584	5.163	8.491	9.327	10.157
3.355E-04	1.238	4.005	5.856	9.932	10.994	12.061
3.459E-04	1.362	4.526	6.729	11.831	13.219	14.643
3.670E-04	1.517	5.190	7.859	14.422	16.310	18.297
3.882E-04	1.718	6.065	9.379	18.124	20.824	23.771
4.154E-04	1.991	7.279	11.529	23.757	27.888	32.638

4.225E-04	2.389	9.090	14.808	33.130	40.100	48.759
5.084E-04	3.044	12.138	20.464	51.128	64.859	84.156
6.132E-04	4.431	18.743	33.046	96.950	133.308	197.321
6.959E-04	5.782	25.326	45.943	152.759	228.934	420.165
7.222E-04	6.227	27.500	50.213	171.605	261.829	501.694
7.532E-04	6.768	30.147	55.428	195.081	303.618	612.902
7.902E-04	7.442	33.457	61.967	225.125	358.220	770.776
8.359E-04	8.314	37.744	70.462	264.960	432.222	1006.732
8.945E-04	9.498	43.577	82.048	320.426	537.656	1384.554
9.745E-04	11.226	52.110	99.044	403.471	699.324	2051.448
1.095E-03	14.075	66.205	127.190	543.746	979.077	3420.525
1.321E-03	20.129	96.202	187.224	848.469	1601.050	7148.695
1.499E-03	26.071	125.678	246.313	1152.630	2233.512	11789.580
1.556E-03	28.031	135.400	265.806	1253.062	2442.604	13346.859
1.623E-03	30.416	147.230	289.524	1375.358	2697.464	15209.157
1.702E-03	33.396	162.014	319.170	1528.296	3016.421	17697.624
1.801E-03	37.256	181.160	357.560	1726.406	3429.735	20860.587
1.927E-03	42.506	207.204	409.785	1995.892	3991.977	25161.411
2.099E-03	50.193	245.328	486.226	2390.171	4814.050	31402.870
2.359E-03	62.908	308.380	612.632	3041.432	6169.905	41503.725
2.846E-03	90.043	442.893	882.231	4427.452	9047.241	52208.348
3.230E-03	116.854	575.724	1148.311	5789.464	11858.446	68139.973
3.352E-03	125.705	619.573	1236.140	6238.741	12784.928	87317.477
3.496E-03	136.485	672.970	1343.084	6785.383	13911.109	94745.498
3.668E-03	149.972	739.770	1476.858	7468.595	15317.086	103909.846
3.880E-03	167.458	826.370	1650.262	8353.367	17135.584	115607.280
4.152E-03	191.280	944.329	1886.427	9557.055	19606.023	131263.166
4.523E-03	226.205	1117.265	2232.603	11319.156	23216.576	153748.141
5.083E-03	284.100	1403.826	2806.116	14233.844	29176.414	190106.859
6.131E-03	407.951	2016.738	4032.454	20453.497	41860.558	265487.031
6.959E-03	530.756	2624.250	5247.522	26597.242	54340.410	336932.547
7.223E-03	571.324	2824.930	5648.876	28625.767	58458.875	360393.496
7.532E-03	620.759	3069.456	6137.894	31096.242	63471.644	388795.383
7.903E-03	682.649	3375.573	6750.046	34187.322	69740.008	424116.629
8.360E-03	762.952	3772.734	7544.210	38195.259	77861.852	469589.082
8.947E-03	872.441	4314.208	8626.856	43655.794	88918.489	531063.672

J.747E-03	1033.155	5108.947	10215.754	51664.092	105119.500	620422.047
1.096E-02	1299.903	6427.889	12852.397	64942.096	131953.705	767032.016

POTASSIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-11 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT				
	5.00	1.00	0.50	0.10	0.01
2.006E-04	0.000	0.000	0.000	0.000	0.000
2.042E-04	0.006	0.008	0.008	0.008	0.008
2.121E-04	0.021	0.027	0.028	0.028	0.029
2.216E-04	0.041	0.053	0.055	0.057	0.058
2.334E-04	0.070	0.092	0.096	0.100	0.101
2.486E-04	0.113	0.154	0.162	0.168	0.170
2.616E-04	0.156	0.221	0.234	0.245	0.247
2.710E-04	0.191	0.275	0.292	0.307	0.311
2.821E-04	0.234	0.347	0.371	0.392	0.397
2.953E-04	0.292	0.447	0.480	0.511	0.519
3.118E-04	0.371	0.592	0.641	0.689	0.700
3.264E-04	0.451	0.747	0.818	0.887	0.904
3.385E-04	0.520	0.887	0.979	1.070	1.093
3.526E-04	0.607	1.072	1.195	1.318	1.350
3.695E-04	0.721	1.324	1.493	1.668	1.714
3.904E-04	0.872	1.683	1.926	2.187	2.257
4.174E-04	1.087	2.225	2.598	3.018	3.135
4.541E-04	1.413	3.119	3.744	4.498	4.719
5.097E-04	1.974	4.816	6.022	7.639	8.153
6.141E-04	3.221	9.070	12.141	17.074	18.900
6.966E-04	4.496	14.167	20.344	33.114	39.339
7.229E-04	4.919	15.886	23.150	38.813	46.761
7.538E-04	5.435	18.023	26.696	46.330	56.814
7.908E-04	6.082	20.757	31.309	56.607	71.021
8.364E-04	6.924	24.382	37.540	71.321	92.243
8.950E-04	8.072	29.435	46.405	93.748	126.467

9.748E-04	9.759	37.022	60.012	131.160	157.055	188.210
1.095E-03	12.556	49.899	83.676	203.250	253.960	321.953
1.321E-03	18.535	78.101	136.905	387.865	521.097	737.861
1.499E-03	24.435	106.654	192.398	615.883	894.348	1499.100
1.556E-03	26.388	116.103	210.816	693.075	1022.864	1773.739
1.623E-03	28.760	127.635	233.365	789.517	1186.362	2142.305
1.702E-03	31.727	142.093	261.722	913.360	1400.416	2655.492
1.801E-03	35.572	160.874	298.672	1078.233	1691.352	3405.036
1.927E-03	40.806	186.503	349.251	1308.930	2107.554	4572.305
2.099E-03	48.473	224.139	423.753	1656.439	2749.485	6565.606
2.359E-03	61.164	286.584	547.736	2248.036	3870.034	10504.212
2.846E-03	88.263	420.228	813.862	3546.861	6395.403	20840.023
3.230E-03	115.055	552.622	1078.207	4864.783	9025.230	33766.900
3.352E-03	123.901	596.341	1165.519	5300.934	9897.630	38137.740
3.496E-03	134.674	649.596	1271.902	5833.333	10965.061	43588.655
3.668E-03	148.154	716.240	1405.059	6500.932	12306.599	50568.550
3.880E-03	165.632	802.664	1577.772	7368.308	14053.248	59820.811
4.152E-03	189.444	920.421	1813.145	8552.184	16441.950	72691.258
4.523E-03	224.355	1093.108	2158.371	10290.973	19956.321	91917.515
5.082E-03	282.228	1379.336	2730.654	13176.390	25796.177	124251.013
6.130E-03	406.023	1991.652	3955.003	19353.174	38307.420	194012.676
6.958E-03	528.765	2598.698	5168.745	25474.077	50699.254	262805.391
7.222E-03	569.307	2799.198	5569.623	27495.410	54790.711	285475.879
7.531E-03	618.706	3043.495	6058.053	29957.733	59773.504	313026.340
7.902E-03	680.544	3349.303	6669.450	33039.273	66007.739	347411.488
8.358E-03	760.770	3746.024	7462.575	37035.630	74089.729	391844.414
8.945E-03	870.155	4286.812	8543.676	42481.240	85098.203	452144.941
9.744E-03	1030.619	5080.333	10129.935	50467.976	101234.352	540104.031
1.095E-02	1296.845	6396.553	12760.965	63707.410	127964.251	684912.781

POTASSIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-10 GM TEMPERATURE = 20C

RADIUS (CM)	SUPER SATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
4.322E-04	0.000	0.000	0.000	0.000	0.000	0.000
4.400E-04	0.024	0.030	0.031	0.031	0.032	0.032
4.570E-04	0.082	0.104	0.108	0.111	0.111	0.112
4.775E-04	0.162	0.209	0.217	0.223	0.224	0.225
5.029E-04	0.275	0.363	0.379	0.392	0.394	0.395
5.357E-04	0.447	0.609	0.639	0.664	0.668	0.671
5.637E-04	0.622	0.878	0.927	0.971	0.976	0.981
5.839E-04	0.761	1.097	1.163	1.222	1.230	1.237
6.077E-04	0.938	1.389	1.481	1.555	1.576	1.585
6.363E-04	1.174	1.794	1.927	2.050	2.066	2.080
6.716E-04	1.499	2.384	2.585	2.775	2.801	2.822
7.035E-04	1.827	3.022	3.309	3.587	3.625	3.657
7.292E-04	2.115	3.602	3.975	4.342	4.393	4.435
7.596E-04	2.478	4.368	4.866	5.367	5.438	5.496
7.961E-04	2.950	5.415	6.103	6.816	6.918	7.003
8.412E-04	3.586	6.911	7.927	8.977	9.135	9.265
8.992E-04	4.490	9.185	10.720	12.450	12.713	12.933
9.784E-04	5.873	12.955	15.544	18.665	19.160	19.579
1.098E-03	8.271	20.60	25.195	31.931	33.078	34.067
1.323E-03	13.644	38.390	51.340	72.038	76.058	79.660
1.501E-03	19.220	60.539	86.844	140.788	153.935	166.793
1.557E-03	21.071	68.023	99.014	165.240	181.922	198.441
1.624E-03	23.356	77.351	114.423	197.531	219.345	241.317
1.704E-03	26.183	89.306	134.511	241.729	271.356	301.897
1.802E-03	29.893	105.202	161.716	305.093	347.362	392.345
1.928E-03	34.972	127.429	200.534	401.815	466.286	538.030

2.100E-03	42.455	160.916	260.327	563.434	671.686	800.277
2.300E-03	54.913	217.994	364.758	875.547	1087.232	1365.781
2.846E-03	81.677	343.674	600.981	1677.584	2232.656	3108.184
3.230E-03	108.298	471.945	849.357	2675.309	3835.704	6224.115
3.352E-03	117.094	514.436	931.894	3013.494	4388.004	7343.611
3.496E-03	127.813	566.356	1033.065	3436.602	5091.176	8838.662
3.668E-03	141.233	631.532	1160.473	3980.817	6012.733	10908.898
3.880E-03	158.644	716.318	1326.747	4706.717	7267.028	13913.008
4.132E-03	182.380	832.203	1554.750	5724.778	9064.806	18557.152
4.523E-03	217.206	1002.689	1891.267	7262.658	11844.993	26420.565
5.083E-03	274.963	1286.166	2452.638	9890.103	16716.632	41814.355
6.131E-03	358.596	1894.531	3661.283	15586.732	27760.513	81888.058
6.958E-03	521.254	2499.586	4867.136	21612.957	39380.280	132140.885
7.222E-03	561.770	2699.492	5265.662	23576.238	43240.864	149172.979
7.531E-03	611.140	2943.142	5751.538	25975.493	47972.247	170473.082
7.901E-03	672.946	3248.235	6360.124	28987.725	53929.578	197846.049
8.358E-03	753.134	3644.151	7150.106	32906.722	61701.949	234307.227
8.945E-03	862.452	4184.005	8227.594	38264.051	72356.237	285347.430
9.744E-03	1022.873	4976.389	9809.525	46146.487	88074.341	362209.203
1.095E-02	1288.995	6291.110	12434.932	59254.890	114279.479	492932.727

POTASSIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-09 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
9.311E-04	0.000	0.000	0.000	0.000	0.000	0.000
9.479E-04	0.101	0.125	0.129	0.133	0.133	0.133
9.845E-04	0.349	0.441	0.456	0.469	0.471	0.472
1.029E-03	0.688	0.856	0.919	0.948	0.952	0.955
1.083E-03	1.173	1.546	1.611	1.667	1.675	1.681
1.154E-03	1.909	2.599	2.725	2.835	2.850	2.862
1.214E-03	2.669	3.759	3.968	4.154	4.179	4.199
1.258E-03	3.266	4.703	4.986	5.241	5.275	5.302
1.309E-03	4.037	5.967	6.362	6.722	6.770	6.809
1.371E-03	5.061	7.726	8.297	8.825	8.896	8.954
1.447E-03	6.478	10.294	11.159	11.977	12.089	12.180
1.515E-03	7.916	13.080	14.319	15.519	15.686	15.821
1.571E-03	9.176	15.617	17.230	18.820	19.042	19.224
1.636E-03	10.770	18.973	21.131	23.306	23.614	23.867
1.715E-03	12.847	23.570	26.562	29.662	30.108	30.477
1.812E-03	15.655	30.155	34.499	39.162	39.849	40.419
1.937E-03	19.654	40.190	46.904	54.467	55.615	56.574
2.108E-03	25.793	56.880	68.236	81.922	84.094	85.928
2.366E-03	36.474	88.888	111.072	140.710	145.754	150.099
2.850E-03	60.530	170.271	227.624	319.089	336.819	352.694
3.233E-03	85.671	269.857	386.963	626.265	684.355	741.062
3.355E-03	54.025	303.537	441.633	732.581	809.301	882.153
3.499E-03	104.259	345.564	510.923	880.035	976.449	1073.337
3.670E-03	117.135	399.495	601.356	1077.881	1208.845	1343.482
3.882E-03	133.941	471.291	723.989	1361.726	1548.588	1746.785
4.154E-03	156.974	571.825	899.223	1795.339	2080.336	2396.140



4.525E-03	150.963	723.573	1169.603	2520.574	2999.010	3564.103
5.084E-03	247.664	982.750	1642.838	3922.786	4857.964	6078.472
6.131E-03	369.769	1554.942	2716.230	7532.361	9983.329	13797.940
6.958E-03	451.644	2141.187	3849.496	12038.369	17164.358	27477.658
7.222E-03	531.929	2335.488	4226.296	13566.572	19639.098	32384.562
7.532E-03	581.049	2573.040	4688.451	15479.624	22791.118	38926.076
7.902E-03	642.582	2871.424	5270.841	17942.615	26924.210	47965.059
8.359E-03	722.464	3259.844	6031.455	21230.546	32553.206	61049.046
8.945E-03	831.433	3791.142	7075.305	25846.728	40628.402	81219.919
9.744E-03	991.444	4573.433	8617.417	32829.077	53132.190	115268.174
1.095E-02	1257.054	5875.541	11192.813	44778.385	75080.200	181705.697

POTASSIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-08 GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT						
	5.00	1.00	0.50	0.10	0.05	0.01	
2.006E-03	0.000	0.000	0.000	0.000	0.000	0.000	
2.042E-03	0.448	0.556	0.573	0.588	0.590	0.591	
2.121E-03	1.549	1.956	2.023	2.081	2.088	2.094	
2.216E-03	3.059	3.934	4.082	4.209	4.226	4.239	
2.334E-03	5.220	6.875	7.164	7.414	7.446	7.473	
2.486E-03	8.512	11.577	12.136	12.627	12.691	12.743	
2.616E-03	11.914	16.770	17.699	18.527	18.637	18.725	
2.710E-03	14.594	20.996	22.259	23.395	23.546	23.669	
2.821E-03	18.054	26.669	28.432	30.038	30.252	30.427	
2.953E-03	22.661	34.571	37.121	39.481	39.800	40.059	
3.117E-03	29.042	46.125	49.997	53.658	54.158	54.565	
3.264E-03	35.528	58.676	64.233	69.613	70.358	70.967	
3.385E-03	41.216	70.118	77.357	84.491	85.489	86.307	
3.526E-03	48.423	85.267	94.964	104.732	106.117	107.255	
3.695E-03	57.819	106.042	119.502	133.442	135.450	137.108	
3.904E-03	70.540	135.839	155.403	176.401	179.493	182.058	
4.174E-03	88.676	181.298	211.582	245.687	250.864	255.189	
4.541E-03	116.567	257.028	308.333	370.149	379.953	388.237	
5.097E-03	165.187	402.529	502.958	637.058	659.875	679.523	
6.141E-03	274.943	773.338	1033.667	1448.420	1528.749	1600.646	
6.966E-03	390.044	1228.669	1761.582	2848.842	3112.286	3369.250	
7.229E-03	428.310	1382.739	2011.450	3347.360	3681.731	4011.862	
7.538E-03	475.207	1575.088	2328.291	4006.326	4443.678	4882.716	
7.908E-03	534.266	1822.058	2742.043	4909.153	5503.280	6113.321	
8.364E-03	611.354	2151.050	3303.459	6204.869	7052.638	7950.485	
8.949E-03	717.099	2612.099	4106.246	8185.067	9478.104	10908.139	

9.748E-03	673.265	3308.474	5345.935	11498.531	13669.116	16226.184
1.095E-02	1134.017	4499.092	7517.875	17908.639	22150.765	27606.625

POTASSIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-07 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
4.322E-03	0.000	0.000	0.000	0.000	0.000	0.000
4.400E-03	2.034	2.522	2.601	2.668	2.677	2.684
4.570E-03	7.041	8.884	9.189	9.449	9.483	9.510
4.775E-03	13.906	17.878	18.550	19.128	19.202	19.263
5.028E-03	23.751	31.263	32.575	33.711	33.859	33.979
5.357E-03	38.756	52.691	55.231	57.460	57.752	57.988
5.637E-03	54.286	76.379	80.607	84.375	84.873	85.276
5.839E-03	66.523	95.671	101.420	106.591	107.279	107.835
6.077E-03	82.335	121.580	129.610	136.923	137.902	138.696
6.363E-03	103.398	157.692	169.316	180.074	181.527	182.707
6.716E-03	132.595	210.530	228.194	244.896	247.178	249.038
7.033E-03	162.297	267.973	293.346	317.909	321.310	324.091
7.292E-03	188.355	320.366	353.432	386.018	390.577	394.313
7.596E-03	221.384	389.765	434.083	478.725	485.052	490.252
7.961E-03	264.477	484.984	546.536	610.279	619.463	627.041
8.412E-03	322.846	621.629	711.150	807.231	821.380	833.114
8.991E-03	406.117	830.236	968.910	1125.067	1148.767	1168.569
9.784E-03	534.270	1178.000	1413.121	1696.379	1741.300	1779.254
1.098E-02	757.675	1846.747	2307.442	2922.456	3027.079	3117.167

POTASSIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS =  $1.00E-06$  GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
0.311E-03	0.000	0.000	0.000	0.000	0.000	0.000
9.478E-03	9.346	11.585	11.948	12.256	12.296	12.328
9.845E-03	32.356	40.818	42.218	43.413	43.567	43.691
1.029E-02	63.931	82.162	85.249	87.900	88.244	88.521
1.083E-02	109.210	143.722	149.748	154.968	155.647	156.196
1.154E-02	178.269	242.317	253.993	264.236	265.579	266.663

AMMONIUM NITRATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-12 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT				
	5.00	1.00	0.50	0.10	0.05
6.123E-05	0.000	0.000	0.000	0.000	0.000
7.400E-05	0.006	0.007	0.007	0.007	0.007
8.776E-05	0.021	0.025	0.026	0.027	0.027
8.969E-05	0.023	0.028	0.029	0.030	0.030
9.233E-05	0.026	0.032	0.033	0.034	0.034
9.517E-05	0.029	0.037	0.038	0.039	0.039
9.853E-05	0.034	0.043	0.045	0.046	0.046
1.026E-04	0.040	0.052	0.054	0.055	0.056
1.077E-04	0.048	0.064	0.067	0.069	0.069
1.143E-04	0.061	0.082	0.086	0.090	0.091
1.200E-04	0.073	0.102	0.108	0.113	0.114
1.241E-04	0.082	0.118	0.125	0.131	0.133
1.289E-04	0.094	0.138	0.147	0.156	0.158
1.348E-04	0.109	0.166	0.178	0.190	0.193
1.421E-04	0.130	0.205	0.223	0.240	0.244
1.486E-04	0.151	0.247	0.271	0.294	0.297
1.539E-04	0.168	0.285	0.315	0.344	0.348
1.602E-04	0.191	0.334	0.372	0.412	0.417
1.678E-04	0.219	0.400	0.451	0.505	0.513
1.772E-04	0.258	0.493	0.565	0.644	0.655
1.892E-04	0.311	0.632	0.739	0.862	0.881
2.057E-04	0.391	0.858	1.032	1.246	1.280
2.307E-04	0.528	1.280	1.605	2.049	2.126
2.777E-04	0.826	2.318	3.116	4.425	4.686
3.149E-04	1.123	3.525	5.082	8.388	9.225
3.267E-04	1.221	3.931	5.752	9.792	10.852
					11.923

3.407E-04	1.341	4.433	6.594	11.639	13.022	14.446
3.573E-04	1.490	5.072	7.685	14.155	16.030	18.012
3.779E-04	1.683	5.915	9.151	17.746	20.417	23.345
4.044E-04	1.945	7.083	11.222	23.200	27.273	31.974
4.404E-04	2.327	8.824	14.379	32.264	39.108	47.642
4.948E-04	2.957	11.754	19.820	49.647	63.070	82.015
5.967E-04	4.289	18.101	31.916	93.844	129.239	191.890
6.771E-04	5.585	24.422	44.304	147.592	221.558	408.724
7.028E-04	6.012	26.509	48.406	165.739	253.313	488.110
7.329E-04	6.531	29.050	53.414	188.342	293.648	596.481
7.689E-04	7.175	32.227	59.694	217.261	346.341	750.470
8.134E-04	8.015	36.342	67.850	255.597	417.737	980.892
8.704E-04	9.151	41.940	78.973	308.961	519.436	1350.355
9.482E-04	10.809	50.128	95.286	388.837	675.317	2003.802
1.066E-03	13.541	63.650	122.295	523.707	944.935	3348.449
1.285E-03	19.347	92.422	179.889	816.542	1543.988	7018.066
1.459E-03	25.043	120.683	236.552	1108.624	2152.462	11586.328
1.514E-03	26.922	130.004	255.243	1205.055	2353.579	13118.485
1.579E-03	29.208	141.345	277.986	1322.466	2598.689	15008.049
1.656E-03	32.065	155.518	306.409	1469.277	2905.367	17392.686
1.752E-03	35.764	173.870	343.214	1659.431	3302.720	20496.860
1.875E-03	40.796	198.833	393.277	1918.050	3843.068	24709.364
2.043E-03	48.162	235.371	466.548	2296.352	4632.894	30809.514
2.295E-03	60.345	295.794	587.697	2921.090	5935.115	40664.430
2.769E-03	86.343	424.682	846.045	4250.329	8697.444	60795.121
3.142E-03	112.025	551.931	1100.967	5556.046	11394.777	79129.739
3.262E-03	120.504	593.937	1185.110	5986.723	12283.655	85109.985
3.401E-03	130.829	645.088	1287.563	6510.714	13363.995	92297.856
3.569E-03	143.747	709.077	1415.715	7165.578	14712.628	101157.690
3.775E-03	160.496	792.029	1581.825	8013.588	16456.810	112458.897
4.040E-03	183.312	905.014	1808.046	9167.183	18826.088	127578.123
4.401E-03	216.766	1070.652	2139.628	10855.806	22288.234	149277.689
4.946E-03	272.208	1345.106	2688.936	13648.682	28001.959	184317.926
5.966E-03	390.812	1932.082	3863.437	19607.656	40159.641	256899.092
6.771E-03	508.406	2513.832	5027.023	25492.785	52118.656	325598.738
7.028E-03	547.252	2706.001	5411.368	27435.867	56065.088	348152.559

7.329E-03	554.588	2940.152	5879.653	29802.238	60868.280	375455.449
7.690E-03	653.849	3233.276	6465.844	32762.952	66874.341	409394.641



AMMONIUM NITRATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-11 GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
1.319E-04	0.000	0.000	0.000	0.000	0.000	0.000
1.594E-04	0.019	0.021	0.021	0.021	0.021	0.021
1.891E-04	0.068	0.083	0.085	0.087	0.088	0.088
1.937E-04	0.076	0.093	0.096	0.099	0.099	0.099
1.989E-04	0.086	0.106	0.110	0.112	0.113	0.113
2.050E-04	0.098	0.123	0.127	0.130	0.131	0.131
2.123E-04	0.114	0.144	0.149	0.154	0.154	0.155
2.210E-04	0.135	0.174	0.181	0.180	0.187	0.188
2.320E-04	0.165	0.217	0.226	0.234	0.235	0.236
2.462E-04	0.208	0.283	0.296	0.309	0.310	0.312
2.585E-04	0.251	0.352	0.372	0.390	0.392	0.394
2.673E-04	0.285	0.408	0.433	0.456	0.459	0.461
2.778E-04	0.328	0.482	0.515	0.544	0.548	0.552
2.904E-04	0.384	0.584	0.627	0.668	0.673	0.678
3.061E-04	0.461	0.729	0.791	0.850	0.858	0.865
3.201E-04	0.538	0.884	0.968	1.051	1.062	1.072
3.317E-04	0.605	1.024	1.130	1.237	1.252	1.264
3.422E-04	0.689	1.207	1.346	1.487	1.507	1.524
3.615E-04	0.798	1.455	1.642	1.838	1.867	1.890
3.817E-04	0.944	1.808	2.071	2.358	2.400	2.436
4.076E-04	1.149	2.338	2.733	3.184	3.253	3.311
4.432E-04	1.462	3.209	3.857	4.650	4.776	4.884
4.970E-04	2.000	4.853	6.078	7.739	8.025	8.272
5.983E-04	3.195	8.960	12.014	16.967	17.941	18.817
6.783E-04	4.416	13.859	19.920	32.540	35.665	38.743
7.039E-04	4.821	15.512	22.625	38.068	42.023	45.970

7.339E-04	5.316	17.565	26.039	45.349	50.506	55.745
7.699E-04	5.936	20.190	30.477	55.288	62.271	69.537
8.142E-04	6.742	23.670	36.466	69.499	79.429	90.109
8.712E-04	7.843	28.519	44.983	91.132	106.226	123.235
9.488E-04	9.460	35.797	58.047	127.171	152.435	182.920
1.066E-03	12.141	48.148	80.756	196.531	245.796	312.033
1.286E-03	17.872	75.189	131.814	373.959	502.844	713.108
1.459E-03	23.530	102.559	185.016	592.849	861.543	1446.796
1.514E-03	25.398	111.616	202.675	666.949	985.045	1711.543
1.579E-03	27.671	122.669	224.293	759.517	1142.144	2066.863
1.657E-03	30.515	136.526	251.476	878.370	1347.793	2561.651
1.752E-03	34.199	154.527	286.896	1036.583	1627.269	3284.396
1.875E-03	39.214	179.090	335.377	1257.930	2027.015	4410.197
2.043E-03	46.561	215.157	406.782	1591.314	2643.457	6333.350
2.296E-03	58.720	274.993	525.600	2158.745	3719.280	10134.554
2.769E-03	84.682	403.041	780.608	3404.232	6143.154	20112.837
3.142E-03	110.346	529.870	1032.861	4667.605	8666.087	32589.823
3.262E-03	118.819	571.750	1117.507	5085.680	9502.949	36807.835
3.401E-03	129.138	622.764	1219.420	5596.008	10526.869	42067.662
3.569E-03	142.050	686.602	1346.979	6235.877	11813.547	48800.847
3.775E-03	158.790	769.384	1512.426	7067.196	13488.724	57725.809
4.040E-03	181.596	882.173	1737.884	8201.767	15779.398	70135.371
4.401E-03	215.036	1047.571	2068.556	9868.009	19149.192	88667.933
4.945E-03	270.456	1321.703	2616.685	12632.789	24747.990	119811.808
5.965E-03	389.007	1908.106	3789.276	18550.682	36740.351	186967.516
6.770E-03	506.540	2489.409	4951.588	24413.954	48614.901	253105.160
7.027E-03	545.361	2681.404	5335.475	26350.121	52535.277	274895.957
7.328E-03	592.662	2915.335	5803.198	28708.674	57309.711	301371.570
7.688E-03	651.874	3208.163	6388.662	31660.242	63283.035	334408.016
8.133E-03	728.691	3588.039	7148.134	35487.968	71026.484	377097.422
8.704E-03	833.407	4105.855	8183.341	40703.553	81572.845	435018.965
9.481E-03	987.067	4865.652	9702.225	48352.648	97031.048	519488.569
1.065E-02	1241.967	6125.942	12221.436	61031.676	122635.039	658466.406

AMMONIUM NITRATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-10 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
2.842E-04	0.000	0.000	0.000	0.000	0.000	0.000
3.435E-04	0.067	0.074	0.075	0.075	0.075	0.076
4.074E-04	0.257	0.313	0.323	0.331	0.332	0.332
4.172E-04	0.288	0.354	0.364	0.373	0.375	0.375
4.285E-04	0.326	0.404	0.416	0.427	0.429	0.430
4.417E-04	0.375	0.468	0.483	0.496	0.498	0.499
4.575E-04	0.437	0.552	0.572	0.589	0.591	0.592
4.762E-04	0.520	0.669	0.694	0.717	0.719	0.722
4.998E-04	0.637	0.837	0.873	0.904	0.908	0.912
5.305E-04	0.810	1.100	1.153	1.201	1.207	1.212
5.558E-04	0.984	1.380	1.457	1.526	1.536	1.543
5.759E-04	1.120	1.605	1.703	1.792	1.803	1.813
5.985E-04	1.294	1.904	2.032	2.149	2.165	2.177
6.257E-04	1.524	2.315	2.488	2.650	2.672	2.690
6.594E-04	1.839	2.908	3.155	3.392	3.424	3.451
6.897E-04	2.155	3.543	3.882	4.215	4.261	4.299
7.145E-04	2.432	4.118	4.549	4.977	5.038	5.087
7.437E-04	2.781	4.875	5.437	6.009	6.090	6.158
7.788E-04	3.234	5.905	6.665	7.461	7.576	7.672
8.222E-04	3.844	7.372	8.448	9.617	9.790	9.934
8.782E-04	4.709	9.590	11.213	13.063	13.346	13.582
9.548E-04	6.033	13.254	15.933	19.200	19.723	20.165
1.071E-03	8.326	20.223	25.322	32.215	33.399	34.421
1.289E-03	13.467	37.790	50.628	71.346	75.402	79.044
1.461E-03	18.799	59.044	84.791	137.949	150.988	163.775
1.517E-03	20.570	66.226	96.498	161.617	178.125	194.518

1.581E-03	22.738	75.174	111.309	192.827	214.356	236.104
1.659E-03	25.463	86.638	130.602	235.486	264.636	294.770
1.754E-03	29.015	101.875	156.715	296.562	338.007	382.230
1.877E-03	33.876	123.175	193.952	389.672	452.645	522.895
2.044E-03	41.040	155.258	251.280	545.067	650.372	775.745
2.297E-03	52.969	209.936	351.367	844.821	1049.874	1320.242
2.770E-03	78.595	330.321	577.698	1614.335	2149.785	2995.845
3.143E-03	104.091	453.166	815.600	2570.703	3687.345	5989.002
3.262E-03	112.514	493.863	894.659	2894.866	4217.065	7064.388
3.402E-03	122.779	543.590	991.566	3300.405	4891.420	8500.569
3.569E-03	135.630	606.011	1113.601	3821.984	5775.118	10489.107
3.775E-03	152.305	687.213	1272.860	4517.647	6977.793	13374.601
4.040E-03	175.035	798.199	1491.237	5493.225	8701.406	17835.042
4.401E-03	208.386	961.472	1813.540	6966.810	11366.592	25387.870
4.946E-03	263.695	1232.950	2351.181	9484.202	16036.316	40173.907
5.965E-03	382.086	1815.544	3508.681	15037.496	26620.923	78667.868
6.770E-03	459.534	2394.924	4663.408	20714.081	37754.690	126934.055
7.027E-03	538.329	2586.346	5045.034	22594.597	41453.619	143289.336
7.328E-03	585.602	2819.653	5510.300	24892.677	45986.920	163741.514
7.688E-03	644.782	3111.791	6093.062	27777.845	51694.584	190027.002
8.133E-03	721.561	3490.891	6849.513	31531.443	59141.012	225036.787
8.703E-03	825.231	4007.808	7881.245	36662.370	69347.666	274028.379
9.481E-03	979.825	4766.510	9395.969	44211.450	84404.938	347810.527
1.065E-02	1234.628	6025.324	11909.786	56764.849	109506.222	473260.020

AMMONIUM NITRATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-09 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					0.01
	5.00	1.00	0.50	0.10	0.05	
6.123E-04	0.000	0.000	0.000	0.000	0.000	0.000
7.400E-04	0.272	0.296	0.300	0.303	0.303	0.303
8.770E-04	1.069	1.304	1.342	1.374	1.378	1.382
8.989E-04	1.201	1.472	1.517	1.554	1.559	1.563
9.233E-04	1.363	1.683	1.736	1.781	1.787	1.792
9.516E-04	1.567	1.955	2.019	2.074	2.081	2.087
9.852E-04	1.832	2.314	2.395	2.465	2.474	2.481
1.026E-03	2.187	2.809	2.916	3.009	3.021	3.031
1.077E-03	2.685	3.528	3.679	3.810	3.827	3.841
1.143E-03	3.429	4.652	4.880	5.082	5.108	5.130
1.200E-03	4.181	5.859	6.187	6.481	6.520	6.552
1.241E-03	4.769	6.832	7.247	7.624	7.675	7.716
1.289E-03	5.524	8.124	8.668	9.168	9.236	9.290
1.348E-03	6.520	9.905	10.646	11.338	11.432	11.509
1.421E-03	7.892	12.482	13.545	14.561	14.701	14.814
1.486E-03	9.276	15.250	16.714	18.147	18.346	18.510
1.539E-03	10.487	17.763	19.622	21.475	21.736	21.950
1.602E-03	12.018	21.075	23.507	25.984	26.337	26.628
1.678E-03	14.010	25.594	28.891	32.344	32.845	33.259
1.771E-03	16.699	32.042	36.724	41.809	42.563	43.190
1.892E-03	20.523	41.820	48.902	56.971	58.205	59.239
2.057E-03	26.392	58.022	69.752	84.051	86.337	88.273
2.307E-03	36.558	88.947	111.374	141.654	146.849	151.332
2.777E-03	59.591	167.293	224.072	315.488	333.344	349.371
3.148E-03	83.617	262.777	377.253	612.747	670.266	726.570
3.267E-03	91.606	295.074	429.799	718.444	791.284	863.468

3.406E-03	101.392	335.358	496.343	857.918	952.932	1048.680
3.573E-03	113.712	387.032	583.132	1048.684	1177.350	1309.986
3.779E-03	129.784	455.805	700.748	1322.012	1504.964	1699.511
4.043E-03	151.820	552.090	868.721	1739.040	2017.021	2325.765
4.404E-03	184.342	697.378	1127.782	2435.716	2900.495	3450.577
4.948E-03	238.603	945.512	1581.050	3781.253	4685.953	5868.709
5.967E-03	355.479	1493.316	2608.926	7241.753	9603.018	13283.118
6.771E-03	472.143	2054.535	3693.908	11557.951	16484.412	26404.873
7.028E-03	510.709	2240.556	4054.675	13021.829	18855.929	31111.888
7.329E-03	557.733	2467.985	4497.165	14854.454	21876.145	37381.531
7.689E-03	616.640	2753.655	5054.772	17213.289	25836.112	46054.016
8.134E-03	693.115	3125.526	5783.017	20362.310	31228.938	58601.458
8.704E-03	797.438	3634.192	6782.441	24783.274	38964.808	77943.278
9.482E-03	950.628	4383.160	8258.918	31470.128	50941.890	110589.293
1.065E-02	1204.918	5629.803	10724.736	42912.859	71964.370	174282.939

AMMONIUM NITRATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-08 G TEMPERATURE = 20C

SUPERSATURATION IN PERCENT

RADIUS (UM)	2.00	1.00	0.50	0.10	0.05	0.01
1.319E-03	0.000	0.000	0.000	0.000	0.000	0.000
1.594E-03	1.173	1.278	1.293	1.303	1.306	1.308
1.891E-03	4.700	5.728	5.855	6.037	6.055	6.070
1.937E-03	5.283	6.474	6.668	6.934	6.855	6.873
1.989E-03	6.002	7.409	7.640	7.838	7.863	7.884
2.050E-03	6.909	8.611	8.894	9.136	9.167	9.192
2.123E-03	8.085	10.205	10.563	10.870	10.910	10.942
2.210E-03	9.666	12.407	12.881	13.290	13.344	13.387
2.320E-03	11.887	15.612	16.276	16.855	16.930	16.992
2.462E-03	15.211	20.628	21.638	22.531	22.648	22.743
2.585E-03	18.578	26.026	27.462	28.790	28.963	29.104
2.673E-03	21.216	30.383	32.231	33.909	34.133	34.315
2.778E-03	24.602	36.180	38.602	40.830	41.129	41.373
2.904E-03	29.081	44.173	47.478	50.567	50.986	51.328
3.051E-03	33.224	53.759	60.511	65.051	65.675	66.185
3.201E-03	41.495	68.225	74.779	81.192	82.086	82.817
3.316E-03	46.961	79.551	87.884	96.185	97.355	98.314
3.422E-03	53.877	94.496	105.405	116.517	118.103	119.408
3.615E-03	62.883	114.906	129.714	145.226	147.478	149.338
3.816E-03	75.058	144.061	165.123	187.994	191.387	194.207
4.070E-03	92.336	188.334	220.242	256.592	262.152	266.806
4.432E-03	119.045	261.807	314.749	379.272	389.586	398.319
4.970E-03	165.478	402.308	503.751	640.647	664.120	684.373
5.983E-03	270.340	759.110	1016.655	1430.878	1511.714	1584.240
6.783E-03	380.295	1195.510	1716.139	2785.382	3046.056	3300.986
7.039E-03	416.875	1343.195	1956.195	3267.154	3597.302	3924.144

7.339E-03	401.710	1527.487	2260.361	3903.095	4333.792	4767.321
7.678E-03	518.179	1764.052	2657.285	4773.204	5356.501	5957.004
8.142E-03	591.895	2079.079	3195.537	6020.347	6849.807	7730.436
8.711E-03	693.030	2520.460	3964.796	7923.958	9184.314	10581.340
9.488E-03	842.414	3187.027	5152.196	11105.573	13212.776	15700.108
1.066E-02	1091.889	4326.602	7231.865	17254.138	21355.408	26696.594



AMMONIUM NITRATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-07 GM TEMPERATURE = 20C

SUPERSATURATION IN PERCENT

RADIUS (UM)	5.00	1.00	0.50	0.10	0.05	0.01
2.842E-03	0.000	0.000	0.000	0.000	0.000	0.000
3.435E-03	5.261	5.728	5.793	5.840	5.853	5.858
4.073E-03	21.255	25.895	26.650	27.291	27.374	27.441
4.172E-03	25.900	29.278	30.157	30.903	31.001	31.079
4.285E-03	27.165	33.521	34.568	35.459	35.575	35.667
4.417E-03	31.285	38.976	40.258	41.353	41.494	41.608
4.573E-03	36.632	46.220	47.841	49.232	49.413	49.558
4.762E-03	43.824	56.237	58.382	60.236	60.477	60.571
4.998E-03	53.541	70.822	73.831	76.496	76.799	77.076
5.305E-03	69.093	93.676	98.255	102.311	102.844	103.276
5.568E-03	86.458	118.294	124.710	130.853	131.643	132.282
5.759E-03	96.501	138.179	146.582	154.210	155.229	156.055
5.985E-03	111.957	164.644	175.668	185.805	187.169	188.277
6.257E-03	132.442	201.165	216.215	230.286	232.197	233.752
6.594E-03	160.675	254.134	275.796	296.495	299.341	301.663
6.897E-03	189.252	311.175	341.077	370.333	374.410	377.748
7.145E-03	214.288	363.018	401.056	438.950	444.287	448.668
7.437E-03	245.975	431.460	481.285	532.040	539.282	545.245
7.788E-03	287.265	524.961	592.658	663.550	673.838	682.341
8.222E-03	343.119	658.645	754.969	859.562	875.080	887.974
8.782E-03	422.705	861.750	1007.787	1174.146	1199.587	1220.885
9.548E-03	545.123	1199.064	1441.580	1737.106	1784.342	1824.334
1.071E-02	758.622	1844.670	2309.831	2937.416	3045.000	3137.839



SODIUM NITRATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-12 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT				
	5.00	1.00	0.50	0.10	0.05
8.248E-05	0.000	0.000	0.000	0.000	0.000
8.352E-05	0.001	0.001	0.001	0.001	0.001
8.575E-05	0.003	0.004	0.004	0.005	0.005
8.829E-05	0.006	0.008	0.008	0.009	0.009
9.123E-05	0.010	0.013	0.013	0.014	0.014
9.469E-05	0.015	0.019	0.020	0.020	0.021
9.886E-05	0.021	0.027	0.029	0.030	0.030
1.040E-04	0.029	0.039	0.041	0.043	0.043
1.107E-04	0.041	0.058	0.061	0.063	0.064
1.164E-04	0.053	0.077	0.081	0.085	0.086
1.206E-04	0.063	0.092	0.098	0.103	0.104
1.254E-04	0.074	0.112	0.120	0.127	0.128
1.313E-04	0.089	0.139	0.150	0.160	0.161
1.385E-04	0.110	0.177	0.193	0.208	0.210
1.450E-04	0.130	0.218	0.239	0.260	0.263
1.503E-04	0.148	0.255	0.282	0.309	0.312
1.565E-04	0.170	0.302	0.333	0.373	0.379
1.640E-04	0.198	0.366	0.414	0.464	0.471
1.732E-04	0.235	0.456	0.524	0.597	0.607
1.851E-04	0.287	0.591	0.692	0.807	0.824
2.014E-04	0.365	0.810	0.974	1.175	1.207
2.260E-04	0.498	1.217	1.526	1.946	2.019
2.722E-04	0.787	2.219	2.981	4.225	4.472
3.087E-04	1.074	3.384	4.875	8.029	8.824
3.204E-04	1.169	3.775	5.521	9.377	10.385
3.341E-04	1.284	4.260	6.333	11.152	12.468
					0.01
					0.000
					0.001
					0.005
					0.009
					0.014
					0.021
					0.030
					0.043
					0.064
					0.086
					0.104
					0.128
					0.161
					0.210
					0.266
					0.316
					0.383
					0.477
					0.616
					0.839
					1.235
					2.081
					4.694
					9.614
					11.401
					13.821

3.505E-04	1.428	4.876	7.384	13.572	15.359	17.245
3.707E-04	1.614	5.689	8.797	17.028	19.579	22.372
3.966E-04	1.867	6.815	10.794	22.281	26.179	30.674
4.320E-04	2.235	8.493	13.837	31.016	37.583	45.769
4.854E-04	2.842	11.317	19.080	47.776	60.694	78.936
5.854E-04	4.125	17.430	30.734	90.408	124.572	185.185
6.643E-04	5.372	23.514	42.661	142.251	213.768	395.834
6.895E-04	5.783	25.523	46.610	159.753	244.448	473.012
7.190E-04	6.282	27.968	51.431	181.551	283.418	578.471
7.544E-04	6.905	31.025	57.475	209.436	334.328	728.496
7.980E-04	7.710	34.984	65.314	246.396	403.303	953.286
8.540E-04	8.802	40.369	76.025	297.838	501.539	1314.374
9.303E-04	10.396	48.244	91.719	374.815	652.085	1954.378
1.045E-03	13.023	61.247	117.697	504.754	912.390	3274.724
1.261E-03	18.604	88.908	173.078	786.769	1490.457	6889.081
1.431E-03	24.078	116.070	227.545	1067.879	2077.039	11388.048
1.485E-03	25.883	125.028	245.511	1160.681	2270.902	12895.606
1.545E-03	28.080	135.927	267.370	1273.658	2507.113	14753.564
1.625E-03	30.624	149.546	294.687	1414.911	2802.630	17097.211
1.719E-03	34.379	167.181	330.058	1597.839	3185.424	20143.240
1.840E-03	39.213	191.167	378.167	1846.609	3705.904	24273.075
2.004E-03	46.289	226.272	448.572	2210.448	4466.486	30243.622
2.252E-03	57.593	284.320	564.972	2811.205	5720.158	39865.154
2.716E-03	82.964	408.131	813.166	4089.118	8378.454	59462.676
3.083E-03	107.630	530.350	1058.026	5344.032	10972.753	77247.192
3.200E-03	115.772	570.694	1138.847	5757.936	11827.606	83045.685
3.337E-03	125.689	619.821	1237.252	6261.499	12866.243	90010.451
3.501E-03	138.095	681.276	1360.337	6890.788	14163.382	98591.797
3.704E-03	154.175	760.941	1519.875	7705.635	15840.442	109533.312
3.963E-03	176.085	869.447	1737.134	8814.049	18118.172	124158.018
4.318E-03	208.214	1028.510	2055.579	10436.423	21446.131	145128.928
4.852E-03	261.451	1292.063	2583.096	13119.519	26938.144	178978.277
5.853E-03	375.336	1855.700	3710.945	18843.654	38622.177	249013.887
6.643E-03	488.242	2414.280	4828.226	24496.043	50112.118	315230.117
6.895E-03	525.539	2598.792	5197.271	26362.245	53903.679	336968.039
7.190E-03	570.988	2823.614	5646.911	28634.947	58518.288	363271.289

7.544E-03	627.885	3105.052	6209.753	31478.413	64288.101	395966.784
7.981E-03	701.708	3470.191	6939.922	35165.115	71765.398	438047.918
8.541E-03	802.361	3567.988	7935.296	40187.611	81938.870	494898.359
9.302E-03	950.099	4698.594	9396.050	47553.074	96847.845	577512.064
1.046E-02	1195.295	5911.051	11819.935	59763.997	121536.909	712965.133

SODIUM NITRATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-11 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
1.777E-04	0.000	0.000	0.000	0.000	0.000	0.000
1.799E-04	0.004	0.004	0.005	0.005	0.005	0.005
1.847E-04	0.012	0.015	0.015	0.015	0.016	0.016
1.902E-04	0.022	0.027	0.028	0.029	0.029	0.029
1.965E-04	0.034	0.043	0.045	0.046	0.047	0.047
2.040E-04	0.050	0.065	0.067	0.069	0.070	0.070
2.130E-04	0.071	0.094	0.097	0.101	0.101	0.102
2.241E-04	0.100	0.135	0.141	0.147	0.147	0.148
2.385E-04	0.144	0.199	0.210	0.219	0.220	0.221
2.508E-04	0.186	0.267	0.283	0.297	0.299	0.300
2.597E-04	0.220	0.321	0.342	0.360	0.363	0.365
2.702E-04	0.262	0.393	0.420	0.445	0.449	0.452
2.828E-04	0.317	0.491	0.529	0.564	0.569	0.573
2.984E-04	0.393	0.632	0.687	0.740	0.747	0.753
3.124E-04	0.468	0.782	0.858	0.933	0.943	0.952
3.238E-04	0.534	0.917	1.015	1.111	1.125	1.136
3.372E-04	0.616	1.094	1.222	1.351	1.370	1.385
3.533E-04	0.722	1.334	1.508	1.688	1.715	1.736
3.732E-04	0.864	1.675	1.920	2.186	2.226	2.258
3.989E-04	1.064	2.186	2.557	2.979	3.043	3.097
4.339E-04	1.368	3.026	3.637	4.380	4.499	4.599
4.869E-04	1.889	4.610	5.772	7.338	7.606	7.838
5.865E-04	3.043	8.565	11.473	16.165	17.085	17.911
6.651E-04	4.221	13.281	19.074	31.078	34.037	36.947
6.903E-04	4.611	14.871	21.673	36.372	40.121	43.855
7.197E-04	5.088	16.848	24.956	43.352	48.245	53.207

7.550E-04	5.686	19.374	29.223	52.886	59.521	66.413
7.986E-04	6.462	22.723	34.985	66.528	75.979	86.129
8.545E-04	7.522	27.390	43.178	87.306	101.703	117.905
9.307E-04	9.076	34.394	55.746	121.943	146.095	175.210
1.046E-03	11.657	46.276	77.592	188.639	235.851	299.300
1.261E-03	17.169	72.282	126.697	359.315	483.146	685.226
1.431E-03	22.606	98.594	177.848	569.905	828.439	1392.552
1.485E-03	24.403	107.299	194.824	641.189	947.320	1647.834
1.549E-03	26.588	117.924	215.605	730.236	1098.543	1990.549
1.625E-03	29.321	131.242	241.734	844.565	1296.500	2467.950
1.719E-03	32.861	148.541	275.778	996.742	1565.515	3165.529
1.840E-03	37.680	172.145	322.371	1209.634	1950.284	4252.641
2.004E-03	44.738	206.801	390.989	1530.241	2543.596	6110.580
2.252E-03	56.420	264.290	505.158	2075.859	3578.880	9784.158
2.716E-03	81.358	387.300	750.153	3273.250	5910.944	19433.243
3.083E-03	106.006	509.118	993.417	4487.488	8337.357	31495.768
3.200E-03	114.144	549.343	1073.763	4889.284	9142.173	35573.930
3.337E-03	124.054	598.339	1171.651	5379.703	10126.780	40658.729
3.501E-03	136.454	659.650	1294.168	5994.596	11363.991	47167.589
3.704E-03	152.531	739.154	1453.072	6793.400	12974.618	55791.306
3.963E-03	174.431	847.472	1669.606	7883.552	15176.782	67778.626
4.318E-03	206.543	1006.309	1987.177	9484.436	18416.062	85675.060
4.852E-03	259.760	1269.555	2513.565	12140.538	23797.304	115745.774
5.852E-03	373.593	1832.645	3639.583	17825.214	35321.904	180521.348
6.642E-03	486.442	2390.797	4755.640	23456.564	46730.447	244245.494
6.894E-03	523.715	2575.144	5124.246	25316.126	50496.892	265240.840
7.189E-03	569.130	2799.754	5573.346	27581.321	55083.689	290749.687
7.543E-03	625.981	3080.911	6135.493	30416.004	60822.041	322572.801
7.979E-03	699.733	3445.642	6864.709	34092.077	68260.601	363685.273
8.539E-03	800.271	3942.808	7858.658	39100.836	78391.321	419443.516
9.302E-03	947.797	4672.294	9316.981	46446.264	93239.738	500757.070
1.045E-02	1192.518	5882.286	11735.702	58621.816	117832.771	634511.000

SODIUM NITRATE

TIME OF CONDENSATION GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-10 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
3.828E-04	0.000	0.000	0.000	0.000	0.000	0.000
3.877E-04	0.014	0.017	0.017	0.018	0.018	0.018
3.980E-04	0.045	0.056	0.058	0.059	0.059	0.059
4.098E-04	0.083	0.105	0.108	0.111	0.112	0.112
4.234E-04	0.132	0.167	0.173	0.178	0.179	0.179
4.395E-04	0.194	0.250	0.259	0.267	0.268	0.269
4.589E-04	0.277	0.363	0.378	0.391	0.392	0.394
4.829E-04	0.392	0.526	0.550	0.571	0.574	0.576
5.139E-04	0.563	0.780	0.820	0.856	0.861	0.864
5.404E-04	0.735	1.051	1.113	1.168	1.175	1.181
5.596E-04	0.869	1.269	1.350	1.423	1.432	1.440
5.822E-04	1.040	1.558	1.666	1.765	1.778	1.789
6.093E-04	1.266	1.955	2.105	2.245	2.264	2.280
6.429E-04	1.574	2.528	2.747	2.957	2.986	3.009
6.730E-04	1.884	3.141	3.447	3.746	3.788	3.822
6.976E-04	2.154	3.696	4.089	4.478	4.532	4.577
7.265E-04	2.494	4.426	4.942	5.465	5.540	5.601
7.612E-04	2.935	5.420	6.122	6.855	6.962	7.049
8.041E-04	3.528	6.833	7.835	8.918	9.079	9.212
8.594E-04	4.368	8.970	10.490	12.214	12.477	12.697
9.348E-04	5.650	12.495	15.016	18.076	18.564	18.976
1.049E-03	7.868	19.198	24.025	30.514	31.624	32.582
1.263E-03	12.828	36.088	48.300	67.900	71.719	75.146
1.433E-03	17.965	56.525	81.097	131.587	143.917	155.987
1.487E-03	19.670	63.429	92.556	154.226	169.848	185.333
1.551E-03	21.757	72.031	106.559	184.103	204.499	225.064



1.627E-03	24.380	83.054	125.092	224.970	252.623	281.161
1.720E-03	27.797	97.703	150.181	283.519	322.904	364.862
1.841E-03	32.474	118.162	185.964	372.835	432.796	499.592
2.002E-03	39.362	149.026	241.058	521.986	622.476	741.977
2.253E-03	50.830	201.583	337.247	809.848	1005.983	1264.369
2.717E-03	75.461	317.271	554.738	1549.131	2062.514	2873.515
3.083E-03	99.951	435.293	733.307	2468.150	3540.273	5751.515
3.200E-03	108.043	474.389	859.259	2779.638	4049.369	6785.549
3.337E-03	117.903	522.157	952.353	3169.316	4697.476	8166.418
3.501E-03	130.247	582.118	1069.582	3670.485	5546.825	10078.961
3.704E-03	146.263	660.114	1222.561	4338.901	6702.688	12854.769
3.964E-03	168.094	766.713	1432.317	5276.248	8359.277	17146.514
4.318E-03	200.123	923.523	1741.874	6692.017	10920.748	24414.728
4.852E-03	253.238	1184.239	2258.223	9110.485	15408.408	38645.748
5.852E-03	366.922	1743.697	3369.796	14445.096	25579.822	75707.461
6.642E-03	479.693	2300.018	4478.606	19897.258	36276.758	122173.766
6.894E-03	516.942	2483.819	4845.050	21703.403	39830.490	137918.967
7.189E-03	562.331	2707.833	5291.802	23910.532	44185.616	157606.504
7.543E-03	619.152	2988.333	5851.364	26681.436	49668.662	182906.889
7.979E-03	692.869	3352.325	6577.685	30286.243	56822.058	216601.260
8.539E-03	793.364	3848.633	7568.311	35213.726	66626.886	263755.121
9.302E-03	940.832	4577.073	9022.659	42463.272	81090.079	334749.203
1.045E-02	1185.458	5785.655	11436.207	54518.007	105199.694	455453.965

SODIUM NITRATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-09 GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
8.247E-04	0.000	0.000	0.000	0.000	0.000	0.000
8.352E-04	0.057	0.070	0.072	0.074	0.074	0.074
8.575E-04	0.188	0.234	0.241	0.247	0.248	0.249
8.829E-04	0.350	0.439	0.454	0.466	0.468	0.469
9.123E-04	0.554	0.703	0.727	0.748	0.751	0.753
9.469E-04	0.818	1.051	1.091	1.125	1.129	1.133
9.886E-04	1.170	1.531	1.593	1.647	1.654	1.660
1.040E-03	1.662	2.227	2.327	2.415	2.427	2.436
1.107E-03	2.396	3.311	3.482	3.633	3.653	3.669
1.164E-03	3.136	4.477	4.739	4.974	5.005	5.030
1.206E-03	3.714	5.416	5.758	6.068	6.110	6.143
1.254E-03	4.454	6.661	7.122	7.545	7.601	7.647
1.313E-03	5.431	8.380	9.023	9.623	9.704	9.771
1.385E-03	6.772	10.866	11.810	12.709	12.832	12.933
1.450E-03	8.124	13.536	14.856	16.143	16.322	16.469
1.503E-03	9.306	15.960	17.652	19.331	19.567	19.761
1.565E-03	10.797	19.151	21.381	23.644	23.966	24.231
1.640E-03	12.733	23.503	26.549	29.726	30.186	30.566
1.732E-03	15.344	29.709	34.065	38.773	39.470	40.048
1.851E-03	19.052	39.117	45.746	53.262	54.408	55.366
2.014E-03	24.731	54.689	65.722	79.101	81.232	83.035
2.260E-03	34.592	84.415	105.625	134.107	138.973	143.169
2.722E-03	56.763	159.682	213.648	300.050	316.862	331.925
3.087E-03	79.897	251.439	360.614	584.112	638.466	591.572
3.204E-03	87.584	282.467	411.020	685.151	754.030	822.161
3.341E-03	97.001	321.173	474.890	818.581	908.523	998.990

3.504E-03	108.851	370.828	958.209	1001.211	1123.178	1248.682
3.707E-03	124.308	436.916	671.150	1263.064	1436.782	1621.204
3.966E-03	145.495	529.442	832.478	1662.844	1927.308	2270.614
4.320E-03	176.726	669.050	1081.322	2331.107	2774.242	3248.085
4.854E-03	228.901	907.456	1516.729	3622.452	4487.011	5616.270
5.853E-03	341.182	1433.689	2504.046	6944.931	9206.765	12729.404
6.643E-03	453.232	1972.713	3546.117	11090.408	15815.809	25331.840
6.895E-03	490.269	2151.364	3892.592	12496.302	18093.401	29852.517
7.190E-03	535.426	2364.775	4317.540	14256.325	20994.122	35878.578
7.544E-03	591.497	2644.108	4853.023	16521.731	24797.409	44203.478
7.950E-03	665.433	3001.204	5552.353	19545.985	29977.001	56259.557
8.539E-03	765.607	3489.652	6512.058	23791.739	37407.033	74843.142
9.302E-03	912.695	4208.817	7929.808	30213.308	48910.709	106213.345
1.045E-02	1156.854	5405.799	10297.446	41201.963	69101.618	167426.133

SODIUM NITRATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS =  $1.00E-08$  GM TEMPERATURE = 201

SUPERSATURATION IN PERCENT

RADIUS (CM)	5.00	1.00	0.50	0.10	0.05	0.01
1.777E-03	0.000	0.000	0.000	0.000	0.000	0.000
1.799E-03	0.252	0.309	0.318	0.326	0.327	0.328
1.847E-03	0.832	1.031	1.063	1.091	1.094	1.097
1.902E-03	1.548	1.938	2.002	2.056	2.063	2.069
1.965E-03	2.451	3.104	3.213	3.305	3.317	3.327
2.040E-03	3.614	4.644	4.824	4.973	4.993	5.008
2.130E-03	5.184	6.778	7.054	7.292	7.323	7.348
2.241E-03	7.375	9.873	10.314	10.707	10.758	10.794
2.385E-03	10.652	14.704	15.462	16.134	16.222	16.293
2.508E-03	13.965	19.917	21.080	22.124	22.263	22.375
2.597E-03	16.554	24.118	25.641	27.021	27.205	27.354
2.702E-03	19.670	29.648	31.750	33.632	33.824	34.040
2.828E-03	24.256	37.407	40.277	42.952	43.315	43.610
2.964E-03	30.284	48.574	52.793	56.811	57.362	57.812
3.124E-03	36.380	60.592	66.494	72.258	73.059	73.715
3.238E-03	41.708	71.504	74.084	86.612	87.664	88.536
3.372E-03	48.434	85.898	92.400	106.048	107.443	108.681
3.533E-03	57.141	102.541	119.214	133.482	135.564	137.254
3.732E-03	69.007	133.584	153.175	174.343	177.475	180.075
3.969E-03	85.804	176.165	206.017	234.860	243.014	249.534
4.334E-03	111.585	246.747	296.226	356.867	366.476	374.605
4.864E-03	156.430	381.743	477.642	606.351	628.333	647.274
5.864E-03	257.505	724.348	964.086	1360.462	1436.511	1504.647
6.651E-03	363.350	1143.640	1634.482	2654.344	2400.625	3140.440
6.902E-03	342.541	1285.463	1870.222	3114.784	3426.864	3735.238
7.157E-03	441.667	1462.518	2162.054	3722.476	4130.526	4540.001

7.550E-03	495.972	1689.768	2543.001	4555.719	5108.434	5676.444
7.985E-03	556.850	1992.420	3059.723	5750.136	6537.437	7371.923
8.544E-03	664.065	2416.466	3798.360	7574.459	8773.054	10099.694
9.307E-03	807.634	3056.831	4938.651	10625.389	12633.672	15001.289
1.046E-02	1047.332	4151.510	6935.935	16524.591	20442.311	25559.485

SODIUM NITRATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-07 GM TEMPERATURE = 20C

SUPERSATURATION IN PERCENT

RADIUS (CM)	2.00	1.00	0.50	0.10	0.05	0.01
3.828E-03	0.000	0.000	0.000	0.000	0.000	0.000
3.877E-03	1.143	1.400	1.441	1.476	1.481	1.484
3.980E-03	3.771	4.670	4.815	4.939	4.955	4.967
4.098E-03	7.019	8.781	9.070	9.310	9.348	9.373
4.234E-03	11.115	14.070	14.561	14.980	15.035	15.078
4.395E-03	16.423	21.085	21.874	22.552	22.640	22.710
4.589E-03	23.536	30.756	32.006	33.088	33.228	33.342
4.829E-03	33.524	44.833	46.854	48.617	48.847	49.033
5.139E-03	48.435	66.850	70.285	73.321	73.721	74.044
5.404E-03	63.543	90.591	95.879	100.625	101.254	101.764
5.596E-03	75.359	109.753	116.679	122.956	123.793	124.472
5.822E-03	90.504	135.224	144.558	153.122	154.273	155.207
6.093E-03	110.544	170.430	183.497	195.682	197.334	198.678
6.429E-03	138.131	221.467	240.694	259.010	261.522	263.573
6.730E-03	166.008	276.434	303.379	329.651	333.304	336.294
6.976E-03	190.403	326.393	360.985	395.321	400.145	404.102
7.265E-03	221.234	392.258	437.942	484.283	490.879	496.306
7.612E-03	261.547	482.249	544.745	609.928	619.361	627.152
8.041E-03	315.535	610.806	700.355	797.142	811.459	823.333
8.593E-03	392.644	806.076	942.674	1097.519	1121.122	1140.856
9.348E-03	511.029	1130.039	1358.020	1614.331	1678.330	1715.543
1.049E-02	717.183	1750.226	2189.876	2779.807	2880.538	2967.308

SODIUM NITRATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS =  $1.00E-06$  GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
8.247E-03	0.000	0.000	0.000	0.000	0.000	0.000
8.352E-03	5.243	6.423	6.611	6.771	6.791	6.808
8.575E-03	17.306	21.425	22.092	22.657	22.730	22.789
8.829E-03	32.219	40.298	41.621	42.748	42.893	43.010
9.125E-03	51.032	64.579	66.831	68.755	69.004	69.205
9.469E-03	75.419	96.802	100.422	103.531	103.933	104.258
9.886E-03	108.113	141.242	146.982	151.943	152.588	153.108
1.040E-02	154.043	205.962	215.240	223.333	224.390	225.244
1.107E-02	222.647	307.233	323.013	336.959	338.794	340.278
1.164E-02	292.198	416.499	440.803	462.610	465.504	467.847

SODIUM BROMIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS =  $1.00E-12$  GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
8.642E-05	0.000	0.000	0.000	0.000	0.000	0.000
8.822E-05	0.002	0.002	0.002	0.002	0.002	0.002
9.220E-05	0.007	0.007	0.009	0.009	0.009	0.009
9.713E-05	0.013	0.017	0.018	0.018	0.018	0.018
1.035E-04	0.023	0.031	0.032	0.033	0.034	0.034
1.085E-04	0.033	0.046	0.048	0.050	0.051	0.051
1.128E-04	0.041	0.058	0.061	0.064	0.064	0.065
1.174E-04	0.051	0.074	0.079	0.083	0.083	0.084
1.229E-04	0.064	0.096	0.103	0.109	0.110	0.111
1.298E-04	0.082	0.128	0.139	0.144	0.149	0.150
1.359E-04	0.100	0.163	0.177	0.191	0.193	0.195
1.409E-04	0.116	0.194	0.213	0.231	0.234	0.236
1.468E-04	0.135	0.234	0.260	0.286	0.289	0.292
1.538E-04	0.160	0.290	0.325	0.361	0.367	0.371
1.625E-04	0.193	0.368	0.419	0.474	0.482	0.489
1.737E-04	0.240	0.485	0.564	0.653	0.667	0.678
1.890E-04	0.316	0.677	0.811	0.971	0.997	1.018
2.121E-04	0.429	1.058	1.296	1.642	1.701	1.752
2.555E-04	0.687	1.930	2.584	3.644	3.853	4.040
2.898E-04	0.944	2.969	4.273	7.023	7.716	8.403
3.008E-04	1.029	3.318	4.848	8.223	9.103	9.989
3.137E-04	1.132	3.750	5.573	9.802	10.956	12.141
3.290E-04	1.260	4.300	6.510	11.958	13.531	15.190
3.480E-04	1.426	5.025	7.770	15.041	17.296	19.763
3.724E-04	1.651	6.029	9.550	19.731	23.190	27.184
4.056E-04	1.979	7.524	12.262	27.535	33.391	40.737



4.558E-04	2.518	10.036	16.933	42.519	54.095	70.516
5.497E-04	3.656	15.470	27.300	60.639	111.414	166.229
6.238E-04	4.763	20.867	37.890	126.950	191.550	359.366
6.474E-04	5.127	22.648	41.395	142.501	219.113	430.197
6.752E-04	5.570	24.816	45.672	162.040	254.121	527.272
7.084E-04	6.121	27.526	51.033	186.926	299.847	665.873
7.453E-04	6.834	31.033	57.993	219.895	361.783	874.465
8.019E-04	7.600	35.802	67.478	265.755	449.953	1211.323
8.735E-04	9.210	42.773	81.380	334.330	584.982	1812.747
9.816E-04	11.533	54.277	104.378	449.977	818.207	3063.662
1.184E-03	16.464	78.732	153.369	700.638	1235.200	6515.926
1.344E-03	21.297	102.721	201.497	949.985	1858.220	10814.468
1.395E-03	22.890	110.632	217.370	1032.279	2030.997	12253.093
1.454E-03	24.829	120.255	236.678	1132.436	2241.426	14022.146
1.526E-03	27.251	132.278	260.804	1257.619	2504.541	16247.094
1.614E-03	30.387	147.844	292.037	1419.677	2845.156	19126.953
1.727E-03	34.651	169.011	334.508	1639.972	3307.979	23016.757
1.882E-03	40.893	199.983	396.647	1962.014	3983.797	28605.904
2.115E-03	51.213	251.184	499.350	2493.441	5096.666	37546.657
2.551E-03	73.225	360.353	718.253	3623.083	7453.592	55559.761
2.892E-03	94.958	468.066	934.097	4731.234	9749.882	71769.883
3.005E-03	102.132	503.619	1005.336	5096.690	10506.405	77035.322
3.134E-03	110.869	546.909	1092.066	5541.235	11425.566	83348.286
3.288E-03	121.798	601.058	1200.540	6096.700	12572.652	91114.463
3.478E-03	135.966	671.247	1341.127	6815.817	14055.558	100996.118
3.722E-03	155.265	766.836	1532.560	7793.808	16068.098	114176.953
4.024E-03	183.558	906.949	1813.109	9225.002	19009.827	133043.139
4.326E-03	230.440	1139.074	2277.788	11591.210	23860.608	163410.250
5.356E-03	330.715	1635.416	3271.105	16637.678	34175.008	226037.715
6.238E-03	430.108	2127.191	4254.860	21618.556	44310.599	285007.160
6.474E-03	462.941	2289.631	4579.789	23262.988	47654.787	304360.258
6.752E-03	502.948	2487.551	4975.665	25265.442	51724.524	327770.664
7.084E-03	553.031	2735.307	5471.185	27770.536	56512.320	352342.988
7.494E-03	618.010	3056.727	6113.991	31018.382	63403.403	394249.051
8.020E-03	706.601	3494.907	6990.226	35442.610	72374.224	444746.906
8.738E-03	836.629	4137.980	8276.062	41929.928	85514.909	518061.234

9.820E-03 1052.425 5205.108 10409.562 52683.992 107272.747 638153.617

SODIUM BROMIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-11 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATIION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
1.862E-04	0.000	0.000	0.000	0.000	0.000	0.000
1.901E-04	0.006	0.008	0.008	0.008	0.008	0.008
1.986E-04	0.022	0.028	0.029	0.030	0.030	0.030
2.093E-04	0.045	0.058	0.060	0.062	0.063	0.063
2.230E-04	0.080	0.106	0.111	0.115	0.115	0.116
2.346E-04	0.115	0.159	0.167	0.174	0.175	0.176
2.431E-04	0.143	0.202	0.213	0.223	0.224	0.225
2.530E-04	0.175	0.259	0.275	0.289	0.291	0.293
2.649E-04	0.227	0.339	0.362	0.363	0.386	0.389
2.796E-04	0.292	0.455	0.491	0.524	0.529	0.533
2.928E-04	0.358	0.580	0.632	0.682	0.689	0.694
3.035E-04	0.415	0.694	0.762	0.828	0.837	0.845
3.162E-04	0.487	0.844	0.935	1.027	1.040	1.050
3.314E-04	0.581	1.048	1.176	1.307	1.326	1.342
3.501E-04	0.706	1.341	1.527	1.725	1.754	1.778
3.742E-04	0.884	1.783	2.072	2.396	2.444	2.485
4.072E-04	1.153	2.515	3.006	3.594	3.687	3.766
4.570E-04	1.616	3.905	4.865	6.144	6.362	6.549
5.506E-04	2.642	7.394	9.873	13.834	14.603	15.293
6.245E-04	3.688	11.572	16.595	26.963	29.511	32.013
6.481E-04	4.035	12.981	18.894	31.630	34.868	38.088
6.757E-04	4.457	14.732	21.799	37.787	42.028	46.322
7.089E-04	4.987	16.970	25.577	46.206	51.977	57.964
7.498E-04	5.675	19.937	30.676	58.263	66.515	75.367
8.023E-04	6.614	24.070	37.932	76.644	89.262	103.453
8.739E-04	7.991	30.271	49.059	107.307	128.559	154.179

9.819E-04	10.273	40.785	68.394	166.387	208.100	264.212
1.184E-03	15.145	63.783	111.833	317.625	427.468	607.223
1.344E-03	19.948	87.025	157.035	506.174	733.972	1238.607
1.395E-03	21.233	94.714	172.034	567.314	839.500	1466.634
1.455E-03	23.462	104.097	190.392	646.176	973.731	1772.974
1.526E-03	25.873	115.856	213.471	747.412	1149.435	2200.115
1.614E-03	28.998	131.126	243.534	882.133	1388.174	2824.883
1.728E-03	33.249	151.958	284.670	1070.552	1729.579	3799.655
1.882E-03	39.475	182.537	345.235	1354.209	2255.867	5467.777
2.115E-03	49.776	233.248	445.973	1836.740	3173.826	8770.981
2.551E-03	71.761	341.715	662.062	2895.034	5240.047	17456.868
2.895E-03	93.475	449.076	876.502	3967.196	7387.034	28313.206
3.005E-03	100.649	484.225	947.323	4321.945	8099.075	31983.774
3.134E-03	109.380	527.700	1033.594	4754.877	8969.986	36556.973
3.288E-03	120.304	581.724	1141.574	5297.609	10064.146	42407.996
3.478E-03	134.466	651.771	1281.603	6002.245	11488.113	50155.749
3.722E-03	153.757	747.196	1472.396	6964.404	13434.568	60916.405
4.054E-03	182.039	887.110	1752.183	8376.613	16296.765	76959.922
4.556E-03	228.903	1118.966	2215.865	10719.036	21049.524	103871.402
5.495E-03	329.133	1614.828	3207.575	15730.708	31222.735	161736.202
6.237E-03	428.476	2106.226	4190.258	20693.076	41286.169	210472.150
6.474E-03	461.287	2268.521	4514.801	22331.652	44608.342	23160.473
6.751E-03	501.264	2466.255	4910.202	24327.487	48653.714	259855.951
7.083E-03	551.306	2713.762	5405.112	26824.903	53713.938	288150.332
7.493E-03	616.224	3034.827	6047.080	30063.329	60272.572	324687.012
8.018E-03	704.714	3472.451	6922.066	34475.450	69203.880	374205.918
8.735E-03	834.556	4114.539	8205.771	40945.233	82291.613	446356.750
9.816E-03	1049.930	5179.498	10334.723	51667.852	103963.963	564933.320
1.184E-02	1511.178	7459.962	14893.058	74605.547	150272.896	815721.156

SODIUM BROMIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-10 GM TEMPERATURE = 20C

SUPERSATURATION IN PERCENT

RADIUS (CM)	5.00	1.00	0.50	0.10	0.05	0.01
4.014E-04	0.000	0.000	0.000	0.000	0.000	0.000
4.095E-04	0.024	0.030	0.031	0.031	0.032	0.032
4.280E-04	0.086	0.108	0.114	0.115	0.115	0.116
4.509E-04	0.176	0.226	0.234	0.241	0.242	0.243
4.805E-04	0.312	0.414	0.432	0.448	0.450	0.451
5.055E-04	0.453	0.623	0.655	0.682	0.686	0.689
5.237E-04	0.565	0.794	0.836	0.877	0.882	0.886
5.450E-04	0.709	1.023	1.096	1.142	1.144	1.155
5.707E-04	0.900	1.343	1.435	1.540	1.551	1.540
6.024E-04	1.165	1.812	1.955	2.088	2.106	2.121
6.308E-04	1.434	2.321	2.524	2.727	2.755	2.777
6.540E-04	1.668	2.785	3.057	3.323	3.360	3.390
6.812E-04	1.966	3.300	3.767	4.135	4.186	4.224
7.134E-04	2.352	4.000	4.756	5.285	5.361	5.423
7.545E-04	2.873	5.047	6.203	7.006	7.124	7.222
8.063E-04	3.613	7.284	8.464	9.780	9.979	10.145
8.775E-04	4.746	10.340	12.356	14.766	15.146	15.467
9.646E-04	6.707	16.190	20.163	23.435	26.328	27.097
1.186E-03	11.096	31.022	41.374	57.835	61.017	63.863
1.345E-03	15.640	49.054	70.260	113.649	124.206	134.524
1.596E-03	17.147	55.145	80.161	133.509	146.925	160.202
1.856E-03	18.992	62.737	92.697	154.744	177.318	195.004
1.927E-03	21.309	72.466	109.037	195.665	219.576	244.213
1.615E-03	24.326	85.397	131.166	247.178	281.356	317.717
1.726E-03	28.457	103.472	162.733	329.824	378.058	436.176
1.883E-03	34.535	130.643	211.342	457.278	545.144	644.557

2.115E-03	44.657	177.064	296.206	711.148	883.298	110.060
2.551E-03	66.379	279.103	488.047	1363.459	1815.724	2530.656
2.895E-03	97.903	333.134	689.540	2174.463	3120.752	5076.956
3.005E-03	97.094	417.548	756.515	2449.325	3570.358	5942.139
3.134E-03	103.783	459.698	838.575	2793.165	4142.737	7214.917
3.288E-03	114.659	512.530	941.845	3235.351	4892.834	8908.914
3.478E-03	128.765	581.265	1076.720	3825.054	5913.640	11368.503
3.722E-03	148.001	675.185	1261.553	4621.816	7376.463	15173.122
4.054E-03	176.213	813.326	1534.797	5900.629	9638.084	21619.626
4.550E-03	222.590	1042.967	1919.166	8033.289	13599.694	34247.523
5.496E-03	323.094	1535.652	2966.195	12736.054	22575.784	67145.262
6.237E-03	422.370	2025.450	3944.510	17540.441	32010.563	108386.904
6.424E-03	455.161	2187.266	4267.155	19131.898	35144.740	122361.590
6.751E-03	495.116	2384.481	4660.495	21076.577	38985.338	139835.117
7.083E-03	545.133	2631.413	5153.137	23517.798	43820.051	162284.385
7.493E-03	610.020	2951.830	5792.565	26693.450	50126.764	192175.771
8.018E-03	698.473	3388.704	6664.631	31033.853	58770.071	233987.646
8.735E-03	821.265	4029.878	7944.845	37419.047	71518.152	296718.027
9.816E-03	1043.558	5093.605	10069.261	48035.213	92764.239	403844.875
1.184E-02	1564.599	7371.867	14620.234	70016.411	138454.291	637820.078

SODIUM BROMIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 MUCIFUS MASS = 1.00E-09 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT						
	5.00	1.00	0.50	0.10	0.05	0.01	
3.642E-04	0.000	0.000	0.000	0.000	0.000	0.000	
3.822E-04	0.102	0.125	0.129	0.132	0.132	0.133	
3.220E-04	0.364	0.456	0.471	0.484	0.485	0.487	
3.713E-04	0.743	0.953	0.988	1.018	1.022	1.026	
1.035E-03	1.324	1.754	1.830	1.896	1.905	1.912	
1.089E-03	1.930	2.649	2.782	2.899	2.915	2.927	
1.128E-03	2.408	3.380	3.566	3.731	3.753	3.770	
1.174E-03	3.028	4.366	4.631	4.870	4.902	4.928	
1.229E-03	3.855	5.745	6.136	6.497	6.545	6.585	
1.298E-03	5.003	7.772	8.382	8.953	9.031	9.094	
1.359E-03	6.170	9.980	10.571	11.724	11.841	11.937	
1.409E-03	7.193	11.946	13.168	14.312	14.471	14.601	
1.468E-03	8.491	14.671	16.259	17.843	18.066	18.249	
1.538E-03	10.181	18.345	20.574	22.859	23.186	23.458	
1.625E-03	12.469	23.626	26.902	30.385	30.895	31.317	
1.737E-03	15.726	31.690	36.819	42.542	43.405	44.125	
1.850E-03	20.729	45.152	53.947	64.455	66.112	67.511	
2.121E-03	29.428	71.020	88.430	111.507	115.413	118.773	
2.555E-03	49.003	136.955	182.606	254.963	268.924	281.404	
2.898E-03	69.422	217.746	311.747	503.324	549.731	594.994	
3.008E-03	76.205	245.070	356.064	591.750	650.740	708.983	
3.136E-03	84.513	279.164	412.238	708.647	785.928	863.523	
3.293E-03	94.967	322.910	485.557	868.814	973.973	1087.199	
3.480E-03	108.595	381.140	584.982	1098.680	1249.000	1408.334	
3.724E-03	127.279	462.671	727.049	1449.952	1679.647	1934.040	
4.056E-03	154.836	585.685	946.225	2037.625	2423.948	2880.114	

4.557E-03	200.786	795.736	1329.763	3174.108	3930.632	4918.074
5.496E-03	299.695	1259.284	2199.426	6099.913	8086.154	11179.623
6.238E-03	398.359	1733.945	3117.109	9751.559	13909.294	22289.375
6.474E-03	430.970	1891.253	3422.210	10989.977	15916.098	26275.206
6.751E-03	470.730	2083.562	3796.395	12540.314	18472.076	31589.632
7.084E-03	520.532	2325.098	4267.888	14535.785	21823.435	38934.641
7.493E-03	585.181	2639.488	4883.612	17199.591	26387.452	49569.678
8.019E-03	673.362	3069.483	5728.534	20939.146	32934.563	65969.602
8.735E-03	802.634	3702.543	6976.616	26594.714	43070.593	93659.378
9.816E-03	1017.725	4756.126	9060.734	36271.803	60859.818	147707.111
1.184E-02	1478.186	7019.807	13553.656	57664.456	101265.317	288056.625



SODIUM BROMIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-08 GM TEMPERATURE = 20C

RADIUS(CM)	SUPEKSATURATIUN IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
1.802E-03	0.000	0.000	0.000	0.000	0.000	0.000
1.901E-03	0.452	0.553	0.569	0.583	0.584	0.586
1.986E-03	1.612	2.016	2.082	2.138	2.145	2.151
2.093E-03	3.293	4.219	4.375	4.509	4.527	4.541
2.230E-03	5.879	7.783	8.119	8.410	8.448	8.479
2.346E-03	8.583	11.770	12.360	12.881	12.950	13.005
2.431E-03	10.722	15.035	15.858	16.592	16.689	16.767
2.530E-03	13.494	19.441	20.620	21.683	21.824	21.939
2.649E-03	17.199	25.615	27.363	28.964	29.179	29.353
2.796E-03	22.352	34.703	37.425	39.971	40.317	40.598
2.928E-03	27.600	44.619	48.599	52.412	52.937	53.365
3.035E-03	32.207	53.683	58.926	64.043	64.755	65.337
3.162E-03	38.052	65.724	72.837	79.928	80.926	81.746
3.314E-03	45.680	82.280	92.274	102.519	103.986	105.195
3.501E-03	56.015	106.105	120.817	136.453	138.742	140.638
3.742E-03	70.753	142.545	165.611	191.340	195.222	198.461
4.072E-03	93.426	203.474	243.098	290.426	297.889	304.186
4.570E-03	132.938	320.792	399.404	503.545	521.167	535.317
5.505E-03	222.074	620.599	827.320	1154.629	1217.718	1274.101
6.244E-03	315.415	989.372	1416.237	2284.687	2494.635	2699.230
6.481E-03	346.442	1114.162	1618.438	2687.163	2954.068	3217.339
6.757E-03	384.459	1269.956	1874.875	3219.411	3569.115	3919.839
7.089E-03	432.323	1469.984	2209.786	3948.931	4424.835	4913.055
7.498E-03	494.784	1736.426	2664.257	4996.335	5676.659	6396.581
8.023E-03	580.441	2109.779	3314.143	6597.628	7637.193	8786.127
8.739E-03	706.905	2673.614	4317.692	9277.957	11026.309	13084.937

9.819E-03	917.999	3637.431	6075.750	14464.596	17887.896	22337.615
1.184E-02	1372.966	5767.401	10067.856	27829.998	36816.185	50718.733

SODIUM BROMIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS =  $1.00E-07$  GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
4.011E-03	0.000	0.000	0.000	0.000	0.000	0.000
4.095E-03	2.051	2.506	2.579	2.641	2.648	2.655
4.280E-03	7.313	9.141	9.440	9.695	9.727	9.754
4.508E-03	14.951	19.147	19.855	20.453	20.542	20.605
4.804E-03	26.720	35.353	36.875	38.196	38.369	38.508
5.055E-03	39.037	53.507	56.187	58.551	58.862	59.113
5.237E-03	48.785	68.380	72.123	75.454	75.895	76.251
5.450E-03	61.431	88.470	93.831	98.662	99.305	99.826
5.707E-03	78.343	116.636	124.589	131.874	132.851	133.645
6.024E-03	101.880	158.131	170.524	182.121	183.696	184.979
6.308E-03	125.878	203.445	221.584	238.963	241.355	243.309
6.540E-03	146.955	244.885	268.803	292.130	295.374	298.029
6.812E-03	173.707	299.965	332.418	364.774	369.332	373.073
7.139E-03	208.639	375.741	421.371	468.147	474.846	480.365
7.543E-03	255.998	484.853	552.075	623.514	633.971	642.631
8.063E-03	323.584	651.858	757.333	874.974	892.721	907.527
8.772E-03	427.655	931.324	1112.672	1329.249	1363.400	1392.211
9.846E-03	609.175	1469.949	1830.122	2307.140	2387.838	2457.216
1.186E-02	1019.204	2848.105	3796.539	5297.478	5586.665	5845.056

SODIUM BROMIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS =  $1.000 \times 10^{-6}$  GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATIUN IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
8.642E-03	0.000	0.000	0.000	0.000	0.000	0.000
8.821E-03	9.413	11.503	11.830	12.116	12.154	12.183
9.220E-03	33.583	41.966	43.338	44.506	44.657	44.778
9.713E-03	68.682	87.936	91.187	93.976	94.337	94.628
1.035E-02	122.793	162.433	169.418	175.486	176.277	176.915
1.089E-02	179.464	245.934	258.249	269.110	270.537	271.692
1.128E-02	224.325	314.370	331.560	346.877	348.900	350.538
1.174E-02	282.547	406.833	431.474	453.685	456.639	459.033

ZINC NITRATE

TIME OF CONDENSATION GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-12 GM TEMPERATURE = 200

RADIUS(CM)	SUPERSATURATION IN PERCENT				
	5.00	1.00	0.50	0.10	0.05
6.400E-05	0.000	0.000	0.000	0.000	0.000
6.854E-05	0.001	0.001	0.001	0.001	0.001
7.002E-05	0.003	0.003	0.003	0.003	0.003
7.348E-05	0.004	0.004	0.004	0.004	0.004
7.667E-05	0.006	0.007	0.007	0.007	0.007
8.001E-05	0.009	0.010	0.010	0.010	0.010
8.569E-05	0.014	0.016	0.016	0.016	0.016
9.001E-05	0.019	0.022	0.023	0.023	0.023
9.313E-05	0.023	0.027	0.028	0.029	0.029
9.680E-05	0.028	0.033	0.036	0.037	0.037
1.012E-04	0.035	0.045	0.047	0.048	0.048
1.067E-04	0.046	0.060	0.063	0.065	0.066
1.116E-04	0.056	0.077	0.081	0.085	0.086
1.156E-04	0.065	0.093	0.099	0.104	0.105
1.203E-04	0.077	0.114	0.122	0.129	0.130
1.259E-04	0.093	0.143	0.153	0.162	0.167
1.329E-04	0.114	0.186	0.203	0.220	0.222
1.419E-04	0.145	0.251	0.280	0.309	0.313
1.543E-04	0.191	0.361	0.413	0.469	0.477
1.729E-04	0.271	0.575	0.683	0.813	0.833
2.081E-04	0.447	1.122	1.428	1.860	1.937
2.359E-04	0.624	1.792	2.462	3.688	3.959
2.448E-04	0.682	2.018	2.815	4.335	4.681
2.552E-04	0.753	2.298	3.262	5.185	5.639
2.677E-04	0.841	2.656	3.842	6.344	6.963
2.831E-04	0.956	3.130	4.628	8.005	8.893

3.029E-04	1.111	3.790	5.749	10.546	11.912	13.343
3.298E-04	1.336	4.780	7.475	14.821	17.157	19.750
3.706E-04	1.707	6.456	10.490	23.195	27.925	33.712
4.469E-04	2.490	10.111	17.297	45.250	58.569	78.228
5.071E-04	3.247	13.770	24.386	73.786	104.488	167.812
5.263E-04	3.496	14.978	26.737	83.502	120.470	200.828
5.488E-04	3.795	16.450	29.612	95.713	141.037	246.295
5.758E-04	4.176	18.290	33.222	111.483	168.299	311.678
6.091E-04	4.662	20.673	37.917	132.597	205.843	411.176
6.518E-04	5.322	23.914	44.327	162.295	260.293	574.674
7.101E-04	6.283	28.651	53.736	207.219	345.434	874.822
7.979E-04	7.864	36.468	69.320	283.890	495.925	1530.366
9.624E-04	11.214	53.071	102.539	452.044	837.934	3510.875
1.092E-03	14.488	69.326	135.152	621.038	1192.476	6430.683
1.134E-03	15.567	74.685	145.906	676.855	1309.841	7428.549
1.182E-03	16.875	81.201	158.985	744.837	1453.065	8682.030
1.240E-03	18.518	89.339	175.321	829.856	1632.479	10291.399
1.312E-03	20.638	99.870	196.462	939.969	1865.129	12415.987
1.404E-03	23.520	114.183	225.197	1089.696	2181.653	15333.104
1.530E-03	27.734	135.112	267.213	1308.590	2644.289	19580.028
1.719E-03	34.697	169.681	336.604	1669.710	3406.408	26421.255
2.073E-03	49.532	243.308	484.347	2436.654	5019.408	40187.512
2.353E-03	64.155	315.832	629.777	3187.433	6586.786	52276.009
2.442E-03	68.981	339.765	677.764	3434.952	7102.905	56197.197
2.547E-03	74.657	368.899	736.171	3735.918	7729.638	60879.857
2.672E-03	82.205	405.330	809.200	4111.824	8511.257	66615.786
2.827E-03	91.729	452.540	903.818	4598.235	9520.979	73876.211
3.025E-03	104.697	516.811	1032.610	5259.367	10890.750	83504.653
3.296E-03	123.703	610.983	1221.277	6226.190	12889.284	97167.516
3.703E-03	155.182	766.921	1533.608	7823.369	16181.710	119041.125
4.467E-03	222.475	1100.158	2200.817	11225.862	23169.766	163648.193
5.070E-03	289.125	1430.047	2860.986	14578.575	30019.138	205052.086
5.263E-03	311.135	1539.000	3079.007	15685.193	32278.284	218610.895
5.488E-03	337.960	1671.736	3344.597	17032.447	35026.419	234980.316
5.758E-03	371.533	1837.871	3676.987	18717.455	38460.684	255269.062

ZINC NITRATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-11 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT				
	5.00	1.00	0.50	0.10	0.05
1.379E-04	0.000	0.000	0.000	0.000	0.000
1.397E-04	0.001	0.001	0.001	0.001	0.001
1.434E-04	0.003	0.003	0.003	0.003	0.003
1.477E-04	0.006	0.006	0.006	0.006	0.006
1.526E-04	0.009	0.010	0.010	0.010	0.010
1.583E-04	0.014	0.015	0.015	0.015	0.015
1.652E-04	0.020	0.023	0.023	0.023	0.023
1.737E-04	0.030	0.034	0.034	0.035	0.035
1.846E-04	0.046	0.053	0.054	0.055	0.055
1.939E-04	0.063	0.074	0.076	0.078	0.078
2.006E-04	0.077	0.093	0.095	0.097	0.097
2.085E-04	0.095	0.118	0.121	0.124	0.125
2.180E-04	0.121	0.153	0.159	0.164	0.165
2.298E-04	0.157	0.207	0.216	0.224	0.226
2.403E-04	0.194	0.267	0.281	0.294	0.295
2.490E-04	0.228	0.323	0.342	0.359	0.362
2.591E-04	0.271	0.398	0.425	0.450	0.454
2.713E-04	0.327	0.503	0.543	0.581	0.586
2.863E-04	0.405	0.657	0.718	0.778	0.786
3.058E-04	0.516	0.896	0.997	1.100	1.115
3.323E-04	0.689	1.303	1.488	1.688	1.718
3.726E-04	0.992	2.101	2.495	2.963	3.036
4.483E-04	1.672	4.187	5.316	6.894	7.171
5.082E-04	2.375	6.814	9.330	13.853	14.834
5.273E-04	2.608	7.702	10.708	16.320	17.572
5.498E-04	2.893	8.811	12.455	19.570	21.214
					0.001
					0.000
					0.001
					0.003
					0.006
					0.010
					0.015
					0.023
					0.035
					0.055
					0.078
					0.097
					0.125
					0.164
					0.225
					0.295
					0.362
					0.454
					0.586
					0.786
					1.115
					1.718
					3.036
					7.171
					15.749
					18.751
					22.782

5.767E-04	3.249	10.234	14.741	24.015	26.255	28.428
6.099E-04	3.713	12.130	17.849	30.398	33.606	36.795
6.525E-04	4.346	14.788	22.313	40.188	45.115	50.187
7.106E-04	5.276	18.807	29.242	56.709	65.098	74.194
7.983E-04	6.817	25.682	41.463	89.172	106.047	125.976
9.627E-04	10.109	40.870	69.430	175.116	222.101	287.234
1.092E-03	13.353	56.385	99.180	287.714	394.933	589.422
1.134E-03	14.423	61.524	109.076	326.150	455.073	699.144
1.182E-03	15.726	67.800	121.218	374.593	532.478	847.548
1.241E-03	17.354	75.675	136.519	437.382	635.143	1056.285
1.312E-03	19.463	85.912	156.500	521.809	776.721	1365.212
1.404E-03	22.331	99.889	183.905	641.200	982.589	1854.951
1.530E-03	26.531	120.424	224.350	823.072	1305.997	2712.186
1.719E-03	33.474	154.501	291.773	1136.347	1882.258	4467.961
2.073E-03	48.281	227.424	436.691	1832.506	3211.031	9337.700
2.353E-03	62.890	299.595	580.710	2547.117	4628.565	15997.480
2.442E-03	67.712	323.423	628.277	2783.857	5099.936	18275.605
2.547E-03	73.583	352.443	686.229	3073.129	5678.013	21150.601
2.672E-03	80.926	388.750	758.758	3436.195	6406.146	24877.290
2.827E-03	90.444	435.818	852.818	3908.306	7356.183	29879.590
3.025E-03	103.405	499.928	980.972	4553.164	8657.995	36924.324
3.295E-03	122.401	593.906	1168.881	5500.855	10576.695	47580.204
3.703E-03	153.865	749.589	1480.242	7074.106	13769.603	65702.437
4.467E-03	221.125	1082.401	2145.951	10441.858	20615.132	105134.822
5.070E-03	287.738	1411.984	2805.184	13776.573	27392.762	144130.201
5.262E-03	309.737	1520.825	3022.864	14877.623	29630.075	156979.365
5.437E-03	336.538	1653.418	3288.086	16218.630	32354.352	172585.328
5.757E-03	370.083	1819.367	3619.991	17896.534	35761.836	192047.006
6.099E-03	413.293	2034.607	4050.461	20071.973	40177.869	217163.518
6.517E-03	472.893	2327.943	4637.087	23035.275	46189.928	251191.094
7.100E-03	559.690	2758.252	5497.578	27379.600	54997.922	300728.578
7.979E-03	704.166	3471.807	6924.345	34577.712	69578.472	382051.484
9.624E-03	1013.071	4999.370	9976.341	49969.485	100714.709	553672.437
1.092E-02	1319.713	6515.426	13008.692	65216.732	131493.906	720229.789
1.134E-02	1421.026	7016.311	14009.853	70252.998	141657.525	775088.758
1.182E-02	1544.502	7626.747	15229.947	76389.074	154037.074	841729.414



ZINC NITRATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-10 GM TEMPERATURE = 20C

SUPERSATURATION IN PERCENT

RADIUS (UM)	5.00	1.00	0.50	0.10	0.05	0.01
2.971E-04	0.000	0.000	0.000	0.000	0.000	0.000
3.009E-04	0.003	0.003	0.003	0.003	0.003	0.003
3.090E-04	0.011	0.011	0.012	0.012	0.012	0.012
3.161E-04	0.020	0.022	0.022	0.022	0.022	0.022
3.287E-04	0.033	0.036	0.036	0.036	0.036	0.036
3.411E-04	0.050	0.055	0.056	0.056	0.056	0.056
3.559E-04	0.075	0.083	0.084	0.085	0.085	0.085
3.742E-04	0.112	0.125	0.127	0.129	0.129	0.129
3.977E-04	0.172	0.197	0.201	0.204	0.204	0.205
4.178E-04	0.239	0.261	0.288	0.293	0.294	0.295
4.323E-04	0.293	0.352	0.361	0.369	0.370	0.371
4.493E-04	0.365	0.449	0.462	0.474	0.476	0.477
4.697E-04	0.464	0.588	0.610	0.628	0.631	0.633
4.951E-04	0.607	0.800	0.836	0.867	0.871	0.876
5.178E-04	0.757	1.040	1.094	1.143	1.150	1.155
5.364E-04	0.891	1.262	1.337	1.406	1.415	1.422
5.582E-04	1.064	1.564	1.670	1.769	1.782	1.793
5.844E-04	1.253	1.987	2.144	2.293	2.314	2.330
6.169E-04	1.608	2.609	2.853	3.091	3.124	3.151
6.587E-04	2.065	3.581	3.987	4.400	4.459	4.507
7.160E-04	2.777	5.250	5.997	6.803	6.922	7.021
8.027E-04	4.034	8.553	10.155	12.051	12.348	12.598
8.658E-04	6.899	17.275	21.916	28.378	29.509	30.490
1.095E-03	9.912	28.450	38.920	57.603	61.622	65.361
1.136E-03	10.913	32.239	44.771	67.981	73.113	77.931
1.184E-03	12.138	36.980	52.211	81.674	88.416	94.823

1.242E-03	13.680	43.084	61.969	100.435	109.626	118.507
1.314E-03	15.690	51.245	75.285	127.424	140.594	153.619
1.406E-03	18.444	62.732	94.471	168.907	189.139	209.817
1.531E-03	22.505	80.174	124.387	239.063	273.495	310.479
1.720E-03	29.273	110.175	177.437	377.276	446.459	527.008
2.074E-03	43.824	176.924	299.704	744.527	936.638	1196.501
2.354E-03	58.300	245.827	431.204	1229.181	1666.682	2423.805
2.443E-03	63.083	268.680	475.016	1394.832	1920.782	2867.451
2.547E-03	68.911	296.638	528.855	1603.922	2247.955	3464.389
2.673E-03	76.208	331.775	596.830	1875.415	2682.155	4298.714
2.827E-03	85.674	377.535	685.771	2241.245	3281.529	5524.093
3.025E-03	98.577	440.150	808.047	2759.919	4154.376	7448.354
3.296E-03	117.503	532.362	988.981	3552.635	5528.739	10777.184
3.703E-03	148.882	685.837	1291.575	4924.003	7986.794	17494.408
4.467E-03	216.017	1015.473	1944.637	7989.954	13690.353	35801.316
5.070E-03	282.565	1343.459	2597.507	11167.814	19850.125	60524.975
5.262E-03	304.545	1451.824	2813.312	12222.035	21902.218	68490.892
5.487E-03	331.324	1583.901	3076.456	13512.095	24424.200	79634.120
5.757E-03	364.845	1749.281	3406.100	15133.900	27608.240	93370.705
6.090E-03	408.327	1963.882	3834.042	17246.698	31773.698	112300.444
6.517E-03	467.593	2256.481	4417.775	20138.475	37498.938	138820.715
7.100E-03	554.547	2685.905	5274.828	24398.397	45967.420	179260.496
7.978E-03	658.755	3398.293	6697.182	31490.500	60121.417	248935.297
9.623E-03	1007.503	4923.893	9744.280	46727.289	90639.963	403526.840
1.092E-02	1313.980	6438.544	12770.350	61893.651	121104.287	561522.914
1.134E-02	1415.224	6938.909	13770.033	66904.681	131171.930	613828.500
1.182E-02	1538.607	7548.695	14988.351	73012.603	143445.342	677685.961

ZINC NITRATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-09 GM TEMPERATURE = 20C

RADIUS(CM)	SUPEKSATURATIUN IN PERCENT				
	5.00	1.00	0.50	0.10	0.05
6.400E-04	0.000	0.000	0.000	0.000	0.000
6.482E-04	0.013	0.014	0.014	0.014	0.014
6.626E-04	0.043	0.046	0.047	0.047	0.047
6.854E-04	0.083	0.088	0.089	0.090	0.090
7.082E-04	0.135	0.145	0.146	0.147	0.147
7.348E-04	0.206	0.223	0.226	0.228	0.228
7.607E-04	0.308	0.338	0.342	0.345	0.346
8.061E-04	0.462	0.515	0.523	0.529	0.530
8.568E-04	0.713	0.815	0.830	0.842	0.844
9.001E-04	0.994	1.169	1.196	1.219	1.222
9.313E-04	1.223	1.466	1.505	1.538	1.542
9.679E-04	1.529	1.877	1.935	1.964	1.990
1.012E-03	1.951	2.471	2.560	2.638	2.648
1.067E-03	2.561	3.375	3.524	3.655	3.672
1.116E-03	3.205	4.400	4.631	4.839	4.866
1.156E-03	3.781	5.356	5.674	5.964	6.003
1.203E-03	4.526	6.654	7.107	7.526	7.583
1.259E-03	5.518	8.481	9.152	9.788	9.875
1.329E-03	6.886	11.171	12.217	13.237	13.379
1.419E-03	8.874	15.394	17.140	18.916	19.378
1.543E-03	11.990	22.670	25.895	29.378	30.320
1.729E-03	17.513	37.138	44.093	52.319	54.692
2.081E-03	30.180	75.578	95.868	124.050	133.245
2.359E-03	43.625	125.282	171.343	253.263	287.147
2.448E-03	48.099	142.159	197.348	299.191	342.658
2.552E-03	53.584	163.302	230.461	359.847	417.303

2.677E-03	60.494	190.568	273.949	443.030	483.243	522.024
2.831E-03	69.518	227.083	333.398	562.824	620.473	677.343
3.029E-03	81.904	278.583	419.213	747.163	835.746	926.009
3.298E-03	100.209	356.957	553.318	1059.305	1210.089	1371.374
3.705E-03	130.793	492.133	791.767	1675.152	1978.072	2328.587
4.468E-03	196.769	793.947	1343.288	3314.819	4155.445	5280.619
5.071E-03	262.713	1107.113	1939.663	5486.741	7400.359	10647.132
5.263E-03	284.515	1211.058	2138.504	6229.559	8529.990	12583.807
5.488E-03	311.102	1338.314	2383.054	7167.849	9984.867	15184.460
5.758E-03	344.411	1498.376	2692.087	8387.214	11916.423	18811.033
6.091E-03	387.657	1707.023	3096.832	10031.937	14584.091	24122.133
6.518E-03	446.655	1992.813	3653.893	12366.752	18471.798	32433.775
7.100E-03	533.292	2414.185	4479.248	15940.655	24600.120	46750.641
7.979E-03	677.105	3116.484	5861.682	22135.783	35579.512	75492.471
9.624E-03	85.284	4627.565	8851.060	36025.189	61129.439	153348.340
1.092E-02	1291.461	6134.886	11847.980	50486.127	88874.941	258110.686
1.134E-02	1392.616	6633.068	12838.981	55280.345	98126.153	293968.633
1.182E-02	1515.900	7240.479	14047.864	61164.640	109506.468	339310.980

ZINC NITRATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-08 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT				
	5.00	1.00	0.50	0.10	0.05
1.379E-03	0.000	0.000	0.000	0.000	0.000
1.390E-03	0.055	0.059	0.059	0.059	0.059
1.434E-03	0.187	0.195	0.201	0.202	0.202
1.477E-03	0.358	0.382	0.385	0.388	0.388
1.526E-03	0.584	0.627	0.633	0.636	0.639
1.583E-03	0.895	0.970	0.980	0.989	0.990
1.652E-03	1.342	1.470	1.488	1.503	1.505
1.737E-03	2.020	2.249	2.282	2.310	2.313
1.846E-03	3.128	3.569	3.635	3.690	3.697
1.939E-03	4.371	5.136	5.255	5.355	5.368
2.006E-03	5.385	6.450	6.621	6.765	6.783
2.085E-03	6.743	8.275	8.528	8.744	8.772
2.180E-03	8.623	10.912	11.307	11.649	11.694
2.298E-03	11.359	14.940	15.597	16.176	16.251
2.403E-03	14.217	19.512	20.538	21.458	21.580
2.490E-03	16.795	23.784	25.198	26.483	26.655
2.591E-03	20.133	29.591	31.605	33.470	33.721
2.713E-03	24.580	37.775	40.763	43.595	43.982
2.863E-03	30.726	49.843	54.508	59.064	59.698
3.058E-03	39.670	68.820	76.628	84.572	85.704
3.323E-03	53.720	101.584	116.040	131.647	133.953
3.726E-03	78.686	166.887	198.143	235.097	240.884
4.483E-03	136.130	340.929	432.414	559.386	581.557
5.082E-03	197.380	566.995	775.383	1145.466	1224.699
5.273E-03	217.775	643.805	893.624	1353.881	1455.107
5.498E-03	242.795	740.098	1044.285	1629.260	1762.317
					1888.453

5.767E-03	274.338	864.369	1242.291	2007.104	2188.622	2363.518
6.098E-03	315.566	1030.936	1513.185	2551.532	2811.812	3068.303
6.525E-03	372.207	1266.078	1904.589	3389.782	3789.815	4196.876
7.106E-03	455.999	1624.316	2516.889	4810.088	5491.132	6218.232
7.983E-03	596.177	2243.009	3607.036	7614.433	8982.664	10561.456
9.627E-03	859.036	3626.733	6132.779	15088.279	18884.529	23941.946
1.092E-02	1202.431	5066.026	8870.929	25006.040	33647.526	48191.189
1.134E-02	1302.770	5543.907	9784.191	28399.038	38787.393	56922.535
1.182E-02	1425.169	6129.170	10907.827	32686.357	45407.958	68650.823

ZINC NITRATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-07 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.20	0.10	0.05	0.01
2.971E-03	0.000	0.000	0.000	0.000	0.000	0.000
3.009E-03	0.248	0.262	0.264	0.266	0.266	0.266
3.090E-03	0.841	0.893	0.900	0.906	0.906	0.907
3.181E-03	1.606	1.714	1.729	1.741	1.742	1.743
3.287E-03	2.625	2.818	2.845	2.866	2.869	2.871
3.411E-03	4.028	4.360	4.406	4.444	4.449	4.453
3.559E-03	6.044	6.617	6.698	6.765	6.773	6.780
3.742E-03	9.111	10.139	10.287	10.409	10.425	10.437
3.977E-03	14.128	16.114	16.411	16.658	16.689	16.715
4.178E-03	19.772	23.216	23.753	24.205	24.263	24.310
4.322E-03	24.376	29.183	29.952	30.604	30.687	30.755
4.493E-03	30.547	37.469	38.614	39.593	39.719	39.821
4.697E-03	39.097	49.460	51.249	52.797	52.998	53.151
4.951E-03	51.464	67.787	70.768	73.390	73.734	74.012
5.178E-03	64.577	88.615	93.273	97.449	98.003	98.452
5.364E-03	76.333	108.085	114.508	120.350	121.131	121.765
5.582E-03	91.566	134.569	143.727	152.206	153.351	154.282
5.844E-03	111.875	171.919	185.519	198.406	200.170	201.607
6.169E-03	139.961	227.035	248.288	269.043	271.932	274.297
6.587E-03	180.870	313.781	349.385	385.608	390.774	395.025
7.160E-03	242.194	463.689	529.682	600.926	611.456	620.197
8.027E-03	359.637	762.824	905.698	1074.590	1101.035	1123.302
9.658E-03	623.352	1561.237	1980.108	2561.244	2662.689	2750.655
1.095E-02	905.161	2600.563	3556.223	5252.292	5615.160	5951.995
1.136E-02	999.026	2953.801	4099.754	6209.458	6673.101	7107.271
1.184E-02	1114.212	3396.783	4792.531	7474.454	8083.962	8661.556

ZINC NITRATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-06 GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
6.400E-03	0.000	0.000	0.000	0.000	0.000	0.000
6.482E-03	1.132	1.197	1.205	1.212	1.213	1.214
6.656E-03	3.840	4.076	4.108	4.134	4.138	4.140
6.854E-03	7.339	7.829	7.896	7.950	7.957	7.963
7.082E-03	11.999	12.878	12.999	13.098	13.110	13.120
7.348E-03	18.423	19.936	20.146	20.318	20.340	20.357
7.667E-03	27.662	30.274	30.642	30.945	30.983	31.014
8.061E-03	41.722	46.413	47.090	47.649	47.720	47.777
8.568E-03	64.740	73.824	75.180	76.309	76.452	76.568
9.000E-03	90.657	106.429	108.888	110.956	111.221	111.434
9.312E-03	111.808	133.830	137.355	140.339	140.724	141.033
9.679E-03	140.170	171.900	177.150	181.637	182.217	182.684
1.012E-02	179.478	227.013	235.223	242.323	243.248	243.993
1.067E-02	236.360	311.289	324.975	337.013	338.593	339.870
1.116E-02	296.707	407.113	428.512	447.696	450.241	452.302
1.156E-02	350.822	496.713	526.231	553.076	556.665	559.577



POTASSIUM BRIMIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-12 GM TEMPERATURE = 20C

RADIUS (CM)	SUPEKSATURATIUN IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
7.583E-05	0.000	0.000	0.000	0.000	0.000	0.000
7.690E-05	0.001	0.001	0.001	0.001	0.001	0.001
7.920E-05	0.003	0.004	0.004	0.004	0.004	0.004
8.186E-05	0.006	0.008	0.008	0.008	0.008	0.008
8.497E-05	0.010	0.012	0.013	0.013	0.013	0.013
8.872E-05	0.015	0.019	0.020	0.020	0.020	0.020
9.335E-05	0.022	0.028	0.029	0.030	0.030	0.031
9.934E-05	0.032	0.043	0.045	0.046	0.046	0.047
1.044E-04	0.042	0.058	0.061	0.064	0.064	0.064
1.081E-04	0.049	0.070	0.074	0.078	0.078	0.078
1.125E-04	0.055	0.086	0.091	0.096	0.097	0.098
1.177E-04	0.071	0.108	0.115	0.123	0.123	0.124
1.242E-04	0.089	0.139	0.150	0.161	0.162	0.164
1.299E-04	0.105	0.172	0.186	0.203	0.205	0.207
1.347E-04	0.120	0.202	0.222	0.242	0.245	0.247
1.402E-04	0.138	0.241	0.268	0.294	0.298	0.301
1.469E-04	0.162	0.293	0.330	0.367	0.373	0.377
1.552E-04	0.193	0.367	0.419	0.475	0.483	0.490
1.658E-04	0.236	0.478	0.557	0.646	0.659	0.671
1.803E-04	0.301	0.658	0.788	0.947	0.972	0.993
2.023E-04	0.411	0.994	1.242	1.577	1.635	1.685
2.436E-04	0.645	1.819	2.438	3.447	3.646	3.826
2.762E-04	0.885	2.776	3.995	6.579	7.232	7.882
2.867E-04	0.962	3.097	4.526	7.630	8.519	9.356
2.989E-04	1.057	3.494	5.193	9.153	10.238	11.356
3.135E-04	1.175	3.999	6.056	11.148	12.625	14.187

3.316E-04	1.327	4.665	7.214	13.998	16.112	18.434
3.548E-04	1.533	5.586	8.851	18.331	21.570	25.324
3.865E-04	1.833	6.957	11.341	25.537	31.014	37.889
4.342E-04	2.327	9.259	15.625	39.361	50.178	65.624
5.237E-04	3.368	14.232	25.125	74.501	103.238	155.265
5.943E-04	4.378	19.164	34.810	117.119	177.415	337.319
6.168E-04	4.710	20.791	38.015	131.499	202.927	404.345
6.432E-04	5.114	22.772	41.926	149.397	235.324	496.470
6.748E-04	5.617	25.246	46.825	172.276	277.631	628.439
7.138E-04	6.267	28.448	53.184	202.573	334.917	827.931
7.639E-04	7.148	32.800	61.847	244.693	416.430	1151.918
8.322E-04	8.434	39.160	74.539	307.635	541.178	1734.248
9.351E-04	10.551	49.651	95.525	413.690	756.425	2956.320
1.128E-03	15.043	71.940	140.201	643.298	1232.829	6360.519
1.280E-03	19.442	93.786	184.049	871.297	1713.442	10598.151
1.329E-03	20.893	100.990	198.509	946.528	1872.150	12014.230
1.386E-03	22.657	109.751	216.096	1038.062	2065.352	13751.558
1.454E-03	24.861	120.697	238.068	1152.434	2306.801	15929.060
1.536E-03	27.715	134.865	266.506	1300.442	2619.213	18737.310
1.646E-03	31.595	154.129	305.174	1501.580	3043.432	22510.734
1.793E-03	37.272	182.311	361.733	1795.484	3662.434	27901.163
2.015E-03	46.658	228.889	455.190	2280.237	4680.873	36459.766
2.430E-03	66.672	328.174	654.324	3310.019	6835.575	53586.371
2.758E-03	86.426	426.094	850.586	4319.318	8931.613	68739.514
2.862E-03	92.946	458.413	915.358	4652.134	9622.014	73664.497
2.965E-03	100.886	497.763	994.210	5056.914	10460.692	79561.402
3.132E-03	110.818	546.981	1092.823	5562.625	11507.028	86804.090
3.313E-03	123.693	610.774	1220.620	6217.231	12857.342	95999.935
3.546E-03	141.229	697.645	1394.622	7107.341	14695.003	108246.409
3.862E-03	166.936	824.968	1649.599	8409.633	17375.169	125729.319
4.340E-03	209.529	1035.877	2071.867	10562.278	21794.344	153803.750
5.236E-03	300.618	1486.801	2974.395	15151.849	31186.411	211539.824
5.942E-03	390.890	1933.489	3868.041	19679.897	40409.215	265701.859
6.168E-03	420.709	2081.033	4163.198	21174.716	43452.049	283464.047
6.432E-03	457.043	2260.798	4522.792	22994.912	47154.744	304943.469
6.749E-03	502.527	2485.820	4972.884	25271.866	51783.187	331609.551

7.139E-03	561.538	2777.739	5556.734	28223.612	57778.342	365879.766
7.640E-03	641.989	3175.654	6352.570	32244.176	65936.660	412120.121
8.324E-03	760.065	3759.685	7520.374	38139.258	77886.665	479218.379
9.355E-03	956.017	4728.740	9457.911	47910.382	97668.132	589025.406

POTASSIUM BROMIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-11 GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
1.634E-04	0.000	0.000	0.000	0.000	0.000	0.000
1.657E-04	0.003	0.004	0.004	0.004	0.004	0.004
1.706E-04	0.011	0.013	0.014	0.014	0.014	0.014
1.764E-04	0.021	0.025	0.026	0.027	0.027	0.027
1.831E-04	0.033	0.041	0.043	0.044	0.044	0.044
1.911E-04	0.050	0.063	0.065	0.067	0.068	0.068
2.011E-04	0.073	0.099	0.099	0.102	0.102	0.103
2.140E-04	0.108	0.144	0.151	0.157	0.158	0.158
2.250E-04	0.142	0.198	0.208	0.217	0.218	0.219
2.330E-04	0.165	0.240	0.254	0.266	0.268	0.269
2.423E-04	0.204	0.297	0.316	0.333	0.335	0.337
2.536E-04	0.249	0.375	0.401	0.425	0.429	0.431
2.675E-04	0.311	0.487	0.526	0.563	0.568	0.572
2.797E-04	0.372	0.606	0.662	0.715	0.723	0.729
2.901E-04	0.426	0.715	0.789	0.856	0.866	0.874
3.021E-04	0.493	0.857	0.952	1.047	1.060	1.071
3.165E-04	0.560	1.050	1.180	1.314	1.334	1.350
3.343E-04	0.636	1.324	1.511	1.711	1.740	1.765
3.572E-04	0.860	1.738	2.023	2.344	2.393	2.434
3.855E-04	1.108	2.418	2.894	3.469	3.560	3.637
4.358E-04	1.533	3.702	4.619	5.847	6.056	6.237
5.248E-04	2.473	6.911	9.236	12.968	13.697	14.350
5.951E-04	3.427	10.733	15.393	25.034	27.416	29.753
6.176E-04	3.744	12.021	17.499	29.527	32.343	35.347
6.439E-04	4.125	13.622	20.158	34.981	38.925	42.923
6.755E-04	4.613	15.667	23.613	42.707	48.064	53.630

7.144E-04	5.241	18.377	28.271	53.763	61.410	69.026
7.644E-04	6.097	22.150	34.904	70.607	82.279	95.430
8.326E-04	7.353	27.808	45.065	98.688	118.312	142.021
9.355E-04	9.433	37.397	62.710	152.754	191.206	243.079
1.128E-03	13.871	58.359	102.324	291.053	392.159	558.293
1.280E-03	18.243	79.524	143.505	461.462	672.770	1139.572
1.329E-03	19.685	86.526	157.168	519.130	769.376	1350.027
1.386E-03	21.441	95.068	174.689	591.146	892.244	1632.531
1.454E-03	23.636	105.773	194.907	683.575	1053.058	2026.682
1.535E-03	26.478	119.673	222.280	806.550	1271.520	2603.681
1.646E-03	30.346	138.652	259.730	978.500	1583.874	3504.875
1.793E-03	36.010	166.455	314.850	1237.278	2065.203	5048.544
2.015E-03	45.378	212.588	406.524	1677.315	2904.398	8109.819
2.430E-03	65.367	311.234	603.097	2641.904	4792.023	16168.981
2.758E-03	85.107	408.834	798.082	3618.340	6751.267	26238.942
2.862E-03	51.624	441.058	862.473	3941.382	7400.912	29641.387
2.985E-03	49.559	480.304	940.912	4335.570	8195.359	33879.989
3.132E-03	109.486	524.408	1039.071	4829.664	9193.226	39300.979
3.313E-03	122.555	593.071	1166.360	5471.350	10491.644	46474.832
3.545E-03	139.884	679.793	1339.780	6346.737	12266.034	56429.444
3.862E-03	165.581	806.934	1594.061	7631.734	14874.348	71256.487
4.340E-03	208.157	1017.603	2015.427	9762.711	19204.062	96089.504
5.235E-03	299.205	1468.091	2916.495	14320.577	28467.339	149371.166
5.942E-03	389.432	1914.437	3809.167	18831.814	37624.839	201458.410
6.167E-03	419.232	2061.849	4103.975	20321.301	40647.540	218603.980
6.431E-03	455.539	2241.445	4463.138	22135.475	44327.965	239420.678
6.748E-03	500.986	2466.241	4912.672	24405.425	48931.075	265360.629
7.138E-03	559.940	2757.836	5495.762	27348.674	54896.885	298834.289
7.639E-03	640.299	3155.278	6290.462	31358.302	63019.520	344180.285
8.321E-03	758.207	3738.384	7458.325	37237.329	74920.860	410192.098
9.351E-03	953.775	4705.467	9389.741	46979.869	94625.259	518604.492
1.128E-02	1372.583	6776.216	13529.116	67818.284	136719.580	747688.695

POTASSIUM BRUMIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS =  $1.00E-10$  GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
3.520E-04	0.000	0.000	0.000	0.000	0.000	0.000
3.569E-04	0.012	0.015	0.015	0.016	0.016	0.016
3.676E-04	0.042	0.050	0.052	0.053	0.053	0.053
3.799E-04	0.078	0.096	0.099	0.101	0.101	0.102
3.944E-04	0.126	0.157	0.162	0.166	0.167	0.167
4.118E-04	0.191	0.241	0.250	0.257	0.258	0.259
4.333E-04	0.282	0.365	0.379	0.391	0.393	0.394
4.611E-04	0.417	0.558	0.583	0.605	0.608	0.610
4.848E-04	0.554	0.767	0.807	0.843	0.848	0.851
5.019E-04	0.662	0.936	0.990	1.037	1.044	1.049
5.220E-04	0.793	1.161	1.234	1.301	1.309	1.317
5.463E-04	0.980	1.472	1.576	1.671	1.684	1.695
5.762E-04	1.229	1.922	2.077	2.223	2.243	2.259
6.031E-04	1.480	2.407	2.627	2.839	2.868	2.892
6.251E-04	1.698	2.846	3.131	3.410	3.449	3.481
6.509E-04	1.974	3.426	3.804	4.183	4.237	4.281
6.819E-04	2.331	4.216	4.737	5.275	5.353	5.417
7.202E-04	2.811	5.343	6.095	6.901	7.019	7.117
7.695E-04	3.491	7.051	8.208	9.507	9.704	9.869
8.369E-04	4.529	9.878	11.822	14.161	14.532	14.845
9.389E-04	6.322	15.262	19.032	24.064	24.921	25.658
1.131E-03	10.326	28.848	38.512	53.938	56.932	59.614
1.282E-03	14.462	45.287	64.874	105.033	114.824	124.404
1.331E-03	15.835	50.840	73.909	123.206	135.630	147.939
1.387E-03	17.514	57.759	85.343	147.197	163.445	179.819
1.455E-03	19.623	66.622	100.242	180.044	202.093	224.857

1.539E-03	22.376	78.398	120.407	227.070	258.553	292.095
1.647E-03	26.127	94.854	149.163	296.855	346.885	400.393
1.794E-03	31.655	119.628	193.423	418.756	499.409	595.370
2.015E-03	40.661	161.819	270.602	650.195	807.919	1015.983
2.451E-03	60.012	254.622	445.192	1244.483	1658.153	2313.312
2.758E-03	80.230	349.198	628.416	1982.809	2847.441	4639.670
2.863E-03	86.716	380.522	689.295	2233.027	3257.147	5475.436
2.985E-03	94.607	418.790	763.900	2546.008	3778.701	6593.470
3.132E-03	104.491	466.819	857.631	2948.465	4462.116	8141.908
3.313E-03	117.313	529.282	960.385	3485.124	5392.085	10390.643
3.546E-03	134.788	614.636	1148.590	4237.519	6724.615	13870.182
3.863E-03	160.421	740.166	1396.271	5373.587	8784.518	19767.639
4.340E-03	202.918	948.822	1809.622	7313.511	12391.900	51325.488
5.235E-03	253.652	1396.422	2699.166	11590.174	20562.850	61440.396
5.942E-03	384.018	1841.314	3566.031	15957.633	29147.176	99190.159
6.167E-03	413.799	1988.292	3879.135	17404.275	31998.530	111979.367
6.451E-03	450.086	2167.415	4236.424	19171.879	35492.417	127970.135
6.748E-03	455.509	2391.689	4683.899	21390.680	39890.180	148510.266
7.158E-03	554.437	2682.697	5264.632	24276.852	45626.460	175851.334
7.638E-03	634.762	3079.457	6056.735	28221.357	53486.942	214066.699
8.321E-03	752.624	3661.732	7219.426	34023.506	65078.852	271619.141
9.351E-03	948.118	4627.696	9148.716	43669.310	84395.060	369310.227
1.126E-02	1366.738	6696.444	13281.396	64365.615	125926.758	582965.312

POTASSIUM BROMIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-09 GM TEMPERATURE = 20C

RADIUS(CM)	SUPEK SATURATION IN PERCENT					
	2.00	1.00	0.50	0.10	0.05	0.01
7.583E-04	0.000	0.000	0.000	0.000	0.000	0.000
7.690E-04	0.052	0.062	0.064	0.055	0.065	0.065
7.920E-04	0.175	0.209	0.215	0.220	0.220	0.221
8.185E-04	0.327	0.400	0.411	0.421	0.422	0.423
8.497E-04	0.528	0.655	0.675	0.695	0.695	0.697
8.871E-04	0.800	1.009	1.044	1.074	1.078	1.081
9.335E-04	1.183	1.530	1.589	1.640	1.647	1.652
9.934E-04	1.759	2.349	2.455	2.547	2.560	2.569
1.044E-03	2.346	3.242	3.411	3.550	3.580	3.596
1.081E-03	2.806	3.964	4.169	4.391	4.418	4.439
1.125E-03	3.396	4.928	5.238	5.518	5.555	5.586
1.177E-03	4.176	6.263	6.703	7.109	7.164	7.209
1.241E-03	5.251	8.204	8.865	9.487	9.572	9.641
1.299E-03	6.337	10.299	11.240	12.146	12.272	12.374
1.347E-03	7.287	12.205	13.424	14.620	14.787	14.924
1.402E-03	8.486	14.721	16.346	17.977	18.208	18.397
1.409E-03	10.045	18.162	20.407	22.725	23.058	23.333
1.522E-03	12.147	23.082	26.332	29.810	30.321	30.745
1.558E-03	15.134	30.564	35.575	41.204	42.057	42.769
1.805E-03	19.708	42.984	51.440	61.607	63.218	64.579
2.025E-03	27.644	66.741	83.214	105.175	108.906	112.122
2.430E-03	45.469	127.013	169.499	237.143	250.242	261.965
2.762E-03	64.026	200.545	287.163	464.025	506.947	548.847
2.887E-03	70.195	225.414	327.536	544.774	599.251	655.087
2.989E-03	77.747	256.434	376.687	651.455	722.707	794.313
3.135E-03	87.248	296.226	445.424	797.532	894.321	995.839



3.316E-03	99.637	349.179	535.889	1007.052	1145.157	1291.675
3.548E-03	116.612	423.302	665.106	1327.043	1537.680	1771.176
3.865E-03	141.650	535.115	864.393	1862.078	2215.693	2653.603
4.342E-03	183.397	725.998	1213.017	2896.211	3587.406	4490.362
5.236E-03	273.246	1147.159	2003.291	5557.121	7368.626	10192.640
5.943E-03	362.853	1578.291	2836.907	8876.356	12664.269	20308.737
6.168E-03	392.471	1721.174	3114.037	10002.010	14489.291	23938.146
6.432E-03	428.580	1895.843	3453.951	11411.099	16813.542	28777.412
6.748E-03	473.809	2115.216	3882.219	13224.691	19860.922	35466.521
7.138E-03	532.519	2400.748	4441.472	15642.543	24010.757	45152.442
7.639E-03	612.597	2791.260	5208.869	19043.765	29963.230	60069.392
8.321E-03	730.168	3366.167	6342.382	24182.772	39178.066	85313.535
9.351E-03	925.295	4322.919	8235.076	32975.076	55348.656	134547.914
1.128E-02	1343.392	6378.423	12315.029	52409.451	92090.401	262418.867

POTASSIUM BROMIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-08 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
1.634E-03	0.000	0.000	0.000	0.000	0.000	0.000
1.657E-03	0.228	0.272	0.279	0.284	0.285	0.286
1.706E-03	0.761	0.918	0.943	0.964	0.966	0.968
1.763E-03	1.440	1.757	1.807	1.850	1.855	1.860
1.831E-03	2.327	2.881	2.971	3.047	3.057	3.065
1.911E-03	3.528	4.448	4.601	4.732	4.749	4.762
2.011E-03	5.228	6.751	7.013	7.238	7.267	7.290
2.140E-03	7.786	10.390	10.857	11.264	11.317	11.360
2.250E-03	10.402	14.363	15.108	15.770	15.857	15.928
2.330E-03	12.452	17.582	18.579	19.471	19.589	19.685
2.423E-03	15.089	21.885	23.256	24.499	24.665	24.800
2.536E-03	18.582	27.848	29.805	31.610	31.853	32.050
2.675E-03	23.401	36.538	39.479	42.250	42.628	42.935
2.799E-03	28.277	45.937	50.128	54.171	54.730	55.187
2.901E-03	32.546	54.492	59.931	65.272	66.018	66.629
3.021E-03	37.942	65.801	73.062	80.351	81.382	82.229
3.165E-03	44.965	81.284	91.332	101.705	103.197	104.427
3.343E-03	54.451	103.453	118.019	133.607	135.899	137.799
3.572E-03	67.947	137.217	159.714	184.982	188.811	192.009
3.885E-03	88.655	193.365	231.402	277.125	284.367	290.484
4.358E-03	124.664	300.969	375.265	474.224	491.038	505.512
5.248E-03	205.751	574.773	766.923	1072.499	1131.609	1184.499
5.951E-03	290.535	910.141	1303.036	2103.794	2297.723	2486.849
6.176E-03	318.724	1023.627	1487.083	2470.969	2717.131	2960.136
6.439E-03	353.257	1165.271	1720.403	2956.230	3278.228	3601.436
6.755E-03	396.732	1347.065	2025.007	3620.946	4058.390	4507.528

7.144E-03	453.461	1589.209	2438.209	4574.743	5196.960	5860.034
7.644E-03	531.252	1928.417	3028.890	6032.104	6984.173	8037.221
8.326E-03	646.095	2440.591	3940.749	8470.175	10008.377	11951.562
9.354E-03	837.780	3315.960	5537.778	13185.650	16309.155	20371.999
1.128E-02	1250.892	5250.197	9163.436	25331.105	33513.492	46180.358

POTASSIUM BROMIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-07 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
3.520E-03	0.000	0.000	0.000	0.000	0.000	0.000
3.569E-03	1.030	1.228	1.258	1.284	1.287	1.290
3.676E-03	3.443	4.150	4.261	4.354	4.366	4.376
3.799E-03	6.513	7.943	8.171	8.363	8.388	8.408
3.944E-03	10.553	13.033	13.439	13.763	13.817	13.863
4.118E-03	15.581	20.139	20.829	21.419	21.495	21.556
4.333E-03	23.700	30.590	31.770	32.786	32.920	33.027
4.611E-03	35.330	47.120	49.233	51.078	51.320	51.514
4.848E-03	47.236	65.194	68.576	71.576	71.971	72.291
5.019E-03	56.576	79.851	84.372	88.422	88.959	89.394
5.220E-03	68.593	99.453	105.677	111.324	112.078	112.689
5.463E-03	84.524	126.636	135.532	143.734	144.839	145.736
5.762E-03	106.525	166.284	179.604	192.269	193.987	195.388
6.031E-03	128.806	209.202	228.288	246.697	249.241	251.321
6.250E-03	148.318	248.292	273.070	297.402	300.800	303.583
6.509E-03	173.002	299.988	333.086	366.316	371.016	374.878
6.818E-03	205.143	370.805	416.641	463.959	470.765	476.378
7.202E-03	248.590	472.270	538.766	609.927	620.389	629.063
7.695E-03	310.445	626.919	729.705	845.143	862.636	877.247
8.369E-03	402.437	884.510	1058.261	1267.334	1300.446	1328.411
9.369E-03	570.790	1378.167	1716.235	2171.195	2248.141	2314.372
1.131E-02	943.677	2636.108	3517.149	4917.531	5188.297	5430.519

POTASSIUM BROMIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-06 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT						
	2.00	1.00	0.50	0.10	0.05	0.01	
7.583E-03	0.000	0.000	0.000	0.000	0.000	0.000	
7.690E-03	4.722	5.625	5.764	5.882	5.897	5.909	
7.920E-03	15.784	19.020	19.527	19.954	20.009	20.053	
8.185E-03	29.668	36.417	37.459	38.339	38.452	38.543	
8.497E-03	48.318	59.769	61.625	63.200	63.403	63.566	
8.871E-03	73.329	92.384	95.546	98.248	98.597	98.878	
9.335E-03	108.786	140.377	145.791	150.457	151.063	151.551	
9.933E-03	162.242	216.336	226.030	234.495	235.602	236.495	
1.044E-02	217.000	299.438	314.965	328.736	330.552	332.021	
1.081E-02	259.970	366.850	387.614	406.213	408.679	410.676	
1.125E-02	315.274	457.036	485.633	511.574	515.037	517.848	
1.177E-02	388.615	582.146	623.032	660.726	665.803	669.929	

AMMONIUM SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-12 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT				
	5.00	1.00	0.50	0.10	0.05
7.607E-05	0.000	0.000	0.000	0.000	0.000
7.658E-05	0.000	0.000	0.000	0.000	0.000
7.803E-05	0.002	0.002	0.002	0.002	0.002
8.004E-05	0.003	0.004	0.004	0.004	0.004
8.238E-05	0.006	0.007	0.007	0.007	0.007
8.515E-05	0.009	0.011	0.011	0.012	0.012
8.849E-05	0.013	0.016	0.017	0.017	0.017
9.266E-05	0.015	0.024	0.025	0.026	0.026
9.810E-05	0.027	0.037	0.038	0.040	0.040
1.028E-04	0.036	0.050	0.052	0.055	0.055
1.062E-04	0.043	0.060	0.064	0.067	0.068
1.102E-04	0.051	0.074	0.079	0.083	0.084
1.150E-04	0.062	0.093	0.100	0.106	0.107
1.210E-04	0.077	0.121	0.130	0.139	0.142
1.264E-04	0.092	0.149	0.165	0.176	0.179
1.309E-04	0.105	0.175	0.192	0.209	0.213
1.361E-04	0.122	0.209	0.231	0.253	0.259
1.424E-04	0.142	0.254	0.285	0.315	0.323
1.502E-04	0.170	0.318	0.361	0.405	0.417
1.603E-04	0.205	0.414	0.477	0.547	0.566
1.741E-04	0.268	0.569	0.673	0.794	0.828
1.950E-04	0.368	0.859	1.054	1.304	1.381
2.345E-04	0.587	1.577	2.062	2.793	3.049
2.657E-04	0.805	2.425	3.395	5.249	6.080
2.757E-04	0.877	2.710	3.847	6.108	7.156
2.875E-04	0.965	3.062	4.415	7.223	8.581

3.015E-04	1.074	3.510	2.149	8.727	9.641	10.551
3.188E-04	1.216	4.101	6.136	10.859	12.135	13.436
3.411E-04	1.408	4.923	7.538	14.088	15.993	18.007
3.715E-04	1.688	6.154	9.691	19.471	22.620	26.137
4.173E-04	2.149	8.238	13.442	29.920	36.074	43.614
5.032E-04	3.124	12.788	21.908	57.234	73.936	98.404
5.710E-04	4.072	17.357	30.743	92.409	130.028	205.419
5.927E-04	4.384	18.867	33.678	104.386	149.532	244.654
6.180E-04	4.762	20.707	37.266	119.439	174.612	298.357
6.484E-04	5.235	23.010	41.775	138.885	207.830	375.016
6.859E-04	5.845	25.994	47.643	164.933	253.552	490.601
7.340E-04	6.674	30.056	55.662	201.597	319.850	678.308
7.995E-04	7.881	36.000	67.440	257.126	423.555	1017.475
8.984E-04	9.871	45.819	86.990	352.080	607.092	1742.377
1.084E-03	14.091	66.708	128.722	560.826	1025.368	3866.925
1.230E-03	18.224	87.205	169.797	771.592	1461.753	6909.716
1.277E-03	19.587	93.965	183.346	841.252	1606.364	7949.929
1.331E-03	21.244	102.187	199.830	926.155	1783.035	9258.561
1.397E-03	23.314	112.460	220.429	1032.416	2004.622	10943.785
1.477E-03	25.994	125.757	247.098	1170.162	2292.360	13180.322
1.581E-03	29.638	143.839	283.364	1357.650	2684.477	16277.622
1.722E-03	34.970	170.293	336.425	1632.080	3258.666	20843.464
1.935E-03	43.782	214.013	424.113	2085.387	4208.751	28330.345
2.335E-03	62.571	307.206	610.985	3049.829	6219.216	43167.252
2.650E-03	81.111	399.105	795.162	3996.316	8183.043	57807.075
2.750E-03	87.230	429.436	855.945	4308.428	8830.077	62381.319
2.868E-03	94.681	466.364	929.940	4688.137	9616.262	67869.734
3.009E-03	104.002	512.551	1022.478	5162.539	10597.416	74628.089
3.183E-03	116.084	572.413	1142.397	5776.688	11865.784	83228.093
3.406E-03	132.538	653.927	1305.667	6611.801	13587.827	94696.590
3.711E-03	156.658	773.393	1544.911	7833.724	16102.584	111098.346
4.170E-03	196.618	971.275	1941.101	9853.611	20249.801	137481.186
5.030E-03	282.070	1394.305	2787.820	14160.154	29064.476	191809.701
5.709E-03	366.743	1813.304	3626.095	18408.584	37720.498	242786.865
5.926E-03	394.713	1951.698	3902.959	19811.080	40576.278	259504.078
6.180E-03	428.792	2120.313	4240.258	21518.824	44051.214	279719.180

6.484E-03	471.452	2331.373	4662.434	23655.060	48394.784	304809.340
6.859E-03	526.798	2605.171	5210.061	26424.319	54020.932	337059.961
7.340E-03	602.250	2978.404	5956.498	30196.270	61677.078	380573.457
7.997E-03	712.987	3526.121	7051.777	35726.362	72890.024	443885.469



AMMONIUM SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
NUCLEUS MASS =  $1.00E-11$  GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT						
	2.00	1.00	0.50	0.10	0.05	0.01	
1.659E-04	0.000	0.000	0.000	0.000	0.000	0.000	
1.650E-04	0.001	0.002	0.002	0.002	0.002	0.002	
1.681E-04	0.005	0.006	0.006	0.007	0.007	0.007	
1.724E-04	0.011	0.014	0.014	0.014	0.014	0.014	
1.775E-04	0.019	0.025	0.024	0.025	0.025	0.025	
1.834E-04	0.029	0.036	0.037	0.038	0.039	0.039	
1.906E-04	0.043	0.055	0.056	0.058	0.058	0.058	
1.996E-04	0.065	0.081	0.085	0.087	0.088	0.088	
2.113E-04	0.093	0.124	0.130	0.134	0.135	0.136	
2.214E-04	0.123	0.170	0.179	0.187	0.188	0.188	
2.287E-04	0.146	0.207	0.219	0.229	0.231	0.232	
2.373E-04	0.176	0.256	0.272	0.287	0.289	0.290	
2.478E-04	0.216	0.324	0.346	0.367	0.370	0.372	
2.607E-04	0.270	0.421	0.455	0.486	0.490	0.494	
2.724E-04	0.325	0.525	0.572	0.616	0.622	0.627	
2.819E-04	0.372	0.618	0.678	0.736	0.745	0.751	
2.932E-04	0.432	0.741	0.820	0.898	0.909	0.918	
3.068E-04	0.509	0.907	1.014	1.123	1.138	1.151	
3.236E-04	0.613	1.143	1.295	1.454	1.477	1.496	
3.453E-04	0.760	1.498	1.727	1.977	2.015	2.046	
3.750E-04	0.983	2.081	2.459	2.897	2.965	3.022	
4.202E-04	1.569	3.186	3.905	4.819	4.969	5.097	
5.052E-04	2.227	5.957	7.782	10.486	10.984	11.422	
5.725E-04	3.108	9.343	15.038	19.979	21.543	23.023	
5.941E-04	3.400	10.480	14.829	23.307	25.270	27.146	
6.193E-04	3.757	11.893	17.086	27.640	30.167	32.612	

6.496E-04	4.204	13.699	20.019	33.503	36.867	40.178
6.869E-04	4.785	16.079	23.986	41.835	46.530	51.257
7.349E-04	5.579	19.455	29.654	54.495	61.502	68.789
8.003E-04	6.746	24.518	38.418	75.667	87.231	99.874
8.991E-04	8.682	33.172	53.833	116.926	139.447	166.178
1.084E-03	12.826	52.292	89.054	225.388	286.063	370.236
1.230E-03	16.918	71.852	126.538	366.782	502.570	746.828
1.277E-03	18.269	78.332	139.010	415.039	577.860	883.292
1.331E-03	19.913	86.250	154.317	475.849	674.701	1067.453
1.397E-03	21.970	96.188	173.612	554.664	803.075	1325.830
1.478E-03	24.634	109.111	198.818	660.645	980.029	1707.097
1.581E-03	28.260	126.766	233.405	810.547	1237.267	2309.507
1.723E-03	33.570	152.716	284.478	1038.995	1641.363	3359.892
1.936E-03	42.357	195.808	369.675	1432.775	2361.659	5500.990
2.335E-03	61.109	288.098	552.959	2308.840	4024.245	11406.108
2.650E-03	79.629	379.543	735.339	3209.942	5802.421	19447.392
2.750E-03	85.742	409.740	795.588	3508.554	6393.948	22198.259
2.868E-03	93.187	446.522	869.003	3873.546	7119.724	25670.872
3.009E-03	102.501	492.548	960.904	4331.810	8034.366	30174.385
3.183E-03	114.574	552.229	1080.111	4927.949	9228.430	36224.857
3.406E-03	131.019	633.536	1242.570	5742.585	10865.758	44759.225
3.711E-03	155.126	752.752	1480.847	6940.393	13280.858	57690.883
4.170E-03	195.066	950.305	1875.799	8930.108	17303.732	79753.287
5.030E-03	280.473	1372.785	2720.591	13192.812	25939.728	127999.134
5.708E-03	365.101	1791.392	3557.676	17418.458	34505.308	176091.137
5.925E-03	393.051	1929.643	3834.129	18813.885	37333.639	191955.650
5.179E-03	427.104	2098.076	4170.934	20513.713	40778.436	211250.168
6.483E-03	469.728	2308.900	4592.493	22640.928	45088.306	235339.762
6.858E-03	525.020	2582.367	5139.297	25399.487	50675.637	266485.383
7.339E-03	600.385	2955.096	5864.544	29157.958	58285.093	308749.418
7.995E-03	710.962	3501.936	6977.852	34669.341	69437.435	370378.605
8.984E-03	894.365	4408.854	8790.940	43803.887	87907.925	471803.312
1.084E-02	1287.104	6350.708	12672.626	63343.648	127375.024	686429.023

AMMONIUM SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-10 GM TEMPERATURE = 200

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
3.531E-04	0.000	0.000	0.000	0.000	0.000	0.000
3.555E-04	0.005	0.006	0.006	0.006	0.006	0.006
3.622E-04	0.020	0.024	0.024	0.025	0.025	0.025
3.715E-04	0.043	0.052	0.053	0.054	0.054	0.055
3.824E-04	0.073	0.088	0.091	0.093	0.093	0.094
3.952E-04	0.112	0.138	0.142	0.145	0.146	0.147
4.107E-04	0.165	0.206	0.215	0.221	0.222	0.223
4.301E-04	0.242	0.312	0.324	0.335	0.336	0.337
4.553E-04	0.358	0.478	0.500	0.518	0.521	0.523
4.770E-04	0.477	0.659	0.693	0.723	0.727	0.730
4.927E-04	0.570	0.805	0.851	0.891	0.897	0.901
5.113E-04	0.650	1.000	1.063	1.119	1.127	1.133
5.338E-04	0.849	1.270	1.358	1.439	1.450	1.459
5.617E-04	1.068	1.660	1.791	1.914	1.931	1.945
5.868E-04	1.289	2.078	2.263	2.440	2.464	2.484
6.074E-04	1.482	2.457	2.694	2.925	2.957	2.983
6.317E-04	1.725	2.955	3.268	3.578	3.621	3.657
6.609E-04	2.042	3.634	4.061	4.494	4.556	4.607
6.971E-04	2.470	4.599	5.208	5.847	5.940	6.017
7.319E-04	3.077	6.061	6.966	7.997	8.148	8.273
8.080E-04	4.009	8.479	10.015	11.796	12.071	12.302
9.052E-04	5.629	13.099	16.046	19.784	20.397	20.920
1.038E-03	9.279	24.845	32.371	43.536	45.584	47.385
1.235E-03	13.086	39.333	54.835	83.749	90.209	96.306
1.480E-03	14.351	44.224	62.510	97.867	105.984	113.717
1.734E-03	15.598	50.315	72.200	116.285	126.742	136.824

1.399E-03	17.845	58.127	84.826	141.249	155.185	168.836
1.480E-03	20.382	68.535	101.958	176.800	196.263	215.752
1.583E-03	23.859	83.143	126.516	230.923	259.988	290.020
1.724E-03	28.988	105.275	164.645	321.642	369.633	421.640
1.937E-03	37.542	143.286	232.032	498.905	592.345	701.839
2.336E-03	55.951	227.804	387.007	966.551	1217.975	1559.248
2.650E-03	74.290	315.085	553.576	1560.364	2142.480	3113.144
2.751E-03	80.351	344.040	609.078	1790.101	2464.067	3674.155
2.869E-03	87.738	379.467	677.290	2054.755	2877.883	4427.951
3.010E-03	96.988	423.999	763.422	2398.323	3426.789	5480.026
3.183E-03	108.992	482.007	876.138	2861.191	4184.126	7022.765
3.407E-03	125.356	561.399	1031.132	3517.414	5286.596	9441.271
3.711E-03	149.369	678.352	1260.541	4520.409	7022.100	13617.246
4.170E-03	169.192	873.071	1644.331	6255.982	10125.974	22027.330
5.030E-03	274.429	1291.474	2473.000	10137.916	17330.524	44895.669
5.708E-03	358.968	1708.023	3301.951	14165.182	25119.257	75730.489
5.925E-03	386.891	1845.661	3575.983	15501.378	27714.545	86283.874
6.179E-03	420.915	2013.429	3910.158	17136.728	30904.623	99619.996
6.483E-03	463.506	2223.518	4328.824	19192.929	34933.033	116948.854
6.858E-03	516.760	2496.162	4872.396	21872.122	40204.495	140305.586
7.339E-03	594.080	2867.943	5613.947	25539.989	47452.320	173412.158
7.994E-03	704.597	3413.642	6702.856	30944.427	58176.416	223925.748
8.584E-03	887.911	4319.059	8510.302	39944.556	76108.938	311057.023
1.084E-02	1280.445	6258.391	12383.161	59287.951	114795.617	304717.352

AMMONIUM SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-09 GM TEMPERATURE = 20C

SUPERSATURATION IN PERCENT

RADIUS (CM)	5.00	1.00	0.50	0.10	0.05	0.01
7.607E-04	0.000	0.000	0.000	0.000	0.000	0.000
7.858E-04	0.021	0.024	0.025	0.025	0.025	0.025
7.802E-04	0.083	0.099	0.101	0.105	0.104	0.104
8.004E-04	0.175	0.215	0.221	0.225	0.226	0.227
8.258E-04	0.303	0.368	0.378	0.387	0.388	0.389
8.514E-04	0.467	0.576	0.594	0.608	0.610	0.612
8.849E-04	0.693	0.870	0.900	0.925	0.928	0.931
9.266E-04	1.016	1.310	1.360	1.405	1.409	1.413
9.809E-04	1.510	2.012	2.105	2.161	2.191	2.200
1.028E-03	2.016	2.781	2.925	3.052	3.069	3.085
1.062E-03	2.415	3.406	3.596	3.770	3.792	3.811
1.102E-03	2.930	4.241	4.505	4.743	4.775	4.801
1.150E-03	3.613	5.397	5.771	6.115	6.162	6.199
1.210E-03	4.557	7.077	7.636	8.159	8.230	8.288
1.264E-03	5.512	8.883	9.670	10.425	10.529	10.613
1.309E-03	6.350	10.522	11.556	12.522	12.659	12.771
1.361E-03	7.409	12.681	14.022	15.351	15.538	15.691
1.424E-03	8.790	15.631	17.466	19.331	19.596	19.815
1.502E-03	10.658	19.838	22.465	25.220	25.619	25.950
1.603E-03	13.322	26.228	30.230	34.603	35.254	35.796
1.741E-03	17.422	36.857	43.508	51.236	52.430	53.432
1.950E-03	24.582	57.190	70.050	86.342	89.014	91.291
2.345E-03	40.801	109.224	142.276	191.204	208.161	208.039
2.657E-03	57.865	173.960	242.450	369.791	398.146	424.870
2.757E-03	63.541	195.839	276.714	432.547	468.193	502.096
2.875E-03	70.495	223.122	320.031	514.495	560.437	604.651

3.012E-03	79.252	258.159	376.546	625.677	686.933	746.819
3.188E-03	90.685	304.912	453.344	784.173	869.776	955.285
3.411E-03	106.377	370.650	563.623	1025.742	1153.643	1285.409
3.715E-03	129.570	470.446	735.184	1431.142	1642.427	1870.498
4.173E-03	168.337	642.269	1039.139	2224.431	2635.904	3115.369
5.032E-03	252.017	1025.531	1740.406	4321.267	5428.267	6916.845
5.710E-03	335.731	1423.151	2497.778	7082.991	9557.941	13758.167
5.926E-03	363.414	1555.141	2750.304	8027.181	10994.696	16224.522
6.180E-03	357.176	1716.744	3060.886	9219.413	12844.019	19533.066
6.484E-03	439.479	1920.025	3453.369	10768.295	15297.849	24141.556
6.859E-03	494.412	2185.040	3967.443	12856.941	18685.063	30882.923
7.340E-03	569.365	2548.083	4675.035	15821.365	23619.372	41420.476
7.995E-03	679.450	3083.439	5723.545	20358.472	31394.631	59549.393
8.984E-03	862.222	3975.882	7480.049	28223.419	45321.667	95896.040
1.084E-02	1253.977	5896.524	11279.176	45859.026	77730.835	194226.660

AMMONIUM SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-08 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT						
	2.00	1.00	0.50	0.10	0.05	0.01	
1.639E-03	0.000	0.000	0.000	0.000	0.000	0.000	
1.650E-03	0.091	0.107	0.109	0.111	0.112	0.112	
1.681E-03	0.366	0.434	0.444	0.453	0.454	0.455	
1.724E-03	0.785	0.945	0.970	0.990	0.993	0.995	
1.775E-03	1.334	1.619	1.664	1.702	1.707	1.710	
1.834E-03	2.059	2.535	2.612	2.677	2.686	2.692	
1.906E-03	3.055	3.836	3.965	4.075	4.089	4.100	
1.996E-03	4.490	5.760	6.001	6.191	6.216	6.236	
2.113E-03	6.681	8.898	9.295	9.642	9.688	9.724	
2.214E-03	8.936	12.316	12.952	13.515	13.590	13.650	
2.287E-03	10.716	15.099	15.949	16.710	16.810	16.892	
2.373E-03	13.014	18.824	19.992	21.050	21.191	21.306	
2.477E-03	16.067	23.985	25.646	27.175	27.380	27.547	
2.607E-03	20.296	31.502	33.984	36.313	36.630	36.888	
2.724E-03	24.581	39.593	43.101	46.461	46.923	47.301	
2.819E-03	28.341	46.945	51.465	55.863	56.474	56.973	
2.932E-03	33.105	56.642	62.626	68.561	69.395	70.078	
3.068E-03	39.322	69.902	76.107	86.445	87.632	88.610	
3.236E-03	47.744	88.844	100.608	112.939	114.729	116.208	
3.453E-03	59.771	117.656	135.605	155.218	158.138	160.566	
3.750E-03	78.317	165.580	195.558	230.282	235.647	240.150	
4.021E-03	110.778	257.712	315.651	389.018	401.045	411.295	
5.052E-03	184.516	493.921	643.306	864.252	904.666	940.209	
2.725E-03	262.412	789.001	1099.517	1676.044	1804.216	1924.948	
5.940E-03	288.339	888.789	1255.648	1961.438	2122.605	2275.794	
6.193E-03	320.122	1013.298	1453.153	2334.283	2542.059	2741.876	

0.496E-03	360.171	1173.306	1711.002	2640.388	3117.509	3388.194
6.869E-03	412.496	1386.980	2061.655	3562.245	3949.623	4336.182
7.349E-03	484.371	1687.673	2565.596	4663.057	5242.033	5837.737
8.003E-03	550.703	2144.607	3350.334	6511.573	7468.287	8499.218
8.990E-03	768.631	2932.251	4742.287	10131.334	11994.882	14160.783
1.064E-02	1153.250	4691.773	7958.582	19707.281	24721.772	31434.892



AMMONIUM SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-07 GM TEMPERATURE = 20C

RADIUS (CM)	SUPER SATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
3.531E-03	0.000	0.000	0.000	0.000	0.000	0.000
3.554E-03	0.410	0.482	0.493	0.503	0.504	0.505
3.622E-03	1.654	1.960	2.007	2.040	2.051	2.055
3.715E-03	3.267	4.272	4.382	4.475	4.486	4.496
3.824E-03	6.037	7.320	7.523	7.694	7.716	7.733
3.952E-03	9.320	11.471	11.817	12.111	12.149	12.180
4.107E-03	13.840	17.364	17.947	18.445	18.509	18.561
4.301E-03	20.353	26.188	27.186	28.046	28.158	28.248
4.553E-03	30.311	40.351	42.149	43.719	43.924	44.090
4.770E-03	40.575	55.894	58.776	61.332	61.668	61.961
4.927E-03	48.680	68.561	72.415	75.866	76.323	76.693
5.113E-03	59.147	85.524	90.825	95.627	96.268	96.788
5.338E-03	73.068	109.038	116.589	123.533	124.467	125.225
5.617E-03	92.365	143.320	154.610	165.201	166.641	167.814
5.868E-03	111.939	180.253	196.219	211.511	213.616	215.335
6.074E-03	129.121	213.829	234.412	254.440	257.221	259.497
6.317E-03	150.901	258.138	285.403	312.447	316.246	319.361
6.609E-03	179.333	318.763	356.172	394.189	399.605	404.061
6.971E-03	217.898	405.422	459.151	515.367	523.534	530.283
7.439E-03	272.998	537.334	619.307	708.868	722.202	733.285
8.079E-03	358.039	756.940	893.977	1052.693	1077.215	1097.794
9.052E-03	507.043	1179.560	1444.729	1780.441	1835.464	1882.356
1.088E-02	845.972	2264.506	2949.248	3961.605	4146.739	4309.491

AMMONIUM SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-06 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT						
	5.00	1.00	0.50	0.10	0.05	0.01	
7.607E-03	0.000	0.000	0.000	0.000	0.000	0.000	
7.658E-03	1.680	2.210	2.261	2.303	2.308	2.312	
7.802E-03	7.580	8.980	9.196	9.376	9.399	9.417	
8.004E-03	16.356	19.584	20.086	20.509	20.563	20.606	
8.238E-03	27.689	33.560	34.489	35.272	35.372	35.453	
8.514E-03	42.752	52.604	54.192	55.538	55.711	55.851	
8.849E-03	63.504	79.656	82.326	84.605	84.900	85.137	
9.266E-03	93.420	120.174	124.750	128.692	129.204	129.617	
9.809E-03	139.188	185.245	193.494	200.698	201.640	202.400	
1.028E-02	186.386	256.706	269.934	281.664	283.210	284.461	
1.061E-02	223.668	314.955	332.653	348.496	350.595	352.296	
1.102E-02	271.831	392.982	417.334	439.394	442.337	444.723	
1.150E-02	335.905	501.166	535.883	567.791	572.083	575.569	

BARIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-12 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
8.750E-05	0.000	0.000	0.000	0.000	0.000	0.000
8.927E-05	0.003	0.004	0.004	0.004	0.004	0.004
9.294E-05	0.009	0.012	0.013	0.014	0.014	0.014
9.735E-05	0.017	0.025	0.026	0.027	0.027	0.028
1.028E-04	0.040	0.042	0.042	0.048	0.048	0.048
1.077E-04	0.050	0.061	0.066	0.070	0.071	0.071
1.116E-04	0.050	0.079	0.085	0.091	0.092	0.092
1.163E-04	0.062	0.101	0.111	0.119	0.120	0.121
1.219E-04	0.078	0.133	0.146	0.159	0.160	0.162
1.288E-04	0.100	0.177	0.197	0.217	0.220	0.222
1.377E-04	0.130	0.244	0.277	0.310	0.315	0.319
1.498E-04	0.175	0.355	0.412	0.475	0.485	0.492
1.681E-04	0.253	0.567	0.683	0.823	0.846	0.865
2.025E-04	0.422	1.101	1.414	1.864	1.945	2.015
2.297E-04	0.590	1.740	2.405	3.635	3.909	4.167
2.384E-04	0.645	1.955	2.743	4.259	4.606	4.938
2.486E-04	0.712	2.221	3.168	5.076	5.530	5.969
2.608E-04	0.795	2.560	3.721	6.197	6.803	7.409
2.758E-04	0.903	3.009	4.466	7.775	8.652	9.538
2.951E-04	1.049	3.632	5.527	10.197	11.538	12.946
3.214E-04	1.262	4.565	7.157	14.262	16.537	19.071
3.612E-04	1.610	6.142	9.998	22.203	26.776	32.398
4.356E-04	2.344	9.576	16.401	43.068	55.863	74.878
4.943E-04	3.054	13.006	23.054	70.000	99.398	160.797
5.131E-04	3.287	14.139	25.260	79.168	114.548	192.502
5.350E-04	3.570	15.518	27.957	90.685	134.042	236.239

5.614E-04	3.923	17.243	31.342	105.554	159.879	259.280
5.936E-04	4.379	19.475	35.743	125.453	195.450	395.492
6.355E-04	4.996	22.510	41.750	153.428	247.028	554.260
6.922E-04	5.895	26.945	50.565	195.724	327.644	847.302
7.779E-04	7.375	34.260	65.158	267.858	470.037	1492.809
9.383E-04	10.507	49.791	96.248	425.906	793.255	3467.134
1.065E-03	13.566	64.988	126.751	584.510	1127.576	6412.664
1.105E-03	14.575	69.997	136.808	636.885	1238.214	7413.1
1.153E-03	15.801	76.088	149.037	700.660	1373.184	868.28
1.209E-03	17.332	83.694	164.311	780.397	1542.177	10305.462
1.279E-03	19.312	93.536	184.075	883.641	1761.198	12440.301
1.369E-03	22.004	106.910	210.935	1023.988	2059.042	15361.917
1.491E-03	25.941	126.464	250.203	1229.090	2494.079	19589.865
1.676E-03	32.444	158.757	315.043	1567.310	3210.200	26349.045
2.021E-03	46.296	227.523	453.065	2285.246	4724.368	39805.728
2.294E-03	59.947	295.240	588.882	2987.524	6193.575	51461.762
2.381E-03	64.453	317.586	633.695	3219.027	6677.301	55235.563
2.483E-03	69.938	344.786	688.237	3500.492	7264.591	59756.510
2.605E-03	76.797	378.799	756.429	3851.996	7996.858	65237.859
2.756E-03	85.687	422.872	844.775	4306.781	8942.616	72188.311
2.949E-03	97.791	482.871	965.022	4924.834	10225.279	81383.233
3.213E-03	115.530	570.776	1141.159	5828.501	12096.156	94418.467
3.611E-03	144.905	716.327	1432.722	7321.037	15177.106	115187.941
4.355E-03	207.708	1027.338	2055.502	10499.877	21713.815	157458.648
4.943E-03	269.895	1335.183	2671.612	13631.166	28116.619	196524.986
5.131E-03	290.440	1436.855	2875.080	14664.642	30228.304	209313.947
5.351E-03	315.466	1560.717	3122.934	15922.786	32797.000	224745.219
5.614E-03	346.791	1715.742	3433.121	17496.241	36006.521	243856.137
5.939E-03	387.428	1916.826	3835.429	19535.452	40162.027	268367.832
6.356E-03	442.820	2190.902	4333.711	22312.135	45814.138	301353.699
6.924E-03	524.106	2593.047	5188.095	26381.783	54087.671	349062.074
7.782E-03	658.977	3260.200	6522.356	33124.380	67774.476	426881.687

BARIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-11 TEMPERATURE = 200

RADIUS (CM)	SUPERSATURATION IN PERCENT						
	5.00	1.00	0.50	0.10	0.05	0.01	
1.887E-04	0.000	0.000	0.000	0.000	0.000	0.000	
1.822E-04	0.012	0.013	0.013	0.013	0.013	0.013	
2.002E-04	0.042	0.044	0.044	0.046	0.047	0.047	
2.057E-04	0.084	0.089	0.089	0.093	0.094	0.094	
2.215E-04	0.145	0.155	0.155	0.164	0.165	0.166	
2.319E-04	0.212	0.225	0.225	0.243	0.244	0.246	
2.402E-04	0.274	0.296	0.296	0.316	0.319	0.321	
2.502E-04	0.355	0.386	0.386	0.416	0.420	0.423	
2.626E-04	0.466	0.512	0.512	0.556	0.563	0.568	
2.772E-04	0.626	0.696	0.696	0.766	0.776	0.784	
2.966E-04	0.870	0.989	0.989	1.103	1.120	1.134	
3.227E-04	1.279	1.482	1.482	1.704	1.738	1.766	
3.622E-04	2.067	2.462	2.462	2.988	3.068	3.135	
4.163E-04	4.089	5.239	5.239	6.870	7.160	7.412	
4.949E-04	6.565	9.069	9.069	13.570	14.552	15.471	
5.136E-04	7.427	10.380	10.380	15.936	17.183	18.362	
5.355E-04	8.476	12.038	12.038	19.043	20.671	22.230	
5.618E-04	9.820	14.202	14.202	23.279	25.465	27.632	
5.942E-04	11.607	17.139	17.139	29.342	32.484	35.613	
6.358E-04	14.109	21.377	21.377	38.625	43.412	48.351	
6.925E-04	17.885	27.867	27.867	54.241	62.331	71.126	
7.781E-04	24.332	39.342	39.342	84.847	101.002	120.129	
9.394E-04	38.564	62.564	62.564	162.679	210.332	272.429	
1.065E-03	53.079	93.409	93.409	271.348	372.836	557.723	
1.105E-03	57.886	102.670	102.670	307.407	429.368	661.318	
1.153E-03	63.756	114.030	114.030	352.842	502.111	801.471	

1.209E-03	16.267	71.119	128.343	411.719	598.573	998.675
1.279E-03	18.238	80.689	147.029	490.863	731.569	1290.648
1.369E-03	20.919	93.754	172.854	602.751	924.912	1753.834
1.491E-03	24.842	112.944	210.463	773.137	1228.550	2565.352
1.670E-03	31.328	144.784	273.475	1066.517	1769.389	4229.352
2.021E-03	42.158	212.900	408.874	1718.142	3015.729	8851.505
2.294E-03	58.755	280.292	543.582	2366.572	4344.153	15180.253
2.361E-03	63.297	302.542	587.806	2607.990	4785.817	17344.977
2.483E-03	68.778	329.637	641.922	2878.514	5327.385	20076.602
2.605E-03	75.633	363.534	709.653	3218.009	6009.414	23617.666
2.756E-03	84.517	407.478	797.481	3659.418	6899.111	28368.586
2.949E-03	96.615	467.327	917.137	4262.267	8118.003	35057.649
3.213E-03	114.345	555.053	1092.571	5148.037	9913.928	45161.611
3.610E-03	143.711	700.368	1383.234	6618.224	12901.679	62329.596
4.355E-03	206.478	1010.332	2034.610	9764.620	19304.887	99619.982
4.945E-03	288.636	1318.545	2619.854	12379.072	25840.646	136389.186
5.150E-03	289.165	1420.112	2923.023	13907.345	27732.009	148499.137
5.350E-03	314.171	1543.842	3070.517	15159.658	30278.227	163200.338
5.613E-03	345.476	1698.695	3380.253	16726.462	33462.749	181525.004
5.938E-03	386.067	1899.537	3781.960	18757.748	37589.424	205167.748
6.354E-03	441.356	2173.245	4329.371	21524.548	43206.892	237176.191
6.922E-03	522.585	2574.749	5132.316	25580.489	51435.635	283741.254
7.779E-03	657.171	3240.516	6463.810	32300.205	65055.728	360129.902
9.383E-03	945.361	4665.713	9313.096	46667.397	94134.392	521187.414
1.002E-02	1231.422	6080.086	12140.323	60897.686	122872.487	677250.875
1.105E-02	1325.935	6547.373	13074.367	65597.872	132361.762	728652.692
1.133E-02	1441.128	7116.858	14212.849	71324.213	143919.078	791067.937

BARIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
NUCLEUS MASS = 1.00E-10 GM TEMPERATURE = 200

SUPERSATURATION IN PERCENT

KAPLUS (CM)	5.00	1.00	0.50	0.10	0.05	0.01
4.065E-04	0.000	0.000	0.000	0.000	0.000	0.000
4.145E-04	0.034	0.046	0.049	0.051	0.051	0.051
4.314E-04	0.117	0.163	0.172	0.179	0.180	0.181
4.510E-04	0.228	0.326	0.345	0.362	0.364	0.366
4.711E-04	0.364	0.568	0.605	0.638	0.642	0.646
4.997E-04	0.543	0.833	0.894	0.950	0.958	0.964
5.181E-04	0.683	1.076	1.162	1.242	1.253	1.262
5.398E-04	0.862	1.400	1.523	1.639	1.655	1.668
5.657E-04	1.095	1.846	2.027	2.203	2.227	2.247
5.970E-04	1.412	2.491	2.769	3.047	3.086	3.118
6.390E-04	1.864	3.483	3.937	4.409	4.477	4.533
6.953E-04	2.500	5.152	5.966	6.859	6.993	7.104
7.805E-04	3.772	8.403	10.092	12.124	12.446	12.718
9.400E-04	6.503	16.831	21.342	28.193	29.369	30.392
1.066E-03	9.344	27.429	37.729	56.241	60.249	63.987
1.106E-03	10.286	31.013	43.281	60.163	71.255	76.047
1.154E-03	11.439	35.488	50.325	79.214	85.866	92.203
1.210E-03	12.867	41.241	59.543	97.044	106.056	114.786
1.280E-03	14.774	48.919	72.096	122.621	135.450	148.166
1.370E-03	17.326	59.709	90.147	161.628	181.395	201.439
1.492E-03	21.161	76.069	118.240	227.957	261.016	296.594
1.670E-03	27.495	104.171	167.972	357.907	423.836	500.734
2.022E-03	41.101	166.614	282.408	702.380	884.108	1130.386
2.294E-03	54.025	231.003	405.325	1156.048	1568.157	2282.674
2.381E-03	59.093	252.356	446.268	1311.067	1806.178	2699.138
2.483E-03	64.537	278.474	496.575	1506.693	2112.579	3259.430

2.606E-03	71.321	311.294	500.082	1760.651	2519.139	4042.556
2.756E-03	80.191	354.032	643.164	2102.776	3080.226	5192.633
2.950E-03	92.238	412.505	757.369	2587.747	3897.133	6998.666
3.213E-03	109.907	496.604	926.335	3328.772	5183.114	10123.910
3.611E-03	133.198	641.884	1208.866	4610.424	7482.523	16431.896
4.355E-03	201.857	949.574	1818.512	7474.974	12816.374	33628.006
4.943E-03	263.958	1255.667	2427.650	10443.053	18573.968	56855.417
5.150E-03	284.468	1356.796	2629.267	11427.610	20492.014	64804.841
5.350E-03	309.457	1480.050	2874.853	12632.377	22849.035	74850.025
5.613E-03	340.735	1654.377	3182.491	14146.657	25824.572	87899.979
5.938E-03	381.307	1834.630	3581.853	16119.693	29717.021	105481.032
6.354E-03	436.606	2107.659	4126.582	18819.774	35066.488	130385.682
6.922E-03	517.736	2508.346	4926.334	22797.006	42978.058	168352.396
7.778E-03	652.282	3173.036	6253.237	29417.790	56199.634	233739.650
9.382E-03	940.229	4596.417	9096.621	43640.624	84702.059	378742.652
1.065E-02	1226.241	6009.489	11919.679	57795.093	113146.588	526806.953
1.105E-02	1320.691	6476.293	12822.248	62471.742	122546.223	575806.258
1.153E-02	1455.793	7045.173	13989.176	68171.817	134004.824	635604.750



CALCIUM CHLORIDE

TIME OF DIMENSIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-09 GM TEMPERATURE = 20C

SUPERSATURATION IN PERCENT

RADIUS (UM)	2.00	1.00	0.50	0.10	0.05	0.01
8.750E-04	0.000	0.000	0.000	0.000	0.000	0.000
8.920E-04	0.144	0.196	0.205	0.213	0.214	0.215
9.294E-04	0.495	0.688	0.723	0.755	0.759	0.762
9.735E-04	0.966	1.379	1.459	1.529	1.538	1.546
1.020E-03	1.625	2.406	2.562	2.703	2.722	2.737
1.077E-03	2.512	3.539	3.798	4.036	4.067	4.093
1.116E-03	2.914	4.580	4.945	5.284	5.330	5.367
1.163E-03	3.662	5.969	6.492	6.988	7.056	7.111
1.219E-03	4.685	7.892	8.664	9.412	9.516	9.601
1.280E-03	6.060	10.676	11.667	13.054	13.221	13.358
1.377E-03	8.025	14.976	16.928	18.951	19.243	19.483
1.498E-03	11.002	22.241	25.747	29.596	30.170	30.649
1.601E-03	16.382	36.456	43.776	52.569	53.961	55.135
2.025E-03	28.439	73.549	94.094	123.041	126.151	132.597
2.297E-03	41.107	120.630	165.626	246.863	264.339	280.613
2.384E-03	45.315	136.574	190.503	290.705	312.916	333.786
2.480E-03	50.469	156.513	221.817	348.434	377.460	405.064
2.608E-03	56.955	182.182	262.823	427.377	466.722	504.722
2.750E-03	65.417	216.503	316.834	540.742	596.777	652.174
2.951E-03	77.022	264.835	399.489	714.725	800.220	887.510
3.214E-03	94.158	338.284	525.301	1008.556	1153.023	1307.816
3.612E-03	122.763	464.802	748.634	1586.835	1874.904	2208.712
4.356E-03	184.415	746.948	1264.414	3122.863	3916.374	4979.844
4.943E-03	245.995	1039.434	1821.502	5153.533	6952.159	10006.703
5.151E-03	266.321	1136.497	2007.202	5847.867	8008.694	11820.320
5.350E-03	291.172	1255.316	2235.572	6724.750	9369.127	14255.276

5.015E-03	322.266	1404.751	2524.120	7864.091	11174.893	17650.133
5.738E-03	362.633	1599.525	2901.991	9400.276	13668.343	22621.007
6.354E-03	417.699	1866.285	3422.005	11581.548	17301.421	30399.384
6.922E-03	458.552	2259.558	4192.379	14918.883	23027.166	43796.902
7.779E-03	632.753	2914.955	5482.573	20703.320	33283.497	70691.588
9.382E-03	920.302	4324.957	8272.139	33669.550	57145.740	143550.123
1.065E-02	1205.955	5731.285	11068.385	47166.426	83051.436	241576.838
1.105E-02	1360.326	6196.078	11993.005	51646.533	91688.999	275134.770
1.153E-02	1415.341	6762.768	13120.690	57132.521	102313.384	317556.543

BARIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-08 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATIION IN PERCENT				
	2.00	1.00	0.50	0.10	0.01
1.807E-03	0.000	0.000	0.000	0.000	0.000
1.923E-03	0.639	0.862	0.902	0.941	0.949
2.002E-03	2.192	3.043	3.201	3.340	3.373
2.057E-03	4.267	6.113	6.403	6.774	6.849
2.214E-03	7.236	10.678	11.368	11.991	12.074
2.319E-03	10.283	15.725	16.873	17.927	18.069
2.405E-03	12.974	20.371	21.989	23.496	23.866
2.505E-03	16.405	26.578	28.903	31.105	31.651
2.626E-03	20.919	35.178	38.618	41.948	42.786
2.775E-03	27.070	47.658	52.968	58.258	59.003
2.960E-03	35.503	66.960	75.679	84.717	87.094
3.227E-03	49.287	99.646	115.339	132.267	137.280
3.622E-03	73.618	163.752	196.611	236.068	247.579
4.303E-03	128.227	331.571	424.118	554.390	597.362
4.949E-03	182.943	545.590	750.012	1115.607	1267.636
5.130E-03	205.116	618.114	862.013	1314.414	1508.508
5.355E-03	228.614	708.874	1004.405	1576.322	1831.506
5.618E-03	258.210	825.808	1191.145	1934.655	2283.404
5.942E-03	296.857	982.292	1446.107	2449.539	2951.835
6.353E-03	349.905	1202.872	1.13.790	3240.168	4019.095
6.925E-03	428.314	1538.462	2387.962	4576.326	5925.261
7.781E-03	559.376	2117.308	3408.227	7207.962	10009.711
9.384E-03	842.508	3410.422	5769.722	14205.219	22559.403
1.005E-02	1125.562	4754.311	8326.691	23473.051	45240.939
1.105E-02	1219.224	5.00.439	9179.359	26642.862	53417.923
1.153E-02	1333.470	5746.762	10226.333	30647.512	64386.822

BARIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-07 GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
4.065E-03	0.000	0.000	0.000	0.000	0.000	0.000
4.143E-03	2.896	3.920	4.104	4.264	4.285	4.302
4.314E-03	9.950	13.807	14.521	15.150	15.232	15.299
4.518E-03	19.472	27.752	29.338	30.749	30.935	31.086
4.771E-03	32.891	48.508	51.638	54.465	54.841	55.146
4.997E-03	46.766	71.482	76.695	81.483	82.127	82.650
5.181E-03	59.034	92.642	99.994	106.641	107.768	108.522
5.397E-03	74.696	120.934	131.504	141.510	142.884	144.000
5.657E-03	95.283	160.161	175.814	190.964	193.061	194.776
5.978E-03	123.376	217.127	241.308	265.396	268.786	271.569
6.390E-03	163.750	305.316	345.054	366.245	392.181	397.080
6.923E-03	220.384	454.801	526.405	605.004	616.738	623.503
7.803E-03	336.499	746.337	896.455	1078.680	1107.193	1131.257
9.400E-03	587.263	1517.938	1941.462	2537.395	2642.492	2733.895
1.066E-02	852.611	2501.616	3438.670	5113.376	5473.827	5809.176
1.106E-02	940.633	2855.050	3953.374	6026.105	6484.372	6914.513
1.154E-02	1048.988	3252.479	4607.952	7228.826	7827.924	8396.970

BARIUM CHLORIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS =  $1.00E-06$  GM TEMPERATURE = 20C

RADIUS (CM)	SUPEKSATURATIUN IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
8.758E-03	0.000	0.000	0.000	0.000	0.000	0.000
8.926E-03	13.308	17.998	18.839	19.573	19.669	19.746
9.294E-03	45.702	63.402	66.678	69.562	69.941	70.247
9.734E-03	89.464	127.473	134.752	141.228	142.083	142.772
1.026E-02	151.166	222.883	237.256	250.236	251.965	253.366
1.077E-02	214.596	328.545	352.488	374.495	377.453	379.856
1.116E-02	271.450	425.896	459.679	491.143	495.404	498.871
1.165E-02	343.520	556.095	604.683	650.702	656.993	662.122

SODIUM SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-12 GM TEMPERATURE = 20C

RADIUS(UM)	SUPER SATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
7.725E-05	0.000	0.000	0.000	0.000	0.000	0.000
7.889E-05	0.002	0.002	0.002	0.003	0.003	0.003
8.253E-05	0.007	0.009	0.009	0.009	0.009	0.009
8.702E-05	0.014	0.018	0.019	0.019	0.019	0.019
9.280E-05	0.023	0.032	0.034	0.035	0.035	0.035
9.771E-05	0.033	0.047	0.050	0.052	0.052	0.053
1.013E-04	0.041	0.059	0.062	0.066	0.066	0.066
1.054E-04	0.050	0.074	0.079	0.084	0.084	0.085
1.104E-04	0.062	0.095	0.102	0.108	0.109	0.110
1.166E-04	0.078	0.124	0.134	0.144	0.145	0.146
1.221E-04	0.094	0.154	0.168	0.181	0.183	0.185
1.266E-04	0.107	0.180	0.198	0.216	0.218	0.220
1.319E-04	0.124	0.215	0.238	0.261	0.264	0.267
1.382E-04	0.145	0.260	0.291	0.323	0.327	0.331
1.461E-04	0.173	0.324	0.367	0.412	0.418	0.424
1.552E-04	0.211	0.418	0.481	0.551	0.561	0.569
1.699E-04	0.269	0.569	0.671	0.789	0.808	0.823
1.907E-04	0.366	0.849	1.038	1.277	1.317	1.350
2.298E-04	0.577	1.535	1.996	2.681	2.807	2.918
2.607E-04	0.787	2.343	3.258	4.979	5.368	5.737
2.705E-04	0.856	2.614	3.687	5.783	6.271	6.740
2.821E-04	0.939	2.948	4.225	6.831	7.460	8.072
2.959E-04	1.044	3.375	4.922	8.249	9.088	9.920
3.130E-04	1.179	3.938	5.860	10.263	11.439	12.634
3.349E-04	1.362	4.721	7.194	13.320	15.087	16.947
3.648E-04	1.629	5.893	9.242	18.428	21.368	24.644

4.049E-04	2.068	7.877	12.812	28.362	34.154	41.243
4.943E-04	2.995	12.204	20.866	54.374	70.230	93.497
5.810E-04	3.895	16.547	29.268	87.914	123.840	196.323
5.823E-04	4.191	17.981	32.050	99.333	142.483	234.109
6.072E-04	4.551	19.729	35.466	113.684	166.461	285.866
6.371E-04	5.000	21.916	39.758	132.223	198.226	359.891
6.739E-04	5.579	24.750	45.325	157.052	241.954	471.753
7.212E-04	6.365	28.606	52.941	191.995	305.368	653.965
7.856E-04	7.511	34.247	64.131	244.903	404.555	984.500
8.823E-04	9.398	43.564	82.683	332.321	560.044	1694.593
1.005E-03	13.400	63.378	122.283	534.037	979.749	3791.314
1.209E-03	17.317	82.813	161.241	734.454	1396.124	6813.857
1.254E-03	18.669	89.222	174.091	800.682	1534.070	7847.602
1.308E-03	20.180	97.017	189.723	881.389	1702.558	9147.238
1.372E-03	22.142	106.755	209.256	982.381	1913.811	10819.870
1.452E-03	24.682	119.360	234.343	1113.276	2188.062	13037.609
1.554E-03	28.135	136.499	268.926	1291.396	2561.637	16101.666
1.693E-03	33.187	161.570	319.226	1552.031	3108.435	20605.410
1.902E-03	41.536	203.004	402.344	1982.466	4010.811	27961.873
2.294E-03	59.337	291.306	579.442	2897.866	5924.884	43039.876
2.804E-03	76.898	378.367	753.951	3795.746	7790.810	56640.585
2.702E-03	82.695	407.161	811.541	4091.836	8405.507	61066.512
2.818E-03	89.752	442.083	881.647	4451.968	9152.303	66372.136
2.957E-03	98.581	485.836	969.318	4901.897	10084.140	72894.058
3.123E-03	110.024	542.540	1082.927	5484.305	11288.596	81183.311
3.347E-03	125.809	615.753	1237.600	6276.196	12923.459	92224.166
3.647E-03	148.452	732.910	1464.233	7434.735	15310.491	107991.139
4.098E-03	186.298	920.332	1839.519	9349.578	19246.087	133302.949
4.943E-03	267.222	1320.980	2641.505	13431.441	27608.552	185311.475
5.610E-03	347.404	1717.775	3435.413	17457.211	35816.710	233982.523
5.823E-03	373.889	1848.835	3697.620	18786.161	38524.464	249938.859
6.073E-03	406.159	2008.511	4017.058	20404.279	41819.215	269224.121

SODIUM SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-11 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
1.664E-04	0.000	0.000	0.000	0.000	0.000	0.000
1.700E-04	0.006	0.008	0.008	0.008	0.008	0.009
1.778E-04	0.023	0.029	0.030	0.031	0.031	0.031
1.875E-04	0.045	0.060	0.062	0.064	0.065	0.065
1.999E-04	0.075	0.108	0.114	0.118	0.119	0.119
2.105E-04	0.113	0.160	0.169	0.177	0.178	0.179
2.182E-04	0.139	0.201	0.213	0.224	0.225	0.227
2.271E-04	0.172	0.255	0.271	0.287	0.289	0.290
2.379E-04	0.214	0.327	0.351	0.373	0.376	0.378
2.512E-04	0.272	0.430	0.465	0.498	0.503	0.506
2.630E-04	0.328	0.537	0.586	0.633	0.639	0.645
2.728E-04	0.377	0.633	0.695	0.756	0.764	0.771
2.842E-04	0.437	0.757	0.838	0.918	0.930	0.939
2.978E-04	0.515	0.923	1.032	1.143	1.159	1.172
3.147E-04	0.615	1.156	1.309	1.469	1.492	1.512
3.364E-04	0.763	1.504	1.732	1.980	2.016	2.047
3.661E-04	0.962	2.071	2.440	2.866	2.932	2.987
4.109E-04	1.356	3.134	3.826	4.696	4.839	4.960
4.951E-04	2.181	5.764	7.502	10.626	10.466	10.690
5.616E-04	3.024	8.589	12.465	18.666	20.311	21.554
5.828E-04	3.503	10.068	14.156	21.997	23.786	25.487
6.077E-04	3.643	11.409	16.295	26.058	28.365	30.565
6.575E-04	4.069	13.125	19.070	31.567	34.647	37.662
6.745E-04	4.625	15.465	22.631	39.415	43.750	48.055
7.215E-04	5.379	18.594	28.207	51.564	57.837	64.545
7.859E-04	6.485	23.466	36.527	71.567	82.157	93.656



0.851E-04	4.325	51.027	51.102	110.172	131.554	150.530
1.067E-03	12.263	49.721	64.540	213.576	270.012	347.773
1.209E-03	10.140	60.541	120.172	347.037	476.302	700.367
1.254E-03	17.427	74.408	132.006	393.506	547.540	830.203
1.308E-03	10.907	81.977	146.527	451.263	637.974	1013.703
1.373E-03	20.937	91.424	164.032	526.117	702.035	1227.981
1.452E-03	23.403	103.000	180.734	626.767	930.278	1623.402
1.554E-03	26.900	120.414	221.541	787.121	1174.007	2140.765
1.693E-03	31.934	143.070	267.968	986.037	1534.042	3207.553
1.902E-03	40.261	185.000	330.734	1327.037	2243.502	5250.762
2.274E-03	50.025	273.520	524.661	2191.336	3824.223	10707.514
2.604E-03	75.273	359.966	697.282	3046.172	5213.367	18627.023
2.702E-03	61.365	388.573	756.367	3327.433	6075.235	21263.136
2.818E-03	68.417	423.421	823.930	3673.633	6764.570	24574.501
2.957E-03	97.239	467.023	912.002	4110.232	7633.099	28714.037
3.128E-03	108.673	523.554	1023.942	4673.570	8766.407	34717.187
3.347E-03	124.251	600.578	1177.051	5440.067	10321.304	42896.667
3.646E-03	147.083	713.501	1403.573	6503.744	12613.679	52287.048
4.098E-03	184.510	900.617	1777.677	8407.940	16431.144	76413.133
4.943E-03	263.793	1300.750	2577.861	12510.317	24623.872	122541.787
5.609E-03	343.932	1697.178	3370.048	16514.546	32740.311	168436.670
5.822E-03	372.400	1828.102	3632.468	17736.818	35426.376	183572.971
6.072E-03	404.646	1977.808	3951.442	19447.470	38694.471	201973.730
6.370E-03	443.008	2187.253	4330.674	21462.970	42780.673	224742.111
6.739E-03	497.363	2446.218	4868.304	24076.366	48077.533	254624.038
7.212E-03	568.724	2794.174	5574.237	27637.363	55290.363	274483.374
7.856E-03	673.433	3316.973	6609.603	32658.708	65861.077	353578.733
8.828E-03	847.042	4173.763	8326.311	41511.817	83363.991	450068.480
1.065E-02	1218.938	6014.477	12002.167	60020.333	120764.832	654135.332

SODIUM SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-10 GM TEMPERATURE = 20C

SUPERSATURATION IN PERCENT

RADIUS (UM)	2.00	1.00	0.50	0.10	0.05	0.01
3.585E-04	0.000	0.000	0.000	0.030	0.000	0.000
3.662E-04	0.024	0.040	0.051	0.052	0.032	0.032
3.831E-04	0.086	0.110	0.114	0.117	0.110	0.110
4.039E-04	0.174	0.228	0.238	0.240	0.247	0.248
4.307E-04	0.306	0.416	0.430	0.453	0.456	0.458
4.535E-04	0.438	0.618	0.652	0.682	0.688	0.690
4.700E-04	0.541	0.779	0.825	0.867	0.873	0.877
4.893E-04	0.671	0.990	1.055	1.116	1.122	1.129
5.125E-04	0.840	1.278	1.371	1.450	1.468	1.477
5.411E-04	1.069	1.667	1.825	1.955	1.972	1.987
5.667E-04	1.297	2.118	2.311	2.496	2.521	2.542
5.876E-04	1.494	2.504	2.750	2.989	3.022	3.049
6.122E-04	1.741	3.006	3.328	3.640	3.691	3.728
6.417E-04	2.058	3.683	4.117	4.537	4.620	4.671
6.761E-04	2.483	4.636	5.248	5.887	5.979	6.076
7.248E-04	3.081	6.065	6.981	7.977	8.125	8.274
7.888E-04	3.991	8.408	9.907	11.631	11.896	12.210
8.823E-04	5.260	12.841	15.671	19.224	19.803	20.210
1.067E-03	9.062	24.015	31.123	41.523	43.412	45.069
1.210E-03	12.698	37.752	52.308	79.003	84.884	90.405
1.250E-03	13.904	42.387	59.548	92.182	99.570	106.572
1.309E-03	15.378	48.163	68.701	109.421	118.951	128.033
1.374E-03	17.232	55.573	80.642	132.844	142.579	157.994
1.453E-03	19.647	65.450	96.000	166.276	184.133	201.935
1.555E-03	22.954	79.316	120.120	217.202	244.083	271.670
1.693E-03	27.828	100.323	150.274	302.930	347.458	392.555

1.702L-03	35.451	136.345	226.179	470.547	657.834	857.077
2.245L-03	53.418	216.508	367.144	513.487	664.988	810.023
3.004E-03	70.807	249.326	423.082	549.501	680.620	814.005
2.703L-03	76.552	326.775	517.077	604.552	731.546	847.613
2.818E-03	83.554	360.359	642.556	745.282	871.243	1001.243
2.957E-03	92.521	402.563	723.476	827.036	954.274	1089.685
3.128E-03	103.696	457.537	830.825	909.939	1008.874	1151.277
3.347E-03	119.202	522.769	977.708	1132.047	1308.623	1511.277
3.647L-03	141.452	643.581	1195.088	1423.022	1654.886	1741.366
4.048L-03	174.676	828.052	1558.710	1928.337	2544.012	3091.877
4.943E-03	260.410	1224.300	2343.717	3107.712	4107.112	4266.179
5.609L-03	340.473	1616.895	3126.884	4324.185	5817.346	7201.420
5.822L-03	366.917	1749.248	3588.415	4640.344	6278.138	8205.870
6.072E-03	399.137	1908.133	3704.917	4629.937	6930.256	9474.292
6.370E-03	434.471	2107.094	4101.430	4818.276	7312.775	11123.475
6.739L-03	491.794	2365.242	4616.228	5076.755	7819.207	13346.184
7.211E-03	563.117	2717.563	5318.500	5420.746	8498.430	16442.865
7.856E-03	677.769	3234.114	6349.707	6321.674	9544.045	21302.744
8.828E-03	841.347	4091.406	8061.311	7847.573	12146.701	29585.045
1.005L-02	1213.024	5927.834	11728.660	10170.084	10860.212	47942.643

SODIUM SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-09 GM TEMPERATURE = 20C

SUPERSATURATION IN PERCENT

RADIUS(UM)	5.00	1.00	0.50	0.10	0.05	0.01
7.725E-04	0.000	0.000	0.000	0.000	0.000	0.000
7.689E-04	0.101	0.125	0.129	0.133	0.135	0.135
6.235E-04	0.359	0.457	0.474	0.488	0.490	0.491
6.702E-04	0.729	0.955	0.994	1.024	1.032	1.036
7.280E-04	1.287	1.746	1.830	1.893	1.911	1.920
9.771E-04	1.849	2.601	2.743	2.872	2.887	2.903
2.200	2.200	3.286	3.482	3.659	3.682	3.701
2.841	2.841	4.108	4.402	4.711	4.744	4.771
3.507	3.507	5.418	5.810	6.172	6.221	6.251
4.554	4.554	7.170	7.761	8.311	8.386	8.447
5.557	5.557	9.032	9.853	10.639	10.747	10.836
6.530	6.530	10.693	11.747	12.760	12.909	13.023
7.460	7.460	12.871	14.240	15.609	15.800	15.957
8.841	8.841	15.807	17.669	19.556	19.823	20.040
10.694	10.694	19.954	22.586	25.333	25.733	26.062
13.313	13.313	26.193	30.147	34.443	35.083	35.612
17.312	17.312	50.458	42.954	50.423	51.571	52.534
24.236	24.236	55.470	66.297	83.737	86.273	88.417
39.791	39.791	103.426	136.390	182.118	190.371	197.807
50.074	50.074	166.758	231.000	346.433	374.244	398.427
61.401	61.401	187.476	263.290	506.994	439.411	470.082
68.103	68.103	213.327	304.184	683.639	523.473	562.233
76.437	76.437	246.544	357.593	987.881	693.813	698.234
87.312	87.312	290.883	430.230	1368.824	813.292	873.333
102.228	102.228	353.244	534.667	1964.233	1082.134	1203.004
124.261	124.261	447.916	697.203	2746.773	1342.340	1733.237

4.099E-03	101.001	985.206	2070.454	2950.331	2926.271
4.943E-03	240.425	1049.902	4080.733	5120.702	6516.964
5.610E-03	319.780	2367.782	6697.103	9032.286	12994.017
5.823E-03	340.014	2607.074	7591.773	10393.170	15329.307
6.072E-03	378.006	2901.301	8721.313	12145.007	15462.628
6.371E-03	418.068	3273.231	10188.762	14469.716	22828.126
6.739E-03	470.131	3760.230	12167.642	17079.048	29215.701
7.212E-03	541.133	4430.601	14976.261	22324.365	39202.866
7.856E-03	645.405	5423.812	19274.661	29721.860	56390.124
8.828E-03	818.513	7067.517	26722.814	42918.841	90858.630
1.065E-02	1189.303	10685.535	41431.690	73628.088	184143.857

SODIUM SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS =  $1.00E-08$  GM TEMPERATURE = 20C

SUPERSATURATION IN PERCENT

RADIUS (UM)	5.00	1.00	0.50	0.10	0.05	0.01
1.664E-03	0.000	0.000	0.000	0.000	0.000	0.000
1.700E-03	0.444	0.550	0.568	0.582	0.584	0.586
1.778E-03	1.582	2.013	2.085	2.145	2.154	2.161
1.875E-03	3.217	4.209	4.380	4.529	4.548	4.564
1.999E-03	5.666	7.710	8.077	8.399	8.441	8.475
2.105E-03	8.168	11.505	12.138	12.701	12.776	12.836
2.181E-03	10.131	14.548	15.416	16.195	16.299	16.383
2.271E-03	12.604	18.564	19.776	20.878	21.076	21.145
2.379E-03	15.844	24.048	25.788	27.393	27.609	27.784
2.512E-03	20.258	31.900	34.499	36.941	37.273	37.544
2.630E-03	24.665	40.210	43.859	47.356	47.938	48.231
2.728E-03	28.491	47.675	52.345	56.890	57.521	58.037
2.842E-03	33.296	57.423	63.553	69.628	70.481	71.180
2.978E-03	39.205	70.608	78.922	87.351	88.551	89.537
3.147E-03	47.855	89.263	101.037	113.330	115.110	116.580
3.364E-03	59.074	117.374	135.094	154.346	157.203	159.576
3.661E-03	77.749	163.715	192.880	226.409	231.562	235.886
4.109E-03	109.123	251.993	307.485	377.050	389.377	398.014
4.951E-03	179.810	476.394	617.189	822.624	859.840	892.467
5.616E-03	254.121	755.863	1046.959	1578.475	1695.002	1804.191
5.828E-03	278.812	856.320	1194.076	1844.655	1991.114	2129.642
6.077E-03	309.066	968.260	1380.441	2193.199	2382.337	2563.302
6.375E-03	347.170	1119.907	1624.048	2667.550	2920.489	3166.465
6.743E-03	396.927	1322.494	1955.674	3345.649	3700.604	4053.250
7.215E-03	465.233	1607.653	2432.678	4381.861	4915.047	5461.506
7.859E-03	566.221	2041.008	3175.939	6125.218	7011.453	7963.390

8.830L-03	755.085	2787.915	4494.822	9544.082	11282.318	13296.902
1.002L-02	1059.804	4455.873	1542.542	18603.794	23311.161	29003.585

SODIUM SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-07 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
3.585E-03	0.000	0.000	0.000	0.000	0.000	0.000
3.662E-03	2.008	2.467	2.505	2.631	2.639	2.646
3.831E-03	7.155	9.104	9.429	9.707	9.743	9.772
4.039E-03	14.570	19.052	19.628	20.499	20.586	20.656
4.307E-03	25.780	34.936	36.596	38.053	38.244	38.398
4.535E-03	37.154	52.178	55.046	57.597	57.935	58.207
4.700E-03	45.594	66.013	69.947	73.481	73.951	74.331
4.893E-03	57.252	84.286	89.786	94.784	95.452	95.994
5.125E-03	72.013	109.259	117.158	124.442	125.423	126.220
5.411E-03	92.144	145.043	156.851	167.948	169.458	170.689
5.667E-03	112.257	182.952	199.546	215.434	217.644	219.432
5.876E-03	129.732	217.024	236.276	258.959	261.831	264.180
6.122E-03	151.691	261.544	289.461	317.124	321.006	324.189
6.416E-03	180.104	321.800	359.686	398.097	403.360	408.094
6.780E-03	218.296	407.113	460.805	516.868	524.984	531.688
7.248E-03	272.421	535.771	616.652	709.526	717.562	728.394
7.887E-03	355.278	748.058	881.318	1034.592	1058.056	1077.799
8.853E-03	499.258	1152.894	1406.763	1724.954	1776.759	1820.630
1.007E-02	824.097	2183.379	2828.564	3769.591	3940.009	4089.397



SODIUM SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-06 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
7.724E-03	0.000	0.000	0.000	0.000	0.000	0.000
7.889E-03	9.208	11.401	11.750	12.057	12.090	12.127
8.253E-03	32.838	41.747	43.236	44.509	44.674	44.807
8.702E-03	66.855	87.397	90.953	94.026	94.426	94.746
9.279E-03	118.344	160.331	167.951	174.620	175.501	176.207
9.771E-03	170.623	239.560	252.717	264.427	265.974	267.220
1.013E-02	211.264	303.152	321.210	337.433	339.567	341.332
1.054E-02	263.047	387.175	412.429	435.381	438.448	440.936
1.104E-02	330.963	502.049	538.333	571.793	576.300	579.963
1.166E-02	423.630	666.717	720.984	771.981	778.923	784.578

POTASSIUM NITRATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-12 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATIUN IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
9.165E-05	0.000	0.000	0.000	0.000	0.000	0.000
9.382E-05	0.004	0.006	0.006	0.007	0.007	0.007
9.871E-05	0.013	0.020	0.022	0.023	0.023	0.024
1.020E-04	0.026	0.042	0.045	0.048	0.048	0.049
1.104E-04	0.039	0.063	0.066	0.073	0.074	0.074
1.143E-04	0.048	0.079	0.086	0.093	0.094	0.095
1.189E-04	0.060	0.101	0.110	0.119	0.120	0.121
1.244E-04	0.075	0.129	0.142	0.154	0.156	0.158
1.313E-04	0.095	0.168	0.187	0.205	0.208	0.210
1.374E-04	0.114	0.209	0.234	0.259	0.263	0.266
1.424E-04	0.131	0.245	0.277	0.309	0.313	0.317
1.483E-04	0.152	0.292	0.332	0.374	0.380	0.385
1.554E-04	0.178	0.354	0.407	0.464	0.472	0.479
1.641E-04	0.213	0.441	0.514	0.594	0.607	0.617
1.754E-04	0.261	0.568	0.675	0.798	0.817	0.834
1.907E-04	0.332	0.773	0.942	1.152	1.186	1.215
2.140E-04	0.453	1.151	1.458	1.882	1.958	2.021
2.577E-04	0.715	2.069	2.800	4.011	4.254	4.473
2.923E-04	0.974	3.123	4.520	7.499	8.257	9.012
3.033E-04	1.059	3.477	5.106	8.734	9.690	10.657
3.162E-04	1.183	3.914	5.842	10.355	11.599	12.882
3.317E-04	1.292	4.470	6.792	12.563	14.243	16.024
3.509E-04	1.460	5.202	8.068	15.710	18.098	20.724
3.754E-04	1.687	6.218	9.869	20.485	24.116	28.326
4.089E-04	2.017	7.725	12.609	28.411	34.501	42.141
4.594E-04	2.561	10.260	17.325	43.594	55.523	72.507

5.2411-04	3.710	13.790	27.700	02.144	113.575	170.039
6.208E-04	4.029	21.104	36.410	120.932	194.220	302.440
6.226E-04	5.192	22.501	42.000	144.660	222.404	431.203
6.800E-04	6.030	25.100	46.324	164.332	257.710	535.532
7.790E-04	6.195	27.902	51.751	189.434	303.936	679.897
7.953E-04	6.913	31.441	56.732	222.132	360.505	807.101
8.063E-04	7.886	36.292	66.323	269.021	435.534	1220.201
8.802E-04	9.311	43.286	81.331	338.230	591.878	1030.910
9.894E-04	11.555	54.894	105.530	454.951	827.355	1103.198
1.193E-03	16.631	74.573	154.990	707.950	1349.305	6590.010
1.354E-03	21.505	103.784	203.573	929.602	1877.342	10947.003
1.400E-03	23.117	111.769	219.593	1042.132	2051.788	12403.541
1.460E-03	25.074	121.401	239.002	1143.833	2264.247	14154.205
1.530E-03	27.518	133.617	263.433	1270.147	2529.890	16444.772
1.627E-03	30.683	149.327	294.930	1433.790	2873.790	19329.827
1.741E-03	34.908	170.893	337.820	1650.173	3341.041	23242.969
1.877E-03	41.288	201.956	400.551	1981.266	4023.354	28946.133
2.132E-03	51.705	253.640	504.223	2517.154	5146.968	37980.746
2.571E-03	73.926	363.842	723.199	3658.165	7526.260	56234.633
2.918E-03	95.866	472.580	943.100	4776.930	9849.123	72373.901
3.022E-03	103.108	506.472	1015.010	5143.936	10606.956	77895.342
3.159E-03	111.928	552.175	1102.576	5594.718	11537.000	84275.176
3.314E-03	122.942	606.441	1217.007	6159.517	12699.168	92123.237
3.502E-03	137.265	677.701	1354.017	6861.550	14192.400	102106.319
3.752E-03	156.744	774.204	1547.203	7668.449	16225.377	115425.713
4.087E-03	185.313	915.660	1830.320	9313.939	19194.625	134683.127
4.529E-03	232.643	1150.011	2299.639	11702.921	24042.283	163162.777
5.040E-03	333.684	1631.124	3302.324	16798.029	34506.370	228429.553
6.202E-03	434.235	2147.638	4293.761	21827.013	44740.318	287999.520
7.000E-03	467.364	2311.644	4623.824	23467.327	46116.457	307545.391
8.000E-03	507.776	2511.473	5023.510	25509.140	52226.094	331183.852
9.141E-03	558.343	2761.614	5523.821	28038.494	57363.200	360551.922
1.029E-02	623.930	3086.143	6172.834	31317.689	64018.244	398322.391
8.004E-03	713.396	3528.553	7057.534	35784.649	73075.783	449312.191
8.800E-03	844.601	4177.844	8555.803	42334.867	86344.485	523356.074
9.899E-03	1062.383	5233.243	10509.441	53192.949	108313.479	644643.180

POTASSIUM NITRATE

TIME OF CRITICAL POINT IN SECONDS  
 NUCLEUS MASS = 1.00E-11 GM TEMPERATURE = 20C

SUPERSATURATION IN PERCENT

RADIUS (UM)	5.00	1.00	0.50	0.10	0.05	0.01
1.972E-04	0.000	0.000	0.000	0.000	0.000	0.000
2.021E-04	0.013	0.020	0.021	0.022	0.023	0.023
2.127E-04	0.046	0.070	0.075	0.080	0.080	0.081
2.263E-04	0.052	0.144	0.132	0.160	0.167	0.168
2.379E-04	0.136	0.217	0.237	0.254	0.257	0.258
2.463E-04	0.170	0.277	0.302	0.325	0.328	0.330
2.562E-04	0.212	0.353	0.360	0.417	0.422	0.425
2.681E-04	0.266	0.455	0.500	0.544	0.550	0.555
2.828E-04	0.337	0.598	0.603	0.726	0.735	0.743
2.960E-04	0.410	0.746	0.652	0.924	0.936	0.946
3.068E-04	0.472	0.877	0.990	1.103	1.120	1.133
3.175E-04	0.549	1.051	1.194	1.343	1.364	1.382
3.347E-04	0.647	1.262	1.472	1.674	1.704	1.724
3.530E-04	0.778	1.605	1.808	2.160	2.203	2.240
3.779E-04	0.902	2.066	2.473	2.921	2.990	3.048
4.104E-04	1.238	2.860	3.486	4.253	4.377	4.482
4.610E-04	1.710	4.322	5.464	7.027	7.297	7.532
5.552E-04	2.747	7.910	10.600	15.192	16.085	16.890
6.276E-04	3.804	12.156	17.531	28.741	31.521	34.261
6.544E-04	4.153	13.566	19.874	31.543	37.050	40.554
6.613E-04	4.580	15.300	22.827	39.002	44.421	49.057
7.147E-04	5.114	17.003	26.600	48.477	54.632	61.043
7.577E-04	5.809	20.024	31.027	60.700	69.510	76.407
8.088E-04	6.755	24.801	37.170	77.530	92.724	107.652
8.810E-04	8.145	31.062	50.420	110.644	132.720	159.421
9.848E-04	10.447	41.676	67.953	170.520	213.463	271.347

1.194E-03	15.362	54.867	113.010	323.640	430.615	614.514
1.355E-03	20.209	88.343	154.433	211.912	742.369	1228.264
1.400E-03	21.808	96.104	174.272	272.681	851.945	1484.304
1.460E-03	23.755	105.573	193.101	333.510	937.807	1724.244
1.530E-03	26.189	117.441	210.343	397.240	1162.043	2231.271
1.627E-03	29.342	132.854	246.737	443.556	1400.220	2863.036
1.741E-03	33.633	153.880	288.200	483.777	1751.004	3648.518
1.897E-03	39.417	184.743	344.343	530.173	2282.430	4634.202
2.132E-03	50.315	235.432	451.074	657.310	3209.290	6812.754
2.571E-03	72.507	345.423	669.211	925.734	4295.468	11044.230
2.918E-03	94.432	453.805	882.692	1208.146	5403.252	14814.647
3.029E-03	101.670	489.591	957.187	1368.240	6182.187	16327.334
3.159E-03	110.485	533.178	1044.282	1483.378	7061.466	18447.744
3.314E-03	121.512	587.716	1153.291	1631.340	8016.142	20824.231
3.506E-03	135.810	658.432	1294.658	1813.034	9003.964	23627.141
3.751E-03	155.285	734.769	1487.278	2034.147	10364.234	26857.100
4.087E-03	183.837	846.023	1769.740	2359.936	12459.100	30577.025
4.529E-03	231.151	1130.102	2237.878	2824.426	15257.370	35952.254
5.039E-03	322.344	1630.730	3239.112	3884.938	21524.771	463405.200
5.287E-03	432.645	2126.863	4231.278	5055.271	28690.843	570706.044
5.525E-03	465.772	2290.723	4558.943	5449.671	3045.188	59580.365
5.805E-03	506.135	2490.364	4958.158	5934.838	39124.813	72501.694
7.140E-03	556.680	2740.258	5457.844	6786.372	54239.046	91077.028
7.552E-03	622.204	3064.422	6106.088	8035.074	60861.323	107970.242
8.082E-03	711.549	3506.273	6984.442	9410.808	69878.963	127971.516
8.805E-03	842.846	4154.566	8285.551	11343.138	83093.701	150825.203
9.894E-03	1060.103	5229.824	10435.045	14164.615	104976.357	170556.844
1.194E-02	1525.816	7532.247	15037.586	21324.414	151736.412	223888.672

POTASSIUM NITRAT.

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-10 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATIUN IN PERCENT						
	5.00	1.00	0.50	0.10	0.05	0.01	
4.254E-04	0.000	0.000	0.000	0.000	0.000	0.000	
4.355E-04	0.052	0.078	0.083	0.087	0.088	0.088	
4.582E-04	0.180	0.274	0.293	0.311	0.313	0.315	
4.875E-04	0.362	0.565	0.609	0.649	0.654	0.658	
5.125E-04	0.538	0.862	0.933	1.000	1.009	1.016	
5.307E-04	0.672	1.095	1.190	1.280	1.292	1.302	
5.520E-04	0.841	1.395	1.527	1.650	1.667	1.681	
5.776E-04	1.060	1.806	1.966	2.156	2.182	2.201	
6.093E-04	1.356	2.364	2.642	2.895	2.930	2.959	
6.378E-04	1.648	2.988	3.341	3.695	3.745	3.786	
6.610E-04	1.901	3.530	3.974	4.427	4.492	4.545	
6.803E-04	2.217	4.235	4.808	5.405	5.491	5.562	
7.211E-04	2.624	5.185	5.948	6.769	6.885	6.984	
7.617E-04	3.169	6.519	7.585	8.752	8.939	9.086	
8.139E-04	3.934	8.515	10.091	11.912	12.194	12.430	
8.853E-04	5.096	11.775	14.314	17.449	17.955	18.384	
9.933E-04	7.095	17.908	22.620	29.052	30.163	31.125	
1.190E-03	11.545	33.199	44.726	65.451	67.136	70.452	
1.357E-03	16.129	51.505	74.185	121.041	122.543	123.831	
1.408E-03	17.651	57.684	84.265	141.478	143.995	147.420	
1.466E-03	19.513	65.377	97.009	168.452	167.274	206.351	
1.540E-03	21.852	75.225	113.597	205.165	230.638	256.971	
1.629E-03	24.898	88.305	136.026	257.747	293.856	332.416	
1.745E-03	29.065	106.575	167.988	337.852	392.536	453.619	
1.898E-03	35.202	134.074	217.150	471.558	562.587	671.320	
2.132E-03	45.413	180.502	302.905	728.863	905.872	1139.841	

2.572E-03	07.336	283.914	496.646	1388.606	1850.198	2581.239
2.919E-03	89.122	388.932	700.081	2207.846	3169.144	5127.931
3.029E-03	56.320	423.717	767.676	2495.476	3623.472	6083.824
3.154E-03	105.090	466.216	850.519	2832.749	4201.781	7320.560
3.314E-03	116.070	519.558	954.829	3279.310	4959.531	9033.500
3.506E-03	130.313	588.938	1090.935	3874.796	5990.575	11519.939
3.752E-03	149.727	683.752	1277.535	4709.714	7467.952	15365.075
4.087E-03	178.208	823.209	1552.883	5970.524	9751.876	21878.948
4.593E-03	225.432	1055.046	2012.100	8123.791	13752.276	34636.937
5.539E-03	326.455	1552.453	3000.518	12871.946	22815.399	67864.282
6.267E-03	426.727	2046.965	3986.231	17722.749	32341.424	109516.520
6.525E-03	459.834	2210.340	4311.982	19329.572	35506.034	123630.469
6.805E-03	500.173	2409.454	4709.114	21293.013	39383.792	141275.414
7.140E-03	550.672	2658.766	5206.505	23757.769	44265.404	163948.744
7.522E-03	616.185	2982.274	5822.103	26964.122	50633.441	194133.594
8.082E-03	705.492	3423.364	6732.589	31346.615	59360.575	236363.488
8.804E-03	836.538	4070.730	8025.169	37793.594	72232.307	299917.871
9.894E-03	1053.911	5144.739	10170.124	48212.549	93684.212	407885.871
1.193E-02	1519.415	7445.052	14765.162	71514.573	139819.521	644227.633

POTASSIUM NITRATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-09 GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
9.165E-04	0.000	0.000	0.000	0.000	0.000	0.000
9.381E-04	0.221	0.328	0.349	0.368	0.371	0.373
9.871E-04	0.764	1.160	1.242	1.316	1.326	1.334
1.050E-03	1.542	2.402	2.585	2.753	2.776	2.794
1.104E-03	2.294	3.669	3.972	4.255	4.293	4.324
1.143E-03	2.873	4.671	5.076	5.457	5.509	5.551
1.189E-03	3.601	5.975	6.525	7.047	7.118	7.177
1.244E-03	4.548	7.735	8.499	9.235	9.337	9.420
1.313E-03	5.829	10.231	11.356	12.420	12.572	12.695
1.374E-03	7.100	12.856	14.370	15.887	16.101	16.277
1.424E-03	8.203	15.212	17.122	19.067	19.345	19.573
1.483E-03	9.585	18.283	20.754	23.523	23.694	24.001
1.554E-03	11.368	22.425	25.728	29.255	29.772	30.201
1.641E-03	13.758	28.273	32.888	37.985	38.749	39.585
1.754E-03	17.129	37.038	43.880	51.790	53.010	54.034
1.907E-03	22.265	51.399	62.469	76.126	78.326	80.192
2.140E-03	31.131	78.527	99.163	127.287	132.145	136.344
2.577E-03	50.975	146.518	197.299	279.565	295.741	310.267
2.923E-03	71.592	228.556	329.038	535.843	586.382	635.870
3.033E-03	78.441	256.278	374.177	626.842	690.639	753.885
3.162E-03	86.829	290.831	431.297	746.808	829.763	913.394
3.317E-03	97.381	335.125	505.737	910.734	1022.724	1138.219
3.509E-03	111.140	394.036	606.541	1145.388	1304.147	1473.047
3.754E-03	129.995	476.462	750.399	1503.082	1743.597	2010.873
4.089E-03	157.807	600.750	972.104	2100.095	2501.106	2976.022
4.594E-03	204.186	812.902	1359.737	3252.114	4030.659	5049.278



5.541E-03	304.025	1280.948	2238.133	6212.307	8239.315	11401.972
6.288E-03	403.624	1760.146	3164.675	9901.374	14124.881	22045.442
6.520E-03	436.545	1518.962	3472.722	11152.362	16152.673	26075.455
6.806E-03	476.684	2113.114	5850.518	12718.312	18735.381	31050.302
7.140E-03	526.962	2356.966	4326.557	14733.661	22121.009	31977.109
7.523E-03	592.229	2674.373	4948.212	17423.820	26731.271	50227.766
8.083E-03	681.256	3108.499	5801.272	21200.075	33343.820	68502.000
8.805E-03	811.972	3747.649	7061.384	26910.945	43580.179	94781.758
9.894E-03	1028.933	4811.384	9165.612	36682.192	61544.060	149376.193
1.193E-02	1493.839	7096.924	13701.937	58282.806	102364.182	291144.191

POTASSIUM NITRATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-08 GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT						
	5.00	1.00	0.50	0.10	0.05	0.01	0.00
1.974E-03	0.600	0.000	0.000	0.000	0.000	0.000	0.000
2.021E-03	0.975	1.452	1.546	1.631	1.643	1.652	1.652
2.127E-03	3.393	5.146	5.507	5.835	5.878	5.914	5.914
2.263E-03	6.857	10.672	11.482	12.228	12.328	12.410	12.410
2.379E-03	10.218	16.325	17.670	18.923	19.093	19.231	19.231
2.463E-03	12.803	20.797	22.598	24.290	24.520	24.707	24.707
2.562E-03	16.065	26.627	29.073	31.398	31.714	31.973	31.973
2.681E-03	20.308	34.506	37.911	41.190	41.643	42.012	42.012
2.828E-03	26.059	45.700	50.629	55.467	56.142	56.694	56.694
2.960E-03	31.779	57.494	64.256	71.034	71.991	72.777	72.777
3.068E-03	36.746	68.069	76.627	85.326	86.567	87.586	87.586
3.195E-03	42.976	81.912	92.972	104.474	106.134	107.505	107.505
3.347E-03	51.023	100.578	115.384	131.187	133.505	135.425	135.425
3.555E-03	61.820	126.969	147.683	170.554	173.980	176.834	176.834
3.778E-03	77.075	166.581	197.336	232.880	238.363	242.463	242.463
4.109E-03	100.349	231.585	281.441	342.920	352.822	361.221	361.221
4.610E-03	140.631	354.635	447.781	574.653	596.548	615.478	615.478
5.522E-03	231.011	603.824	893.730	1265.837	1338.824	1404.422	1404.422
6.256E-03	325.267	1038.336	1494.547	2431.839	2660.435	2884.054	2884.054
6.534E-03	356.595	1164.953	1700.516	2846.031	3134.632	3420.432	3420.432
6.813E-03	394.984	1322.863	1961.297	3392.250	3767.573	4145.485	4145.485
7.147E-03	443.306	1525.417	2301.358	4138.922	4645.653	5167.510	5167.510
7.559E-03	506.357	1795.001	2762.174	5208.165	5926.583	6689.587	6689.587
8.088E-03	592.815	2172.489	3420.312	6838.786	7927.220	9134.143	9134.143
8.809E-03	720.469	2742.238	4435.515	9561.774	11376.486	13519.373	13519.373
9.898E-03	933.548	3715.744	6212.455	14819.609	18342.309	22931.934	22931.934

1.194E-J2 1392.624 5866.525 10244.897 28342.688 37513.033 51725.040

POTASSIUM NITRATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS =  $1.00E-07$  GM TEMPERATURE = 20C

RADIUS (CM)	SUPER SATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
4.254E-03	0.000	0.000	0.000	0.000	0.000	0.000
4.354E-03	4.448	6.589	7.017	7.403	7.454	7.496
4.581E-03	15.420	23.374	25.009	26.497	26.696	26.857
4.875E-03	31.185	48.505	52.186	55.572	56.027	56.397
5.125E-03	46.499	74.251	80.362	86.057	86.829	87.455
5.306E-03	58.289	94.633	102.817	110.507	111.553	112.405
5.520E-03	73.171	121.215	132.340	142.905	144.351	145.529
5.776E-03	92.542	157.165	177.662	187.585	189.644	191.325
6.093E-03	118.819	208.278	230.727	252.762	255.836	258.352
6.377E-03	144.976	262.181	292.998	323.889	328.252	331.836
6.610E-03	167.695	310.627	349.557	389.224	394.881	399.536
6.883E-03	196.220	373.862	424.320	476.794	484.369	490.621
7.211E-03	233.073	459.303	526.893	599.029	609.609	618.374
7.617E-03	282.558	580.176	674.798	779.269	794.920	807.954
8.139E-03	352.522	761.731	902.332	1064.811	1089.874	1110.899
8.853E-03	459.352	1059.909	1288.036	1569.310	1614.802	1653.022
9.953E-03	644.436	1624.860	2051.562	2632.599	2732.843	2819.506
1.196E-02	1060.214	3046.252	4100.931	5807.087	6141.574	6442.154

POTASSIUM NITRATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-06 GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
9.165E-03	0.000	0.000	0.000	0.000	0.000	0.000
9.381E-03	20.437	30.265	32.229	33.998	34.234	34.424
9.870E-03	70.865	107.390	114.900	121.730	122.643	123.383
1.050E-02	143.363	222.931	239.839	255.391	257.482	259.181
1.104E-02	213.833	341.364	369.450	395.620	399.164	402.046
1.143E-02	268.099	435.152	472.773	508.117	512.926	516.841
1.189E-02	336.620	557.508	608.657	657.225	663.873	669.292

MAGNESIUM SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-12 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
8.812E-05	0.000	0.000	0.000	0.000	0.000	0.000
9.080E-05	0.004	0.006	0.006	0.006	0.007	0.007
9.700E-05	0.017	0.024	0.026	0.027	0.028	0.028
1.023E-04	0.029	0.046	0.050	0.053	0.054	0.054
1.061E-04	0.039	0.064	0.070	0.075	0.076	0.077
1.105E-04	0.052	0.088	0.097	0.106	0.107	0.108
1.159E-04	0.068	0.122	0.136	0.150	0.152	0.154
1.224E-04	0.090	0.170	0.193	0.217	0.221	0.224
1.285E-04	0.111	0.222	0.256	0.293	0.298	0.303
1.331E-04	0.129	0.267	0.312	0.362	0.370	0.375
1.388E-04	0.151	0.326	0.386	0.455	0.466	0.475
1.455E-04	0.175	0.403	0.485	0.585	0.601	0.614
1.535E-04	0.215	0.509	0.626	0.774	0.799	0.820
1.646E-04	0.264	0.662	0.835	1.070	1.110	1.145
1.792E-04	0.336	0.903	1.175	1.580	1.654	1.720
2.012E-04	0.455	1.329	1.809	2.618	2.783	2.933
2.426E-04	0.705	2.311	3.364	5.538	6.062	6.571
2.752E-04	0.945	3.360	5.163	9.962	11.452	13.102
2.857E-04	1.024	3.705	5.786	11.452	13.280	15.333
2.979E-04	1.119	4.126	6.524	13.324	15.595	18.190
3.125E-04	1.238	4.654	7.459	15.766	18.655	22.027
3.306E-04	1.390	5.341	8.688	19.113	22.922	27.498
3.537E-04	1.597	6.280	10.392	24.009	29.317	35.967
3.855E-04	1.896	7.666	12.944	31.865	39.932	50.733
4.350E-04	2.587	9.974	17.277	46.453	60.656	81.969
5.222E-04	3.422	14.932	26.788	82.466	116.005	178.887

5.927E-04	4.424	19.831	36.419	125.222	140.988	368.160
6.152E-04	4.753	21.447	39.605	139.615	216.705	437.570
6.415E-04	5.154	23.412	43.489	157.500	249.279	532.601
6.731E-04	5.653	25.868	48.552	180.329	291.710	668.733
7.120E-04	6.297	29.045	54.667	210.517	349.034	872.454
7.619E-04	7.171	33.362	63.264	252.435	430.431	1202.649
8.300E-04	8.446	39.670	75.822	315.008	554.762	1794.338
9.527E-04	10.546	50.074	96.670	420.343	768.934	3030.477
1.125E-03	14.999	72.174	140.972	648.230	1242.320	6461.513
1.277E-03	19.560	93.832	164.446	874.597	1719.404	10710.937
1.525E-03	20.798	100.973	198.782	949.018	1876.925	12130.584
1.382E-03	22.547	109.659	216.218	1039.808	2068.672	13871.074
1.450E-03	24.732	120.510	238.001	1153.244	2308.290	16051.708
1.534E-03	27.561	134.555	266.196	1300.040	2618.292	18871.655
1.641E-03	31.407	153.652	304.527	1499.500	3039.199	22631.146
1.768E-03	37.055	181.589	360.597	1790.573	3655.312	28012.823
2.009E-03	46.338	227.762	453.243	2271.641	4663.608	36551.798
2.424E-03	66.178	326.178	650.643	3292.677	6800.700	53603.806
2.751E-03	85.757	423.241	845.189	4293.329	8874.404	68674.644
2.855E-03	92.221	455.277	909.394	4623.287	9564.039	73572.594
2.978E-03	100.091	494.281	987.550	5024.599	10395.679	79435.145
3.124E-03	109.955	543.067	1085.306	5525.961	11433.271	86633.237
3.305E-03	122.697	606.299	1211.982	6174.925	12774.227	95774.342
3.537E-03	140.079	692.407	1384.458	7057.355	14594.396	107940.720
3.853E-03	165.557	818.610	1637.198	8348.362	17251.935	125308.159
4.329E-03	207.776	1027.607	2055.757	10482.343	21633.618	153188.254
5.222E-03	298.062	1474.618	2950.345	15032.030	30945.261	210520.006
5.927E-03	387.537	1917.366	3836.117	19520.557	40088.537	264261.297
6.152E-03	417.093	2063.608	4126.675	21002.326	43105.186	281689.211
6.416E-03	453.106	2241.786	4485.098	22806.600	46775.807	303201.387
6.732E-03	458.185	2464.823	4931.221	25063.678	51364.160	324659.590
7.121E-03	556.678	2754.164	5509.921	27989.602	57207.267	363662.234
7.621E-03	636.417	3148.596	6298.737	31974.993	65395.209	409541.094
8.303E-03	753.450	3727.439	7456.237	37818.393	77241.016	476099.969
9.532E-03	947.669	4687.929	9376.668	47503.679	98850.357	585022.984

MAGNESIUM SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
NUCLEUS MASS =  $1.00E-11$  GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT				
	5.00	1.00	0.50	0.10	0.05
1.859E-04	0.000	0.000	0.000	0.000	0.000
1.956E-04	0.015	0.020	0.021	0.022	0.022
2.090E-04	0.057	0.084	0.089	0.094	0.095
2.205E-04	0.101	0.159	0.172	0.184	0.187
2.285E-04	0.136	0.222	0.241	0.260	0.265
2.381E-04	0.181	0.307	0.337	0.367	0.374
2.496E-04	0.239	0.426	0.474	0.523	0.535
2.638E-04	0.318	0.599	0.679	0.761	0.783
2.765E-04	0.394	0.783	0.902	1.030	1.049
2.868E-04	0.460	0.948	1.102	1.280	1.306
2.990E-04	0.542	1.160	1.371	1.615	1.653
3.135E-04	0.644	1.443	1.734	2.087	2.139
3.312E-04	0.779	1.834	2.248	2.771	2.857
3.542E-04	0.965	2.404	3.021	3.851	3.993
3.860E-04	1.240	3.306	4.288	5.726	5.987
4.335E-04	1.698	4.930	6.678	9.589	10.147
5.226E-04	2.684	8.734	12.633	20.483	22.303
5.930E-04	3.657	12.914	19.791	37.152	42.328
6.154E-04	3.978	14.298	22.173	42.798	49.143
6.418E-04	4.367	15.992	25.109	49.916	57.806
6.733E-04	4.854	18.127	28.840	59.244	69.283
7.122E-04	5.483	20.919	33.775	72.079	82.337
7.621E-04	6.339	24.765	40.666	90.932	104.423
8.302E-04	7.591	30.480	51.068	121.322	149.435
9.328E-04	9.660	40.092	68.901	178.076	227.515
1.122E-03	14.068	60.983	108.539	319.445	435.770



1.277E-03	82.001	149.478	490.079	710.508	1220.209
1.325E-03	88.951	163.054	547.727	815.605	1442.029
1.382E-03	97.429	179.660	619.610	958.021	1730.316
1.450E-03	108.050	200.526	711.740	1099.735	2130.019
1.534E-03	121.938	227.692	834.165	1317.903	2713.095
1.642E-03	140.642	264.847	1005.157	1629.200	3620.052
1.768E-03	168.233	319.524	1262.245	2100.294	5170.037
2.009E-03	213.974	410.426	1699.050	2752.308	8232.342
2.424E-03	311.770	605.321	2652.962	4816.195	16270.225
2.751E-03	408.521	798.614	3624.194	6759.544	26205.870
2.855E-03	440.464	862.446	3944.504	7403.915	29670.192
2.978E-03	479.368	940.202	4335.349	8191.876	33884.824
3.124E-03	528.042	1037.506	4825.241	9181.539	39273.291
3.305E-03	591.148	1163.684	5461.451	10409.135	46401.508
3.536E-03	677.110	1325.587	6329.516	12228.629	56293.179
3.853E-03	803.135	1587.641	7603.238	14814.887	71020.605
4.329E-03	1011.953	2005.312	9715.801	19107.889	95687.129
5.222E-03	1458.476	2896.460	14234.130	28292.050	148576.973
5.927E-03	1900.887	3783.269	18705.928	37370.442	200257.658
6.151E-03	2046.999	4075.480	20182.447	40363.140	217272.954
6.415E-03	2225.011	4431.477	21980.769	44015.693	237926.926
6.730E-03	2447.824	4877.050	24230.887	48579.107	263663.984
7.120E-03	2736.845	5454.997	27148.369	54493.138	296868.680
7.619E-03	3130.778	6242.688	31122.928	62545.417	341859.387
8.300E-03	3708.734	7398.264	36950.426	74343.442	407339.583
9.327E-03	4667.274	9314.613	46607.566	93876.406	514878.676
1.125E-02	6719.718	13417.415	67262.736	135603.672	742068.477

MAGNESIUM SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-10 GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
4.090E-04	0.000	0.000	0.000	0.090	0.000	0.000
4.215E-04	0.057	0.078	0.082	0.085	0.085	0.086
4.502E-04	0.222	0.326	0.346	0.365	0.367	0.369
4.747E-04	0.397	0.623	0.672	0.717	0.723	0.728
4.923E-04	0.536	0.870	0.946	1.018	1.028	1.036
5.130E-04	0.713	1.206	1.326	1.441	1.457	1.470
5.377E-04	0.946	1.681	1.871	2.061	2.088	2.110
5.683E-04	1.263	2.374	2.688	3.013	3.060	3.099
5.956E-04	1.575	3.116	3.586	4.094	4.169	4.231
6.179E-04	1.843	3.781	4.405	5.098	5.203	5.290
6.441E-04	2.175	4.644	5.485	6.453	6.602	6.727
6.754E-04	2.597	5.796	6.960	8.353	8.574	8.759
7.141E-04	3.154	7.399	9.061	11.153	11.495	11.785
7.638E-04	3.925	9.751	12.236	15.566	16.134	16.624
8.316E-04	5.073	13.492	17.471	23.267	24.318	25.239
9.340E-04	7.007	20.282	27.421	39.141	41.469	43.771
1.126E-03	11.205	36.361	52.464	64.431	91.857	98.947
1.276E-03	15.421	54.323	83.040	154.429	175.323	197.603
1.326E-03	16.812	60.286	93.242	178.167	203.789	231.464
1.583E-03	18.507	67.601	105.847	208.164	240.047	274.994
1.451E-03	20.629	76.844	121.914	247.562	288.195	333.547
1.534E-03	23.382	88.974	143.235	301.907	355.608	417.022
1.642E-03	27.136	105.743	173.108	381.937	456.927	545.746
1.789E-03	32.650	130.757	218.393	511.303	625.454	768.146
2.010E-03	41.804	173.040	296.425	753.708	954.649	1229.533
2.424E-03	61.417	265.517	471.020	1360.369	1833.525	2600.749

2.751E-03	80.878	359.421	653.140	2099.253	3030.297	4975.099
2.855E-03	67.305	390.512	713.617	2349.222	3441.612	5625.667
2.978E-03	93.136	428.486	787.702	2561.474	3964.091	6958.468
3.124E-03	104.938	476.135	880.942	302.456	4647.328	8522.909
3.305E-03	117.652	538.092	1002.554	3596.513	5575.282	10787.575
3.537E-03	134.978	622.740	1169.216	4344.452	6902.668	14280.412
3.853E-03	160.391	747.212	1415.055	5472.777	8951.549	20182.527
4.329E-03	202.520	954.079	1824.919	7397.976	12534.979	31715.516
5.222E-03	292.660	1397.796	2706.795	11639.707	20643.344	61687.054
5.927E-03	382.035	1838.792	3585.932	15969.720	29155.452	99176.422
6.151E-03	411.555	1984.480	3876.451	17403.929	31982.890	111875.864
6.415E-03	447.522	2162.031	4230.609	19156.303	35447.093	127749.902
6.730E-03	492.546	2384.334	4674.158	21355.878	39807.479	148137.398
7.120E-03	550.954	2672.781	5249.839	24216.975	45494.573	175271.500
7.619E-03	630.572	3066.047	6034.923	28127.089	53287.227	213211.861
8.300E-03	747.394	3643.191	7187.378	33878.577	64778.646	270286.410
9.327E-03	941.162	4600.635	9099.671	43440.109	83927.662	367210.355
1.125E-02	1356.083	6651.111	13195.884	63954.758	125096.711	579111.602

MAGNESIUM SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-09 GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
8.812E-04	0.000	0.000	0.000	0.000	0.000	0.000
9.080E-04	0.240	0.328	0.344	0.357	0.359	0.361
9.700E-04	0.939	1.376	1.462	1.540	1.550	1.559
1.023E-03	1.689	2.641	2.847	3.040	3.066	3.087
1.061E-03	2.280	3.694	4.016	4.321	4.363	4.397
1.109E-03	3.040	5.135	5.641	6.131	6.199	6.254
1.158E-03	4.043	7.169	7.979	8.768	8.901	8.995
1.224E-03	5.409	10.154	11.491	12.878	13.078	13.243
1.289E-03	6.760	13.356	15.365	17.536	17.857	18.123
1.331E-03	7.924	16.237	18.906	21.874	22.321	22.694
1.388E-03	9.370	19.977	23.587	27.738	28.376	28.912
1.459E-03	11.213	24.988	29.990	35.977	36.922	37.720
1.536E-03	13.650	31.974	39.136	48.144	49.613	50.863
1.646E-03	17.034	42.259	53.000	67.370	69.818	71.927
1.792E-03	22.093	58.676	75.934	101.016	105.552	109.529
2.012E-03	30.648	88.603	119.701	170.565	180.664	189.755
2.420E-03	49.330	159.880	230.450	369.858	402.061	432.763
2.752E-03	68.247	240.188	366.766	679.393	770.149	866.480
2.897E-03	74.499	266.879	412.332	784.498	895.821	1015.487
2.979E-03	82.121	299.668	468.678	917.470	1056.070	1207.206
3.129E-03	91.675	341.153	540.608	1092.325	1269.072	1465.262
3.306E-03	104.091	395.686	636.213	1333.824	1567.585	1833.309
3.537E-03	121.053	471.206	770.405	1689.929	2016.634	2400.911
3.853E-03	146.009	584.083	974.254	2266.407	2764.138	3361.123
4.330E-03	187.531	775.368	1326.592	3348.516	4225.376	5411.681
5.222E-03	276.750	1195.015	2116.863	6063.171	8129.578	11424.314

5.927E-03	365.635	1623.061	2945.390	9383.916	13455.588	21730.994
6.152E-03	395.009	1764.872	3220.701	10508.283	15286.822	25416.313
6.415E-03	430.818	1938.190	3558.200	11913.785	17614.120	30314.551
6.731E-03	475.667	2155.819	3983.294	13720.374	20659.516	37062.938
7.120E-03	533.879	2439.026	4538.212	16129.071	24799.053	46804.302
7.619E-03	613.273	2826.291	5299.446	19506.685	30726.909	61781.615
8.300E-03	729.830	3396.329	6423.570	24609.971	39890.133	86997.754
9.327E-03	923.265	4344.856	8300.194	33334.501	55949.990	136083.434
1.125E-02	1337.701	6382.463	12344.832	52607.934	92403.750	263237.410

MAGNESIUM SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS =  $1.00E-08$  GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
1.898E-03	0.000	0.000	0.000	0.000	0.000	0.000
1.956E-03	1.060	1.448	1.519	1.580	1.588	1.595
2.090E-03	4.165	6.096	6.478	6.822	6.868	6.905
2.203E-03	7.504	11.721	12.637	13.488	13.604	13.697
2.285E-03	10.139	16.410	17.840	19.193	19.378	19.528
2.381E-03	13.535	22.835	25.082	27.258	27.559	27.806
2.476E-03	18.020	31.918	35.521	39.115	39.621	40.037
2.638E-03	24.138	45.270	51.223	57.400	58.291	59.025
2.765E-03	30.204	59.622	68.578	78.255	79.685	80.873
2.868E-03	35.434	72.543	84.455	97.699	99.693	101.354
2.989E-03	41.936	89.341	105.468	124.006	126.856	129.245
3.135E-03	50.240	111.874	134.246	161.009	165.232	168.795
3.315E-03	61.232	143.333	175.411	215.714	222.286	227.878
3.542E-03	76.519	189.713	237.883	302.277	313.238	322.678
3.860E-03	99.420	263.886	341.415	453.971	474.311	492.134
4.335E-03	138.231	399.395	539.401	768.150	813.399	854.192
5.226E-03	223.215	723.045	1041.738	1669.778	1814.640	1952.539
5.930E-03	309.622	1089.240	1662.627	3074.229	3482.550	3915.056
6.154E-03	338.193	1211.016	1870.177	3551.366	4052.320	4589.625
6.418E-03	373.049	1360.712	2127.106	4155.564	4779.222	5457.921
6.733E-03	416.765	1550.240	2455.325	4950.075	5745.906	6627.061
7.122E-03	473.614	1799.565	2891.909	6048.552	7101.309	8294.946
7.621E-03	551.341	2145.136	3505.232	7608.883	9141.141	10867.405
8.302E-03	665.801	2662.180	4437.854	10294.167	12538.105	15309.242
9.328E-03	856.449	3539.321	6050.845	15226.268	19181.261	24505.413
1.125E-02	1266.620	5466.536	9677.215	27613.696	36938.572	51693.997

MAGNESIUM SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-07 GM TEMPERATURE = 20C

RADIUS(CM)	SUPEKSATURATIUN IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
4.090E-03	0.000	0.000	0.000	0.000	0.000	0.000
4.215E-03	4.811	6.568	6.887	7.166	7.202	7.232
4.502E-03	18.917	27.672	29.406	30.965	31.172	31.340
4.747E-03	34.105	53.251	57.409	61.274	61.796	62.221
4.923E-03	46.108	74.591	81.084	87.226	88.065	88.748
5.129E-03	61.582	103.844	114.057	123.943	125.311	126.430
5.377E-03	82.037	145.236	161.616	177.958	180.260	182.149
5.683E-03	109.959	206.128	233.219	261.323	265.375	268.719
5.956E-03	137.668	271.645	312.426	356.482	362.995	368.401
6.179E-03	161.574	330.653	384.920	445.248	454.327	461.896
6.441E-03	191.306	407.416	480.919	565.401	578.386	589.270
6.754E-03	229.307	510.445	612.467	734.494	753.745	769.986
7.141E-03	279.641	654.379	800.760	984.624	1014.597	1040.105
7.638E-03	349.701	866.751	1086.720	1380.669	1430.691	1473.767
8.316E-03	454.740	1206.673	1561.013	2075.192	2168.070	2249.449
9.340E-03	632.950	1828.343	2468.913	3514.796	3721.549	3907.911
1.126E-02	1023.705	3315.140	4775.385	7650.078	8312.462	8942.756

MAGNESIUM SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS =  $1.00E-06$  GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
8.812E-03	0.000	0.000	0.000	0.000	0.000	0.000
9.080E-03	22.094	30.154	31.616	32.895	33.063	33.198
9.700E-03	86.913	127.103	135.062	142.218	143.169	143.938
1.023E-02	156.773	244.686	263.790	281.537	283.937	285.889
1.061E-02	211.964	342.817	372.650	400.866	404.720	407.861
1.105E-02	283.166	477.379	524.312	569.744	576.032	581.172
1.156E-02	377.321	667.849	745.146	818.265	828.846	837.530



POTASSIUM IODIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-12 GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
7.304E-05	0.000	0.000	0.000	0.000	0.000	0.000
7.431E-05	0.001	0.002	0.002	0.002	0.002	0.002
7.707E-05	0.005	0.006	0.006	0.006	0.006	0.006
8.038E-05	0.009	0.012	0.012	0.012	0.012	0.013
8.447E-05	0.015	0.020	0.021	0.021	0.021	0.021
8.975E-05	0.024	0.032	0.034	0.035	0.035	0.035
9.425E-05	0.032	0.045	0.047	0.050	0.050	0.050
9.751E-05	0.039	0.055	0.059	0.061	0.062	0.062
1.013E-04	0.047	0.069	0.073	0.077	0.078	0.078
1.059E-04	0.058	0.087	0.094	0.099	0.100	0.101
1.116E-04	0.072	0.114	0.123	0.132	0.133	0.134
1.168E-04	0.087	0.142	0.155	0.167	0.169	0.170
1.209E-04	0.099	0.167	0.183	0.200	0.202	0.204
1.259E-04	0.114	0.199	0.221	0.243	0.246	0.249
1.318E-04	0.134	0.243	0.273	0.304	0.309	0.313
1.391E-04	0.160	0.305	0.348	0.394	0.401	0.407
1.485E-04	0.197	0.398	0.463	0.537	0.548	0.557
1.615E-04	0.251	0.548	0.656	0.787	0.808	0.825
1.810E-04	0.343	0.829	1.035	1.313	1.360	1.402
2.178E-04	0.541	1.516	2.031	2.870	3.036	3.186
2.469E-04	0.755	2.307	3.321	5.476	6.022	6.567
2.562E-04	0.800	2.573	3.761	6.401	7.095	7.798
2.671E-04	0.878	2.902	4.314	7.618	8.529	9.468
2.802E-04	0.975	3.319	5.028	9.279	10.520	11.836
2.963E-04	1.100	3.868	5.986	11.652	13.431	15.391
3.170E-04	1.269	4.628	7.338	15.260	17.991	21.173

3.453E-04	1.516	5.756	9.392	21.260	25.889	31.747
3.879E-04	1.920	7.647	12.919	32.768	41.940	55.209
4.678E-04	2.772	11.722	20.721	61.994	86.462	131.815
5.308E-04	3.595	15.748	28.643	97.328	148.774	291.996
5.509E-04	3.865	17.076	31.264	109.244	170.205	351.337
5.745E-04	4.194	18.691	34.458	124.064	197.412	433.496
6.028E-04	4.603	20.707	38.459	142.993	232.925	552.291
6.376E-04	5.132	23.315	43.646	168.034	280.980	733.961
6.823E-04	5.848	26.857	50.708	202.804	349.290	1033.453
7.433E-04	6.892	32.028	61.043	254.662	453.671	1582.362
8.352E-04	8.609	40.548	78.111	341.919	633.335	2763.513
1.007E-03	12.248	58.626	114.389	530.266	1029.496	6146.277
1.143E-03	15.805	76.308	149.915	716.509	1426.552	10360.482
1.187E-03	16.978	82.137	161.627	777.925	1557.541	11761.396
1.238E-03	18.404	89.224	175.867	852.605	1716.840	13468.299
1.298E-03	20.185	98.076	193.651	945.853	1915.693	15589.283
1.374E-03	22.490	109.529	216.661	1066.438	2172.648	18293.683
1.470E-03	25.623	125.095	247.930	1230.150	2521.061	21876.941
1.601E-03	30.205	147.858	293.646	1469.143	3028.598	26912.502
1.799E-03	37.777	185.459	369.140	1862.870	3862.011	34747.584
2.170E-03	53.914	265.551	529.874	2698.011	5620.726	50035.620
2.463E-03	69.826	344.464	688.112	3514.773	7325.482	63144.369
2.557E-03	75.078	370.506	740.327	3784.031	7886.730	67390.431
2.666E-03	81.472	402.209	803.882	4111.417	8568.159	72454.181
2.797E-03	89.470	441.856	883.351	4520.290	9417.865	78645.376
2.959E-03	99.835	493.234	986.318	5049.354	10515.384	86475.079
3.167E-03	113.951	563.167	1126.483	5768.466	12004.163	96850.095
3.450E-03	134.640	665.689	1331.824	6820.084	14176.202	111583.589
3.877E-03	168.910	835.439	1671.790	8557.426	17754.398	135107.871
4.676E-03	242.180	1198.243	2398.129	12259.006	25350.371	183153.320
5.308E-03	314.762	1557.466	3116.944	15907.336	32797.708	227824.064
5.509E-03	338.736	1676.112	3354.342	17111.608	35254.280	242460.615
5.745E-03	367.946	1820.658	3643.543	18577.760	38242.758	260132.807
6.028E-03	404.505	2001.582	4005.496	20411.625	41977.670	282048.074
6.377E-03	451.943	2236.272	4474.972	22788.536	46814.114	310175.203

POTASSIUM IODIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-11 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
1.274E-04	0.000	0.000	0.000	0.000	0.000	0.000
1.601E-04	0.005	0.006	0.006	0.006	0.006	0.006
1.660E-04	0.016	0.020	0.020	0.021	0.021	0.021
1.732E-04	0.030	0.038	0.040	0.041	0.041	0.041
1.820E-04	0.050	0.065	0.068	0.070	0.071	0.071
1.934E-04	0.079	0.107	0.112	0.116	0.117	0.118
2.031E-04	0.109	0.152	0.160	0.167	0.168	0.168
2.101E-04	0.131	0.187	0.198	0.208	0.209	0.210
2.163E-04	0.160	0.234	0.249	0.263	0.264	0.266
2.282E-04	0.198	0.299	0.320	0.339	0.342	0.344
2.405E-04	0.250	0.392	0.423	0.453	0.457	0.460
2.516E-04	0.301	0.491	0.535	0.578	0.584	0.589
2.606E-04	0.345	0.580	0.638	0.694	0.702	0.709
2.712E-04	0.401	0.697	0.774	0.850	0.861	0.870
2.839E-04	0.473	0.850	0.962	1.070	1.086	1.098
2.997E-04	0.569	1.082	1.233	1.395	1.419	1.438
3.200E-04	0.704	1.422	1.653	1.913	1.952	1.985
3.478E-04	0.905	1.980	2.367	2.833	2.906	2.969
3.900E-04	1.258	3.034	3.781	4.779	4.949	5.095
4.692E-04	2.028	5.662	7.560	10.604	11.197	11.729
5.319E-04	2.806	8.779	12.585	20.460	22.401	24.310
5.520E-04	3.064	9.830	14.303	23.963	26.428	28.883
5.752E-04	3.378	11.136	16.473	28.583	31.807	35.079
6.037E-04	3.772	12.803	19.291	34.895	39.279	43.838
6.384E-04	4.283	15.010	23.092	43.928	50.192	58.931
6.830E-04	4.979	18.061	28.491	57.689	67.261	78.066

7.439E-04	5.999	22.682	36.761	80.627	96.741	116.265
8.357E-04	7.687	30.471	51.108	124.778	156.402	199.251
1.008E-03	11.283	47.475	83.273	237.649	320.936	458.876
1.144E-03	14.815	64.607	116.636	376.483	550.660	941.349
1.187E-03	15.985	70.273	127.703	423.455	629.741	1115.931
1.238E-03	17.404	77.184	141.241	482.093	730.305	1350.971
1.299E-03	19.178	85.841	158.253	557.322	861.891	1679.485
1.374E-03	21.474	97.078	180.400	657.364	1040.594	2161.405
1.470E-03	24.598	112.399	210.686	797.169	1295.975	2915.970
1.601E-03	29.169	134.873	255.245	1007.417	1689.253	4212.299
1.799E-03	36.728	172.115	329.295	1364.601	2374.223	6790.858
2.170E-03	52.844	251.695	487.964	2146.607	3912.613	13598.964
2.463E-03	68.746	330.350	645.172	2936.689	5505.079	22100.122
2.557E-03	73.995	356.316	697.080	3198.010	6032.915	24971.441
2.666E-03	80.385	387.936	760.303	3516.789	6678.120	28544.158
2.797E-03	88.379	427.491	839.407	3916.246	7488.172	33108.578
2.959E-03	98.740	478.766	941.966	4434.836	8541.597	39138.887
3.157E-03	112.050	548.598	1081.662	5142.023	9980.306	47493.165
3.450E-03	133.531	650.955	1286.444	6179.637	12093.705	59900.150
3.877E-03	167.788	820.510	1625.685	7899.439	15598.933	80612.979
4.676E-03	241.025	1182.904	2350.854	11575.447	23090.577	124836.944
5.307E-03	313.570	1541.912	3068.888	15210.223	30484.756	167751.812
5.508E-03	337.525	1660.452	3306.004	16410.189	32925.038	181967.467
5.744E-03	366.717	1804.863	3594.859	17871.497	35895.457	198981.494
6.027E-03	403.251	1985.605	3956.365	19699.673	39609.838	220286.572
6.375E-03	450.640	2220.036	4425.229	22069.686	44422.339	247740.309
6.823E-03	515.229	2539.533	5064.183	25297.809	50972.935	284678.486
7.432E-03	609.989	3008.233	6001.449	30029.953	60567.779	338864.453
8.352E-03	767.145	3785.478	7555.551	37870.073	76447.047	427361.816
1.007E-02	1103.647	5449.472	10882.238	54633.611	110351.733	613937.797
1.143E-02	1437.712	7101.063	14183.418	71240.239	143865.957	794876.039
1.187E-02	1548.087	7646.735	15274.070	76725.620	154933.332	85472.231

POTASSIUM IODIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-10 GM TEMPERATURE = 20C

RADIUS (CM)	SUPER SATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
3.390E-04	0.000	0.000	0.000	0.000	0.000	0.000
3.449E-04	0.017	0.021	0.022	0.022	0.023	0.023
3.577E-04	0.059	0.073	0.076	0.078	0.078	0.078
3.731E-04	0.114	0.145	0.150	0.155	0.155	0.156
3.921E-04	0.190	0.248	0.258	0.267	0.268	0.269
4.166E-04	0.304	0.409	0.428	0.444	0.447	0.448
4.375E-04	0.418	0.582	0.613	0.640	0.643	0.646
4.526E-04	0.507	0.721	0.762	0.799	0.804	0.808
4.704E-04	0.621	0.906	0.963	1.015	1.022	1.027
4.917E-04	0.771	1.160	1.242	1.317	1.328	1.336
5.182E-04	0.976	1.529	1.652	1.767	1.783	1.796
5.420E-04	1.182	1.924	2.099	2.267	2.290	2.309
5.614E-04	1.361	2.282	2.509	2.731	2.762	2.787
5.842E-04	1.587	2.754	3.056	3.350	3.401	3.436
6.117E-04	1.880	3.397	3.814	4.243	4.305	4.356
6.457E-04	2.272	4.314	4.917	5.560	5.654	5.732
6.895E-04	2.827	5.702	6.630	7.668	7.825	7.956
7.494E-04	3.673	7.997	9.559	11.432	11.728	11.978
8.402E-04	5.133	12.370	15.407	19.449	20.135	20.726
1.011E-03	8.386	23.392	31.198	43.631	46.039	48.196
1.146E-03	11.732	36.694	52.525	84.942	92.839	100.563
1.189E-03	12.844	41.189	59.837	99.644	109.670	119.599
1.240E-03	14.202	46.787	69.090	119.056	132.175	145.393
1.301E-03	15.908	53.957	81.143	145.620	163.450	181.842
1.375E-03	18.128	63.480	97.453	183.691	209.153	236.275
1.472E-03	21.165	76.782	120.704	241.785	280.658	323.982

1.603E-03	25.632	96.799	156.477	338.816	404.157	481.965
1.800E-03	33.060	130.868	218.873	526.086	654.009	823.021
2.171E-03	48.985	205.752	359.762	1006.849	1342.708	1876.245
2.464E-03	64.794	281.975	507.490	1603.595	2305.842	3769.677
2.557E-03	70.014	307.218	556.569	1805.815	2637.649	4450.709
2.667E-03	76.374	338.053	616.705	2058.715	3059.993	5361.245
2.798E-03	84.334	376.745	692.405	2383.854	3613.350	6623.659
2.960E-03	94.658	427.057	791.153	2817.311	4366.192	8458.256
3.167E-03	108.725	495.792	926.493	3424.859	5444.716	11299.107
3.450E-03	129.356	596.858	1126.127	4341.909	7111.438	16118.722
3.877E-03	163.552	764.800	1458.926	5907.151	10028.998	25572.603
4.676E-03	236.695	1124.941	2174.835	9355.849	16632.888	50224.424
5.307E-03	309.196	1482.723	2888.216	12874.611	23562.609	81119.239
5.508E-03	333.140	1600.915	3123.950	14039.997	25864.045	91583.711
5.744E-03	362.312	1744.947	3411.300	15463.773	28683.466	104662.370
6.027E-03	398.828	1925.271	3771.152	17250.684	32231.599	121457.180
6.375E-03	446.195	2159.231	4238.164	19574.677	36858.346	143800.119
6.823E-03	510.757	2478.182	4874.991	22750.298	43196.731	175023.900
7.432E-03	605.481	2946.219	5809.713	27420.509	52541.455	221970.520
8.352E-03	762.579	3722.567	7360.511	35182.696	68107.324	301597.914
1.007E-02	1058.931	5384.960	10681.834	51831.877	101557.448	475421.805
1.143E-02	1432.827	7035.288	13979.421	68377.264	134838.633	650045.180
1.187E-02	1543.130	7580.473	15066.780	73843.238	145833.975	707757.500

POTASSIUM IODIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-09 GM TEMPERATURE = 20C

RADIUS (CM)	SUPEKSATURATION IN PERCENT						
	5.00	1.00	0.50	0.10	0.05	0.01	
7.304E-04	0.000	0.000	0.000	0.000	0.000	0.000	
7.430E-04	0.071	0.088	0.091	0.093	0.093	0.093	
7.706E-04	0.243	0.304	0.314	0.323	0.324	0.325	
8.057E-04	0.473	0.602	0.624	0.642	0.644	0.646	
8.447E-04	0.794	1.035	1.076	1.112	1.116	1.120	
8.975E-04	1.274	1.711	1.789	1.858	1.867	1.874	
9.425E-04	1.758	2.442	2.570	2.684	2.699	2.711	
9.750E-04	2.137	3.032	3.205	3.360	3.380	3.397	
1.013E-03	2.622	3.817	4.057	4.275	4.304	4.327	
1.059E-03	3.263	4.903	5.248	5.565	5.608	5.642	
1.116E-03	4.143	6.479	6.999	7.488	7.555	7.609	
1.168E-03	5.029	8.177	8.920	9.634	9.732	9.813	
1.209E-03	5.803	9.720	10.684	11.626	11.760	11.867	
1.259E-03	6.780	11.755	13.043	14.331	14.513	14.663	
1.318E-03	8.048	14.538	16.321	18.155	18.419	18.636	
1.391E-03	9.756	18.513	21.099	23.856	24.260	24.595	
1.485E-03	12.180	24.554	28.547	33.014	33.690	34.254	
1.614E-03	15.887	34.582	41.332	49.418	50.696	51.774	
1.810E-03	22.314	53.768	66.959	84.486	87.459	90.017	
2.178E-03	36.726	102.425	136.548	190.735	201.208	210.575	
2.469E-03	51.689	161.679	231.322	373.274	407.677	441.245	
2.562E-03	56.662	181.727	263.856	438.285	481.971	525.122	
2.671E-03	62.750	206.731	305.076	524.190	581.361	638.791	
2.802E-03	70.406	238.800	358.851	641.836	719.551	799.427	
2.963E-03	80.391	281.468	431.740	810.601	921.576	1039.279	
3.170E-03	94.066	341.182	535.837	1068.378	1237.780	1425.545	

3.453E-03	114.229	431.235	696.352	1499.430	1784.073	2120.526
3.879E-03	147.835	584.919	977.075	2352.584	2889.504	3617.402
4.678E-03	220.132	923.872	1613.195	4476.270	5937.267	8217.716
5.308E-03	292.166	1270.615	2283.757	7149.123	10205.225	16387.447
5.509E-03	316.001	1385.528	2506.692	8055.571	11676.133	19319.505
5.745E-03	345.034	1525.993	2780.075	9190.171	13549.373	25229.855
6.028E-03	381.397	1702.392	3124.506	10650.307	16005.227	28635.895
6.376E-03	428.594	1931.909	3574.230	12599.140	19349.341	36405.594
6.823E-03	492.962	2245.919	4191.276	15334.467	24145.592	48544.993
7.433E-03	567.458	2708.057	5102.582	19470.275	31569.233	68948.128
8.352E-03	744.270	3477.033	6624.013	26544.721	44594.063	108788.302
1.007E-02	1080.210	5128.836	9905.065	42177.908	74179.520	212301.338
1.143E-02	1413.884	6773.805	13179.337	58200.903	105411.934	342234.090
1.187E-02	1524.120	7317.393	14262.350	63510.982	115794.455	386301.133



POTASSIUM IODIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-08 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
1.574E-03	0.000	0.000	0.000	0.000	0.000	0.000
1.601E-03	0.313	0.385	0.397	0.407	0.408	0.409
1.660E-03	1.067	1.334	1.377	1.414	1.419	1.423
1.732E-03	2.078	2.643	2.737	2.818	2.829	2.837
1.820E-03	3.498	4.551	4.732	4.888	4.908	4.925
1.934E-03	5.618	7.539	7.884	8.185	8.224	8.256
2.031E-03	7.769	10.777	11.343	11.844	11.911	11.964
2.101E-03	9.452	13.396	14.160	14.843	14.934	15.007
2.183E-03	11.611	16.888	17.948	18.909	19.037	19.141
2.262E-03	14.465	21.722	23.247	24.651	24.839	24.993
2.405E-03	18.395	28.752	31.058	33.224	33.519	33.760
2.515E-03	22.361	36.339	39.637	42.806	43.246	43.603
2.606E-03	25.830	43.241	47.529	51.725	52.310	52.789
2.712E-03	30.210	52.357	58.090	63.827	64.637	65.302
2.839E-03	35.905	64.837	72.788	80.966	82.140	83.108
2.997E-03	43.590	82.693	94.239	106.551	108.357	109.853
3.200E-03	54.505	109.871	127.732	147.717	150.738	153.260
3.478E-03	71.248	155.069	185.332	221.572	227.298	232.131
3.900E-03	100.331	241.751	301.040	379.769	393.116	404.598
4.692E-03	165.750	462.232	616.115	860.171	907.287	949.416
5.319E-03	233.972	731.934	1047.016	1687.939	1842.912	1993.960
5.520E-03	256.661	823.240	1195.024	1982.661	2179.672	2373.849
5.755E-03	284.455	937.195	1382.664	2372.716	2630.313	2888.732
6.036E-03	319.439	1083.456	1627.635	2906.849	3257.042	3616.410
6.384E-03	365.078	1278.216	1959.939	3673.415	4173.516	4702.914
6.830E-03	427.650	1551.034	2434.953	4844.884	5608.306	6452.361

7.439E-03	520.005	1962.901	3168.189	6804.950	8087.605	9598.611
8.327E-03	674.112	2666.696	4452.210	10596.302	13105.390	16368.995
1.008E-02	1006.155	4221.455	7366.711	20362.138	26942.700	37133.887
1.144E-02	1337.792	5815.729	10446.751	32564.701	46334.471	73821.224
1.187E-02	1447.437	6344.250	11471.093	36704.373	53018.646	86975.710

POTASSIUM IODIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-07 GM TEMPERATURE = 20C

RADIUS (UM)	SUPERSATURATION IN PERCENT						
	5.00	1.00	0.50	0.10	0.05	0.01	
3.390E-03	0.000	0.000	0.000	0.000	0.000	0.000	
3.449E-03	1.415	1.739	1.791	1.835	1.841	1.846	
3.577E-03	4.822	6.023	6.219	6.387	6.408	6.425	
3.731E-03	9.397	11.944	12.370	12.734	12.781	12.819	
3.921E-03	15.828	20.581	21.398	22.104	22.195	22.269	
4.106E-03	25.444	34.128	35.686	37.046	37.223	37.367	
4.375E-03	35.219	48.829	51.390	53.659	53.958	54.200	
4.526E-03	42.869	60.726	64.186	67.282	67.692	68.024	
4.703E-03	52.685	76.603	81.408	85.760	86.341	86.811	
4.917E-03	65.686	98.596	105.516	111.882	112.738	113.434	
5.102E-03	83.594	130.613	141.082	150.919	152.258	153.349	
5.419E-03	101.684	165.198	180.184	194.597	196.585	198.210	
5.614E-03	117.513	196.679	216.173	235.257	237.917	240.095	
5.842E-03	137.515	238.280	264.367	290.469	294.155	297.181	
6.117E-03	163.540	295.270	331.472	368.713	374.059	378.465	
6.457E-03	198.682	376.869	429.485	485.587	493.817	500.636	
6.895E-03	248.657	501.164	582.633	673.778	687.557	699.058	
7.494E-03	325.340	708.063	846.244	1011.688	1037.824	1059.884	
8.401E-03	458.722	1105.309	1376.350	1736.162	1797.146	1849.605	
1.011E-02	759.192	2117.169	2821.786	3938.667	4154.173	4346.834	
1.146E-02	1073.204	3357.542	4802.517	7739.080	8448.379	9139.357	
1.189E-02	1177.665	3777.589	5483.062	9093.363	9994.219	10882.507	

POTASSIUM IODIDE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-06 GM TEMPERATURE = 20C

RADIUS(CM)	SUPER SATURATION IN PERCENT						
	5.00	1.00	0.50	0.10	0.05	0.01	0.01
7.304E-03	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7.430E-03	6.484	7.967	8.204	8.405	8.431	8.452	8.452
7.706E-03	22.101	27.597	28.495	29.260	29.358	29.438	29.438
8.037E-03	43.081	54.743	56.692	58.359	58.575	58.748	58.748
8.447E-03	72.594	94.362	96.108	101.339	101.759	102.097	102.097
8.974E-03	116.746	156.547	163.687	169.920	170.736	171.394	171.394
9.425E-03	161.656	224.078	235.822	246.229	247.600	248.710	248.710
9.750E-03	196.818	278.742	294.617	308.820	310.701	312.225	312.225
1.013E-02	241.971	351.721	375.777	393.750	396.414	398.574	398.574
1.059E-02	301.751	452.852	484.625	513.853	517.786	520.980	520.980
1.116E-02	384.156	600.135	648.224	693.414	699.566	704.577	704.577
1.168E-02	467.436	759.305	826.172	894.409	903.548	911.013	911.013

ZINC SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-12 GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT						
	5.00	1.00	0.50	0.10	0.05	0.01	
7.548E-05	0.000	0.000	0.000	0.000	0.000	0.000	
7.744E-05	0.003	0.004	0.004	0.004	0.004	0.004	
8.187E-05	0.011	0.015	0.015	0.016	0.016	0.016	
8.755E-05	0.023	0.034	0.036	0.038	0.038	0.038	
9.239E-05	0.035	0.056	0.060	0.065	0.065	0.066	
9.586E-05	0.045	0.074	0.081	0.087	0.088	0.089	
9.993E-05	0.057	0.098	0.109	0.119	0.120	0.121	
1.046E-04	0.073	0.132	0.148	0.164	0.166	0.168	
1.108E-04	0.093	0.179	0.205	0.232	0.236	0.239	
1.162E-04	0.113	0.228	0.265	0.306	0.312	0.317	
1.206E-04	0.129	0.271	0.319	0.374	0.383	0.390	
1.257E-04	0.149	0.326	0.389	0.465	0.477	0.487	
1.319E-04	0.174	0.398	0.484	0.590	0.607	0.622	
1.395E-04	0.206	0.496	0.615	0.771	0.798	0.820	
1.492E-04	0.250	0.635	0.808	1.051	1.093	1.131	
1.625E-04	0.313	0.851	1.118	1.527	1.604	1.673	
1.826E-04	0.415	1.228	1.680	2.484	2.650	2.804	
2.202E-04	0.630	2.062	3.054	5.123	5.637	6.141	
2.499E-04	0.833	2.975	4.614	8.998	10.395	11.561	
2.593E-04	0.900	3.269	5.129	10.297	11.999	13.937	
2.704E-04	0.980	3.627	5.759	11.920	14.022	16.455	
2.837E-04	1.080	4.074	6.554	14.031	16.685	19.822	
3.001E-04	1.209	4.654	7.596	16.914	20.385	24.607	
3.212E-04	1.382	5.446	9.038	21.117	25.911	31.996	
3.499E-04	1.633	6.612	11.192	27.839	35.062	44.867	
3.932E-04	2.044	8.549	14.836	40.265	52.889	72.126	

4.742E-04	2.508	12.698	22.815	70.926	100.433	157.238
5.382E-04	3.741	16.781	30.859	107.097	164.738	327.532
5.586E-04	4.016	18.127	33.518	119.271	186.784	390.325
5.825E-04	4.348	19.764	36.759	134.386	214.695	476.860
6.112E-04	4.763	21.808	40.815	153.661	251.030	601.389
6.465E-04	5.258	24.450	46.073	179.124	300.077	790.888
6.919E-04	6.024	28.036	53.229	214.436	369.642	1101.710
7.537E-04	7.081	33.276	63.700	267.073	475.735	1668.108
8.470E-04	8.821	41.907	80.991	355.513	658.063	2880.076
1.022E-03	12.507	60.218	117.740	546.360	1059.638	6328.353
1.159E-03	16.110	78.131	153.730	735.037	1461.868	10597.793
1.203E-03	17.295	84.037	165.595	797.256	1594.560	12016.367
1.255E-03	18.743	91.217	180.022	872.913	1755.931	13744.775
1.317E-03	20.548	100.185	198.039	967.380	1957.367	15890.511
1.393E-03	22.865	111.789	221.351	1089.544	2217.672	18626.557
1.491E-03	26.057	127.561	253.033	1255.409	2570.624	22251.951
1.624E-03	30.701	150.625	299.354	1497.544	3084.797	27342.887
1.822E-03	38.373	188.726	375.851	1896.478	3929.142	35268.639
2.201E-03	54.726	269.869	538.735	2742.728	5711.154	50742.274
2.498E-03	70.853	349.865	699.102	3570.463	7438.652	64017.476
2.593E-03	76.176	376.259	752.021	3843.336	8007.387	68310.246
2.704E-03	82.657	408.350	816.435	4175.132	8697.963	73443.019
2.837E-03	90.762	448.574	896.978	4589.513	9559.076	79713.301
3.001E-03	101.269	500.648	1001.340	5125.731	10671.374	87643.245
3.211E-03	115.576	571.549	1143.405	5854.574	12180.202	98151.416
3.499E-03	136.546	675.446	1351.536	6920.464	14381.584	113078.491
3.931E-03	171.284	847.509	1696.135	8581.403	18008.270	136912.568
4.742E-03	245.555	1215.271	2432.405	12433.404	25707.498	185592.455
5.362E-03	319.134	1579.422	3161.060	16131.711	33256.531	230865.479
5.507E-03	343.437	1699.697	3401.735	17352.469	35746.695	245696.074
5.820E-03	373.048	1846.229	3694.907	18638.727	38775.984	263602.680
6.113E-03	410.115	2029.639	4061.834	20697.730	42561.906	285808.809
6.467E-03	458.202	2267.557	4537.764	23107.246	47464.495	314309.437
6.921E-03	523.755	2591.665	5186.441	26388.747	54134.326	352714.516
7.540E-03	619.556	3067.750	6136.197	31199.056	63900.464	408334.121
8.474E-03	779.595	3857.319	7717.092	39170.220	80061.217	499217.434

ZINC SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
NUCLEUS MASS = 1.00E-11 GM TEMPERATURE = 20C

RADIUS (UM)	SUPERSATURATION IN PERCENT						0.01
	5.00	1.00	0.50	0.10	0.05	0.00	
1.626E-04	0.000	0.000	0.000	0.030	0.000	0.000	0.000
1.668E-04	0.009	0.012	0.013	0.013	0.013	0.013	0.013
1.764E-04	0.056	0.049	0.051	0.055	0.054	0.054	0.054
1.866E-04	0.077	0.113	0.120	0.126	0.127	0.128	0.128
1.990E-04	0.120	0.189	0.204	0.218	0.220	0.221	0.221
2.065E-04	0.153	0.251	0.273	0.295	0.298	0.301	0.301
2.175E-04	0.196	0.335	0.369	0.404	0.408	0.412	0.412
2.258E-04	0.250	0.451	0.505	0.550	0.567	0.574	0.574
2.388E-04	0.322	0.616	0.703	0.794	0.808	0.819	0.819
2.504E-04	0.392	0.789	0.915	1.054	1.075	1.093	1.093
2.598E-04	0.451	0.942	1.106	1.294	1.323	1.367	1.367
2.709E-04	0.523	1.136	1.326	1.614	1.654	1.688	1.688
2.841E-04	0.614	1.397	1.692	2.057	2.116	2.166	2.166
3.005E-04	0.733	1.750	2.164	2.702	2.792	2.869	2.869
3.215E-04	0.894	2.260	2.854	3.701	3.847	3.974	3.974
3.502E-04	1.151	3.056	3.997	5.417	5.681	5.914	5.914
3.934E-04	1.523	4.469	6.103	8.884	9.453	9.972	9.972
4.744E-04	2.356	7.728	11.255	18.523	20.271	21.964	21.964
5.363E-04	3.171	11.246	17.306	32.840	37.540	42.644	42.644
5.826E-04	3.435	12.406	19.314	37.662	43.387	49.691	49.691
6.113E-04	3.765	13.828	21.785	43.718	50.789	58.693	58.693
6.466E-04	4.171	15.614	24.915	51.626	60.563	70.741	70.741
6.920E-04	4.695	17.946	29.048	62.473	74.177	87.847	87.847
7.538E-04	5.407	21.154	34.807	76.359	94.544	114.153	114.153
8.470E-04	6.447	25.912	43.482	103.892	128.281	159.366	159.366
	8.164	33.900	56.324	151.448	193.949	254.022	254.022

1.022E-04	11.816	51.229	91.241	269.585	368.704	537.477
1.160E-03	15.402	68.622	125.149	411.731	605.413	1043.633
1.203E-03	15.585	74.372	136.390	459.734	686.676	1226.033
1.255E-03	18.024	81.362	150.135	519.564	789.762	1470.638
1.317E-03	19.822	90.163	167.399	596.211	924.340	1811.185
1.393E-03	22.150	101.559	189.867	698.003	1106.715	2308.763
1.491E-03	25.316	117.092	220.583	840.085	1366.833	3084.770
1.624E-03	29.950	139.876	265.762	1053.557	1766.739	4412.925
1.825E-03	37.611	177.625	340.829	1415.931	2462.281	7044.996
2.201E-03	53.946	258.284	501.657	2208.834	4022.761	13970.716
2.498E-03	70.063	338.009	661.002	3009.698	5637.075	22594.724
2.593E-03	75.383	364.327	713.615	3274.573	6172.119	25505.697
2.704E-03	61.861	396.376	777.697	3597.698	6826.153	29129.231
2.857E-03	89.963	436.468	857.875	4002.579	7647.206	33755.582
3.001E-03	100.465	488.441	961.829	4528.213	8714.944	39868.941
3.211E-03	114.767	559.224	1103.426	5245.021	10173.192	48334.441
3.498E-03	135.730	662.976	1310.998	6296.764	12315.270	60906.394
3.931E-03	170.456	834.844	1654.869	8040.001	15868.173	81899.082
4.742E-03	244.695	1202.252	2389.961	11766.141	23461.364	126710.239
5.382E-03	318.237	1566.129	3117.851	15450.712	30956.735	170204.873
5.586E-03	342.524	1686.297	3358.223	16667.137	33430.362	184511.223
5.825E-03	372.114	1832.693	3651.045	18148.487	36441.537	201852.719
6.112E-03	409.150	2015.920	4017.521	20001.735	40206.810	223441.039
6.465E-03	457.192	2253.576	4492.834	22404.340	45085.521	251271.752
6.919E-03	522.670	2577.472	5140.586	25676.853	51726.239	288919.922
7.537E-03	618.737	3052.632	6090.765	30474.153	61452.536	343635.828
8.470E-03	778.062	3840.597	7666.300	38424.147	77550.251	433330.168
1.022E-02	1119.213	5527.577	11038.936	55417.110	111922.627	622430.859
1.160E-02	1457.902	7202.029	14385.807	72253.606	145901.654	805855.609



ZINC SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-10 GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
2.503E-04	0.000	0.000	0.000	0.000	0.000	0.000
3.595E-04	0.036	0.046	0.048	0.049	0.050	0.050
3.800E-04	0.136	0.165	0.195	0.202	0.204	0.204
4.064E-04	0.295	0.431	0.458	0.483	0.486	0.489
4.288E-04	0.463	0.725	0.782	0.836	0.844	0.850
4.449E-04	0.593	0.967	1.054	1.137	1.149	1.158
4.638E-04	0.759	1.296	1.429	1.560	1.579	1.594
4.865E-04	0.974	1.752	1.960	2.172	2.203	2.227
5.144E-04	1.262	2.407	2.742	3.097	3.149	3.192
5.394E-04	1.541	3.095	3.586	4.129	4.210	4.278
5.597E-04	1.779	3.707	4.350	5.081	5.193	5.287
5.836E-04	2.072	4.494	5.349	6.358	6.516	6.648
6.121E-04	2.442	5.535	6.702	8.135	8.365	8.560
6.474E-04	2.925	6.969	8.608	10.727	11.079	11.381
6.927E-04	3.589	9.047	11.452	14.762	15.338	15.837
7.544E-04	4.570	12.314	16.063	21.725	22.769	23.690
8.475E-04	6.208	18.168	24.761	35.877	38.134	40.187
1.022E-03	9.732	31.828	46.227	75.502	82.450	89.141
1.160E-03	13.239	46.834	71.872	134.932	153.613	173.656
1.204E-03	14.395	51.807	80.408	155.004	177.771	202.515
1.255E-03	15.802	57.898	90.931	180.276	208.421	239.453
1.317E-03	17.562	65.562	104.320	213.364	248.975	296.945
1.393E-03	19.842	75.652	122.054	258.866	305.570	359.254
1.491E-03	22.950	89.555	146.857	325.693	390.376	467.333
1.624E-03	27.510	110.265	184.394	433.435	531.046	653.543
1.825E-03	35.072	145.226	248.970	634.842	805.142	1038.941

2.201E-03	51.256	221.565	393.225	1137.753	1535.240	2182.385
2.498E-03	67.294	299.005	543.442	1748.847	2527.269	4161.910
2.593E-03	72.590	324.633	593.314	1955.552	2868.136	4871.172
2.704E-03	79.041	355.930	654.396	2213.664	3301.014	5816.012
2.837E-03	87.115	395.191	731.255	2545.051	3866.932	7121.277
3.001E-03	97.585	446.233	831.474	2986.222	4635.318	9011.409
3.211E-03	111.850	515.951	968.789	3603.897	5734.085	11928.026
3.498E-03	132.769	618.444	1171.281	4535.334	7429.339	16859.704
3.931E-03	167.440	788.735	1508.768	6123.855	10392.855	26501.657
4.742E-03	241.600	1153.873	2234.644	9621.800	17093.796	51574.654
5.382E-03	315.100	1516.605	2957.903	13189.531	24120.466	82923.073
5.586E-03	339.374	1636.429	3196.893	14371.085	26454.000	93538.521
5.825E-03	368.950	1782.451	3488.213	15814.574	29312.664	106803.689
6.112E-03	405.970	1965.265	3853.035	17626.228	32909.898	123833.659
6.465E-03	453.991	2202.456	4326.499	19982.380	37600.885	146493.193
6.919E-03	519.445	2525.813	4972.124	23201.885	44027.094	178156.426
7.537E-03	615.478	3000.313	5919.754	27936.551	53500.528	225737.484
8.470E-03	774.747	3787.389	7491.977	35805.802	69280.657	306454.543
1.022E-02	1115.752	5472.767	10859.223	52685.084	103192.749	482637.250
1.159E-02	1454.273	7145.952	14202.475	69459.644	136933.971	659697.711

ZINC SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-09 GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT						
	5.00	1.00	0.50	0.10	0.05	0.01	
7.547E-04	0.000	0.000	0.000	0.000	0.000	0.000	
7.744E-04	0.148	0.191	0.198	0.205	0.205	0.206	
8.187E-04	0.566	0.773	0.810	0.843	0.847	0.851	
8.755E-04	1.258	1.805	1.917	2.019	2.032	2.043	
9.238E-04	1.947	3.042	3.284	3.510	3.541	3.565	
9.586E-04	2.501	4.068	4.433	4.782	4.830	4.869	
9.993E-04	3.207	5.463	6.024	6.576	6.653	6.716	
1.048E-03	4.126	7.405	8.285	9.178	9.305	9.410	
1.108E-03	5.358	10.206	11.623	13.124	13.343	13.525	
1.162E-03	6.559	13.155	15.238	17.538	17.883	18.170	
1.206E-03	7.586	15.786	18.517	21.624	22.098	22.495	
1.257E-03	8.853	19.176	22.819	27.109	27.779	28.343	
1.319E-03	10.457	23.677	28.654	34.762	35.742	36.573	
1.395E-03	12.562	29.888	36.901	45.952	47.456	48.742	
1.492E-03	15.460	38.924	49.243	63.420	65.882	68.014	
1.625E-03	19.761	53.185	69.418	93.650	98.122	102.067	
1.826E-03	26.974	78.856	107.386	155.302	164.995	173.801	
2.202E-03	42.595	139.139	201.865	328.650	358.567	387.307	
2.499E-03	58.279	205.990	315.761	590.144	670.685	756.643	
2.593E-03	63.457	228.169	353.722	678.580	776.776	882.905	
2.704E-03	69.765	255.377	400.594	790.085	911.541	1044.674	
2.837E-03	77.666	289.755	460.319	936.258	1090.053	1261.533	
3.001E-03	87.924	334.887	539.568	1137.567	1339.437	1569.891	
3.212E-03	101.927	397.312	650.626	1433.633	1713.497	2043.869	
3.499E-03	122.513	490.514	819.085	1911.763	2334.509	2860.071	
3.932E-03	156.737	648.268	1109.686	2807.259	3545.514	546.575	

4.742E-03	230.212	993.997	1761.179	5049.216	6773.965	9529.602
5.382E-03	303.346	1346.269	2443.196	7786.622	11169.389	18059.325
5.586E-03	327.512	1462.961	2669.789	8713.285	12680.350	21109.230
5.825E-03	356.968	1605.561	2947.528	9871.417	14600.227	25162.370
6.112E-03	393.857	1784.596	3297.302	11359.740	17111.914	30746.591
6.465E-03	441.732	2017.549	3751.836	13343.694	20525.339	38807.671
6.919E-03	507.018	2336.051	4380.003	16125.122	25412.060	51201.792
7.537E-03	602.851	2804.803	5304.528	20326.594	32964.114	72072.267
8.470E-03	761.870	3584.664	6847.659	27507.526	46190.152	112701.113
1.022E-02	1102.508	5259.627	10172.848	43366.543	76220.633	217976.992
1.159E-02	1440.836	6927.548	13494.687	59614.927	107896.002	349856.613

ZINC SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-08 GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
1.626E-03	0.000	0.000	0.000	0.000	0.000	0.000
1.668E-03	0.651	0.839	0.870	0.898	0.901	0.904
1.764E-03	2.494	3.398	3.563	3.707	3.726	3.741
1.886E-03	5.462	7.953	8.447	8.893	8.952	9.000
1.990E-03	8.606	13.433	14.497	15.493	15.628	15.738
2.065E-03	11.066	17.981	19.592	21.132	21.344	21.517
2.153E-03	14.207	24.176	26.657	29.093	29.433	29.712
2.258E-03	18.300	32.814	36.708	40.662	41.225	41.688
2.388E-03	23.801	45.296	51.580	58.233	59.204	60.008
2.503E-03	29.173	58.466	67.715	77.923	79.453	80.727
2.598E-03	33.775	70.231	82.368	96.170	98.278	100.041
2.709E-03	39.455	85.403	101.613	120.693	123.672	126.180
2.841E-03	46.660	105.581	127.749	154.943	159.307	163.005
3.005E-03	56.126	133.463	164.748	205.093	211.791	217.521
3.215E-03	69.187	174.094	220.201	283.485	294.465	303.972
3.501E-03	88.604	238.352	311.022	419.361	439.335	456.946
3.934E-03	121.255	354.303	482.327	696.966	740.317	779.676
4.744E-03	192.173	627.433	909.861	1479.212	1613.225	1741.805
5.383E-03	263.699	931.723	1427.564	2662.764	3023.859	3408.321
5.587E-03	287.326	1032.743	1600.231	3063.297	3503.643	3978.367
5.826E-03	316.130	1156.755	1813.575	3568.648	4113.468	4709.076
6.113E-03	352.226	1313.564	2085.637	4231.548	4921.697	5689.270
6.466E-03	599.133	1519.597	2446.939	5145.123	6051.414	7082.831
6.920E-03	463.221	1604.841	2953.744	6489.690	7746.762	9225.499
7.538E-03	557.527	2231.174	3723.336	8662.819	10562.689	12914.670
8.470E-03	714.496	2953.712	5052.691	12736.810	16056.317	20532.731

1.022E-02	1051.990	4539.767	8037.963	22949.286	30708.958	43003.197
1.159E-02	1368.637	6159.652	11170.972	35447.142	50678.002	81286.502

ZINC SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-07 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
3.503E-03	0.000	0.000	0.000	0.000	0.000	0.000
3.594E-03	2.943	3.789	3.932	4.055	4.071	4.084
3.800E-03	11.285	15.369	16.111	16.761	16.846	16.914
4.064E-03	24.741	36.001	38.238	40.254	40.521	40.739
4.288E-03	39.017	60.872	65.690	70.197	70.809	71.308
4.449E-03	50.196	81.522	88.822	95.799	96.758	97.540
4.638E-03	64.483	109.676	120.923	131.967	133.508	134.771
4.865E-03	83.115	148.966	166.632	184.570	187.124	189.224
5.144E-03	108.175	205.789	234.323	264.528	268.937	272.586
5.393E-03	132.679	265.803	307.831	354.213	361.163	366.951
5.597E-03	153.677	319.444	374.627	437.366	446.945	454.960
5.835E-03	179.617	388.665	462.401	549.179	562.727	574.127
6.121E-03	212.540	480.783	581.687	705.432	725.286	742.111
6.474E-03	255.826	608.169	750.664	934.367	964.862	990.941
6.926E-03	315.607	793.952	1004.127	1292.480	1342.490	1385.788
7.544E-03	404.563	1088.057	1419.629	1913.659	2004.699	2084.952
8.475E-03	554.321	1619.374	2204.193	3183.898	3381.627	3561.098
1.022E-02	880.078	2872.770	4165.024	6767.023	7378.682	7965.306
1.160E-02	1209.324	4272.245	6544.464	12196.150	13845.221	15599.120

ZINC SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-06 GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
7.547E-03	0.000	0.000	0.000	0.000	0.000	0.000
7.744E-03	13.491	17.362	18.017	18.580	18.653	18.712
8.187E-03	51.756	70.463	73.862	76.839	77.229	77.544
8.755E-03	113.524	165.144	175.398	184.636	185.865	186.860
9.238E-03	179.104	279.360	301.459	322.137	324.945	327.231
9.585E-03	230.478	374.226	407.724	439.736	444.136	447.726
9.993E-03	296.155	503.611	555.238	605.930	613.006	618.802
1.048E-02	381.847	684.238	765.362	847.730	859.456	869.104
1.108E-02	497.153	945.587	1076.668	1215.418	1235.673	1252.437
1.162E-02	609.955	1221.747	1414.889	1628.021	1659.955	1686.552



CUPRIC SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-12 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
1.026E-04	0.000	0.000	0.000	0.000	0.000	0.000
1.053E-04	0.009	0.019	0.022	0.026	0.026	0.027
1.113E-04	0.029	0.067	0.081	0.096	0.098	0.100
1.167E-04	0.049	0.118	0.143	0.173	0.178	0.181
1.211E-04	0.066	0.162	0.199	0.244	0.251	0.257
1.262E-04	0.086	0.218	0.271	0.338	0.349	0.358
1.324E-04	0.111	0.291	0.368	0.468	0.484	0.498
1.400E-04	0.143	0.391	0.503	0.655	0.681	0.704
1.498E-04	0.187	0.533	0.700	0.943	0.987	1.022
1.632E-04	0.251	0.752	1.017	1.436	1.516	1.588
1.833E-04	0.354	1.135	1.596	2.419	2.593	2.754
2.210E-04	0.571	2.002	2.993	5.155	5.702	6.243
2.508E-04	0.776	2.910	4.588	9.210	10.727	12.458
2.603E-04	0.843	3.208	5.113	10.560	12.407	14.547
2.715E-04	0.924	3.569	5.754	12.238	14.512	17.188
2.848E-04	1.025	4.021	6.560	14.408	17.264	20.693
3.013E-04	1.154	4.607	7.616	17.358	21.068	25.644
3.224E-04	1.329	5.407	9.073	21.640	26.721	33.244
3.512E-04	1.582	6.582	11.247	28.468	36.041	46.416
3.947E-04	1.996	8.534	14.925	41.064	54.127	74.181
4.760E-04	2.865	12.713	22.963	71.998	102.193	160.491
5.402E-04	3.705	16.826	31.066	108.446	167.013	332.393
5.607E-04	3.981	18.182	33.744	120.711	189.231	395.740
5.847E-04	4.316	19.831	37.008	135.938	217.353	482.996
6.135E-04	4.734	21.889	41.094	155.354	253.956	608.490
6.490E-04	5.273	24.551	46.390	181.001	303.356	799.308

6.945E-04	6.004	28.165	53.598	216.566	373.411	1112.031
7.566E-04	7.069	33.441	64.145	269.575	480.234	1681.432
8.502E-04	8.821	42.135	81.561	358.642	663.812	2897.976
1.025E-03	12.534	60.581	118.581	550.850	1068.132	6356.153
1.164E-03	16.165	78.627	154.837	740.888	1473.163	10634.796
1.208E-03	17.362	84.577	160.790	803.550	1606.779	12056.384
1.260E-03	18.818	91.810	181.324	879.751	1769.274	13787.672
1.322E-03	20.630	100.845	199.475	974.912	1972.115	15939.000
1.398E-03	22.988	112.536	222.961	1097.965	2234.268	18683.000
1.496E-03	26.187	128.426	254.879	1265.042	2589.714	22319.000
1.630E-03	30.865	151.663	301.547	1508.956	3107.544	27430.465
1.832E-03	38.595	190.050	378.618	1910.831	3957.971	35392.250
2.209E-03	52.072	271.825	542.726	2763.350	5752.834	50940.602
2.508E-03	71.321	352.408	704.309	3597.273	7493.023	64293.389
2.603E-03	76.684	379.002	757.629	3872.186	8065.960	68617.446
2.714E-03	83.214	411.377	822.530	4206.461	8761.612	73774.580
2.848E-03	91.381	451.865	903.685	4623.954	9629.089	80084.073
3.012E-03	101.968	504.335	1008.838	5164.193	10749.609	88063.911
3.224E-03	116.384	575.775	1151.982	5898.510	12269.655	98638.625
3.512E-03	137.514	680.462	1361.696	6972.407	14487.406	113660.892
3.946E-03	172.517	853.837	1706.916	8746.641	18141.207	137654.279
4.760E-03	247.356	1224.405	2450.800	12527.115	25898.318	186673.834
5.403E-03	321.497	1591.342	3185.046	16253.527	33504.703	232254.566
5.608E-03	345.986	1712.537	3427.541	17483.574	36013.643	247189.443
5.848E-03	375.824	1860.190	3722.956	18981.154	39065.947	265226.094
6.136E-03	413.175	2045.005	4092.690	20854.303	42880.562	287588.652
6.491E-03	461.630	2284.745	4572.264	23282.224	47820.495	316302.801
6.947E-03	527.686	2611.536	5225.905	26588.693	54541.007	354978.828
7.568E-03	624.627	3091.071	6184.957	31435.690	64381.354	411015.625
8.506E-03	785.468	3886.695	7775.950	39467.890	80665.220	502542.383

CUPRIC SULFATE

TIME OF FUNDAMENTAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-11 G TEMPERATURE = 20C

SUPERSATURATION IN PERCENT

RADIUS(CM)	5.00	1.00	0.50	0.10	0.05	0.01
2.210E-04	0.000	0.000	0.000	0.000	0.000	0.000
2.208E-04	0.050	0.025	0.076	0.089	0.090	0.092
2.398E-04	0.103	0.235	0.281	0.332	0.339	0.346
2.514E-04	0.174	0.413	0.500	0.602	0.618	0.631
2.609E-04	0.234	0.570	0.697	0.821	0.875	0.895
2.720E-04	0.307	0.770	0.954	1.183	1.219	1.250
2.853E-04	0.399	1.035	1.300	1.642	1.698	1.747
3.017E-04	0.515	1.356	1.784	2.308	2.398	2.474
3.228E-04	0.682	1.815	2.501	3.340	3.490	3.620
3.515E-04	0.921	2.725	3.660	5.111	5.385	5.629
3.949E-04	1.316	4.159	5.806	8.673	9.268	9.813
4.762E-04	2.157	7.471	11.070	18.655	20.510	22.319
5.404E-04	2.979	11.043	17.255	33.600	38.675	44.267
5.609E-04	3.249	12.222	19.303	38.603	44.781	51.681
5.649E-04	3.577	13.660	21.814	44.852	52.461	61.084
6.136E-04	3.986	15.466	24.991	52.973	62.545	73.585
6.491E-04	4.515	17.823	29.178	64.064	76.520	91.232
6.946E-04	5.242	21.061	35.001	80.241	97.333	118.231
7.567E-04	6.201	25.860	43.763	106.168	131.674	164.626
8.310E-04	8.010	33.913	58.736	154.309	193.279	260.722
1.026E-03	11.689	51.373	91.918	273.612	374.972	547.991
1.164E-03	15.302	68.899	126.082	416.905	613.694	1059.079
1.208E-03	16.493	74.691	137.408	465.239	695.633	1243.199
1.260E-03	17.943	81.755	151.250	525.588	799.557	1490.006
1.322E-03	19.755	90.602	168.650	602.820	935.201	1833.510
1.398E-03	22.100	102.082	191.287	705.350	1118.992	2335.245

1.446L-03	25.290	117.752	222.233	848.555	1381.095	3117.333
1.630L-03	29.958	140.687	267.751	1003.628	1784.006	4422.419
1.832L-03	36.077	178.720	343.382	1428.704	2484.688	7106.029
2.209L-03	54.135	259.987	505.422	2227.519	4056.679	14077.838
2.507L-03	70.375	340.315	665.972	3034.382	5082.852	22758.111
2.603L-03	75.730	368.833	718.983	3301.239	6221.851	25686.516
2.714L-03	82.262	399.125	783.550	3626.785	6880.691	29333.402
2.840L-03	90.426	439.522	864.337	4034.708	7707.822	33990.442
3.012L-03	101.008	491.889	969.079	4504.300	8783.526	40142.098
3.224L-03	113.419	563.210	1111.751	5286.493	10252.596	48662.372
3.512L-03	136.542	667.751	1320.901	6346.157	12410.659	61317.133
3.946L-03	171.532	840.930	1667.389	8102.328	15990.141	82447.959
4.700L-03	246.336	1211.146	2408.086	11656.906	23640.433	127564.270
5.402L-03	320.443	1577.805	3141.530	15569.512	31192.608	171365.617
5.607L-03	344.916	1698.893	3383.748	16792.195	33684.936	182769.768
5.847L-03	374.733	1847.909	3678.810	18267.815	36718.319	203237.443
6.135L-03	412.053	2031.038	4048.089	20155.102	40512.559	224978.232
6.490L-03	460.482	2270.519	4527.040	22376.070	45428.060	253002.627
6.949L-03	529.443	2595.891	5179.750	25873.514	52118.866	290712.016
7.506L-03	623.246	3075.693	6137.210	30707.452	61919.435	346026.758
8.501L-03	783.793	3869.700	7724.820	38716.150	78139.482	436375.410
1.020L-02	1127.309	5269.626	11123.323	52840.920	112773.723	626895.625
1.109L-02	1468.856	7256.939	14495.888	72806.328	147011.012	811698.227

CUPRIC SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-10 G/M TEMPERATURE = 200

SUPERSATURATION IN PERCENT

RADIUS (UM)	2.00	1.00	0.50	0.10	0.05	0.01
4.761E-04	0.000	0.000	0.000	0.000	0.000	0.000
4.895E-04	0.120	0.257	0.300	0.348	0.355	0.360
5.166E-04	0.411	0.930	1.107	1.306	1.337	1.362
5.416E-04	0.694	1.636	1.978	2.378	2.440	2.492
5.620E-04	0.935	2.264	2.766	3.367	3.462	3.541
5.859E-04	1.231	3.070	3.796	4.692	4.836	4.957
6.146E-04	1.605	4.136	5.186	6.232	6.475	6.692
6.500E-04	2.094	5.599	7.142	9.211	9.562	9.864
6.954E-04	2.765	7.719	10.056	13.379	13.968	14.480
7.573E-04	3.755	11.045	14.795	20.566	21.651	22.813
8.308E-04	5.407	16.966	23.659	35.104	37.463	39.616
1.026E-03	8.964	30.869	45.575	76.119	83.487	90.627
1.164E-03	12.503	46.115	71.791	138.100	156.231	180.114
1.206E-03	13.676	51.156	80.494	156.910	183.427	210.425
1.260E-03	15.065	57.328	91.196	184.975	215.199	248.944
1.322E-03	16.662	65.101	104.786	218.940	257.008	300.235
1.398E-03	19.162	75.273	122.752	265.457	315.075	372.698
1.496E-03	22.294	89.315	147.840	333.520	401.713	483.541
1.630E-03	26.869	110.209	185.756	442.906	544.871	673.671
1.832E-03	34.505	145.460	250.915	646.811	822.860	1065.618
2.209E-03	50.815	222.420	396.355	1154.760	1561.113	2224.222
2.508E-03	66.974	300.432	547.733	1770.913	2561.807	4223.360
2.605E-03	72.310	326.256	597.989	1979.304	2905.586	4939.412
2.714E-03	76.611	357.791	659.240	2239.490	3342.080	5893.049
2.848E-03	86.946	397.352	736.986	2573.464	3912.624	7210.054
3.012E-03	97.495	448.762	837.973	3018.131	4687.185	9116.582

3.224E-03	111.865	519.031	970.332	3640.599	5794.628	12057.654
3.512E-03	132.947	622.304	1160.370	4579.170	7502.984	17028.602
3.940E-03	167.683	793.893	1520.429	6179.635	10489.180	26745.310
4.760E-03	242.608	1161.817	2251.841	9704.393	17240.961	52006.753
5.402E-03	316.670	1527.321	2980.626	13299.270	24320.792	83584.375
5.607E-03	341.131	1648.063	3221.442	14489.845	26672.062	94278.193
5.847E-03	370.932	1795.202	3514.991	15944.332	29552.376	107639.009
6.132E-03	408.236	1979.415	3882.604	17769.789	33177.000	124793.003
6.490E-03	456.625	2218.422	4359.689	20143.913	37903.472	147617.324
6.945E-03	522.581	2544.255	5010.254	23387.977	44378.292	179507.656
7.266E-03	619.320	3022.392	5965.146	28128.802	53923.730	227438.115
8.502E-03	778.841	3815.503	7549.419	36088.244	69824.368	308747.238
1.025E-02	1123.463	5513.813	10942.501	53096.342	103995.460	486254.836
1.164E-02	1464.585	7199.849	14311.431	69999.330	137994.395	664612.383

CUPRIC SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-09 GM TEMPERATURE = 20C

SUPERSATURATION IN PERCENT

RADIUS (CM)	2.00	1.00	0.50	0.10	0.05	0.01
1.026E-03	0.000	0.000	0.000	0.000	0.000	0.000
1.053E-03	0.511	1.094	1.279	1.479	1.508	1.533
1.113E-03	1.761	3.970	4.722	5.369	5.697	5.803
1.167E-03	2.978	7.001	8.457	10.157	10.420	10.641
1.211E-03	4.015	9.701	11.838	14.398	14.800	15.139
1.262E-03	5.301	13.175	16.272	20.091	20.704	21.222
1.324E-03	6.924	17.761	22.272	28.017	28.961	29.766
1.400E-03	9.051	24.122	30.734	39.583	41.083	42.373
1.478E-03	11.980	33.336	43.383	57.626	60.144	62.334
1.552E-03	16.323	47.856	64.030	88.626	93.478	97.597
1.633E-03	23.601	73.918	102.730	152.164	162.298	171.540
1.710E-03	39.368	135.194	199.266	331.564	363.280	393.930
1.798E-03	55.199	203.117	315.723	604.176	690.890	784.615
1.893E-03	80.423	225.617	354.429	695.836	801.487	917.119
1.995E-03	111.786	253.180	402.102	810.808	941.129	1082.709
2.105E-03	147.752	287.962	462.730	960.833	1125.115	1310.395
2.224E-03	190.094	333.577	543.023	1166.612	1380.931	1628.018
2.352E-03	249.209	392.611	655.362	1466.156	1763.016	2113.969
2.488E-03	336.956	480.651	825.543	1953.579	2394.960	2947.163
2.642E-03	464.444	649.729	1118.796	2860.230	3623.163	4662.082
2.814E-03	644.481	958.210	1775.692	5124.842	6887.875	9711.092
3.005E-03	902.174	1353.201	2463.032	7885.170	11322.115	18325.993
3.217E-03	1255.224	1470.391	2691.390	8819.464	12846.113	21405.238
3.452E-03	1750.206	1614.488	2971.281	9987.016	14782.201	25496.541
3.710E-03	2433.377	1794.898	3323.757	11487.281	17314.651	31131.514
4.000E-03	3341.616	2024.639	3783.806	13486.950	20755.814	39263.384

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6.945E-03	507.404	2350.584	4414.793	16290.219	25681.693	51763.320
7.566E-03	603.571	2622.930	5346.418	20524.341	33292.875	72805.387
8.502E-03	764.208	3608.771	6901.394	27760.788	46627.638	113760.563
1.025E-02	1107.460	5296.583	10252.083	43741.554	76883.157	219841.553
1.164E-02	1448.386	6977.310	13599.619	60114.167	108801.030	352709.227



CUPRIC SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-08 GM TEMPERATURE = 20C

SUPERSATURATION IN PERCENT

RADIUS (UM)	5.00	1.00	0.50	0.10	0.05	0.01
2.210E-03	0.000	0.000	0.000	0.000	0.000	0.000
2.268E-03	2.277	4.868	5.687	6.574	6.705	6.813
2.398E-03	7.856	17.688	21.028	24.789	25.357	25.831
2.514E-03	13.304	31.225	37.699	45.260	46.430	47.411
2.609E-03	17.966	43.295	52.810	64.199	65.988	67.495
2.720E-03	23.718	56.851	72.646	89.655	92.378	94.684
2.853E-03	31.008	79.496	99.528	125.130	129.334	132.917
3.017E-03	40.577	107.965	137.492	176.961	183.648	189.396
3.228E-03	53.776	149.402	194.329	257.938	269.172	276.943
3.515E-03	73.367	214.843	287.282	398.184	418.955	437.347
3.949E-03	106.333	332.557	461.897	683.376	728.697	770.006
4.762E-03	177.923	610.209	898.846	1492.887	1634.919	1772.011
5.404E-03	250.118	919.394	1428.112	2726.555	3115.161	3534.109
5.608E-03	273.955	1021.881	1604.171	3141.633	3615.211	4132.128
5.849E-03	303.014	1147.516	1821.189	3662.642	4246.992	4893.433
6.136E-03	339.415	1306.160	2097.358	4342.982	5079.901	5908.510
6.491E-03	386.707	1514.426	2463.438	5276.796	6238.650	7343.940
6.946E-03	451.308	1802.469	2976.129	6646.230	7970.274	9540.435
7.566E-03	546.357	2232.657	3753.616	8852.534	10835.703	13306.129
8.502E-03	704.544	2961.292	5095.155	12977.326	16407.371	21052.076
1.026E-02	1044.635	4560.041	8105.355	23293.494	31224.934	43819.523
1.164E-02	1363.863	6192.474	11242.927	35896.453	51371.136	82486.194

CUPRIC SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS = 1.00E-07 GM TEMPERATURE = 20C

RADIUS (CM)	SUPERSATURATION IN PERCENT					
	5.00	1.00	0.50	0.10	0.05	0.01
4.761E-03	0.000	0.000	0.000	0.000	0.000	0.000
4.682E-03	10.366	22.141	22.862	29.893	30.487	30.980
3.165E-03	35.786	80.507	95.694	112.785	115.367	117.520
3.416E-03	60.636	142.197	171.647	206.033	211.350	215.811
3.620E-03	61.911	197.236	240.534	292.340	300.479	307.333
3.859E-03	108.182	268.209	331.012	408.402	420.799	431.294
6.146E-03	141.495	362.467	453.703	570.261	589.394	605.698
6.500E-03	185.257	492.539	627.099	806.875	837.323	863.491
6.924E-03	245.667	682.017	886.897	1176.800	1227.975	1272.481
7.573E-03	335.515	981.550	1312.144	1817.961	1912.643	1996.460
8.508E-03	486.638	1520.966	2111.913	3122.919	3329.642	3518.001
1.026E-02	613.493	2795.159	4115.990	6830.788	7479.063	8104.495
1.164E-02	1147.221	4217.161	6548.613	12489.341	14263.784	16174.483

CUPRIC SULFATE

TIME OF CONDENSATIONAL GROWTH IN SECONDS  
 NUCLEUS MASS =  $1.00E-06$  GM TEMPERATURE = 20C

RADIUS(CM)	SUPERSATURATION IN PERCENT				
	5.00	1.00	0.50	0.10	0.05
1.020E-02	0.000	0.000	0.000	0.000	0.000
1.022E-02	47.676	101.795	116.894	137.411	140.143
1.113E-02	164.640	370.249	440.054	518.605	530.470
1.167E-02	279.042	654.129	789.531	947.604	972.046
					0.000
					142.405
					540.366
					992.550

## LITERATURE CITED

1. Low, R. D. H., 1969, A Comprehensive Report on Nineteen Condensation Nuclei, Part I: Equilibrium Growth and Physical Properties, ECOM-5249, U.S. Army Atmospheric Sciences Laboratory, 553 pp.
2. Langmuir, Irving, 1915, "The Dissociation of Hydrogen into Atoms, Part II," J. Am. Chem. Soc., 37, 417-458.
3. Howell, W. E., 1949, "The Growth of Cloud Drops in Uniformly Cooled Air," J. Meteor., 6, 134-139.
4. Best, A. C., 1951, "The Size of Cloud Droplets in Layer-Type Clouds," Quart. J. Roy. Meteor. Soc., 77, 241-248.
5. Squires, P., 1952, "The Growth of Cloud Drops by Condensation," Austral. J. Sci. Res., 5, 59-86.
6. Keith, C. H., and A. B. Arons, 1954, "The Growth of Sea-Salt Particles by Condensation of Atmospheric Water Vapor," J. Meteor., 11, 173-184.
7. Mason, B. J., 1957, The Physics of Clouds, Oxford Univ. Press, 481 pp.
8. Mordy, W., 1959, "Computations of the Growth by Condensation of a Population of Cloud Droplets," Tellus, 11, 16-44.
9. Neiburger, M., and C. W. Sien, 1960, "Computation of the Growth of Cloud Drops by Condensation Using an Electronic Digital Computer," Physics of Precipitation, American Geophysical Union, 191-210.
10. Fletcher, N. H., 1962, The Physics of Rainclouds, Cambridge Univ. Press, 386 pp.
11. Borovikov, A. M., A. Kh. Khrigian, et al., 1963, Cloud Physics, Israel Program for Scientific Translations, pp. 392.
12. Aleksandrov, E. L., L. M. Levin, and Yu. S. Sedunov, 1967, "Condensation Growth of a Solution Droplet," Izv., Atmospheric and Oceanic Physics, 3(8), translation, 506-511.
13. Silverman, B. A., and B. A. Kunkel, 1970, "A Comparison of the Warm Fog Clearing Capabilities of Some Hygroscopic Materials," J. of Applied Meteor., V. 9, pp 634-638.
14. Evers, H. R., 1965, Elements of Cloud Physics, The Univ. of Chicago Press, 191 pp.

15. Robinson, R. A., and R. H. Stokes, 1959, Electrolyte Solutions, 2nd ed., Butterworths Sci. Publ., London, 559 pp.
16. Reith, C., 1957, "On a Special Aspect of the Condensation Process and its Importance in the Treatment of Cloud Particle Growth," Tellus, 9, 572, 577.
17. Fukuta, N., and L. A. Walter, 1970, Study of Basic Theories of Water Condensation, Final Report, Univ. of Denver, 49 pp.
18. Kennard, Earle H., 1938, Kinetic Theory of Gases, McGraw-Hill, 483 pp.
19. Fuchs, N. A., 1959, Evaporation and Droplet Growth in Gaseous Media, translation, Pergamon Press, 72 pp.
20. Frisch, H. L., and F. C. Collins, 1952, "Diffusional Processes in the Growth of Aerosol Particles," J. Chem. Phys., 20, 1797-1803.
21. Low, R. D. H., 1969, "A Generalized Equation for the Solution Effect in Droplet Growth," J. Atmos. Sci., 26, 608-611.
22. Jiusto, J. E., 1967, Nucleation Factors in the Development of Clouds, Ph. D. dissertation, Penn. State Univ., 124 pp.
23. Dennis, W. L., 1960, "The Growth of Hygroscopic Drops in a Humid Air Stream," Trans. Faraday Soc., Discussion, 30, 78-85.
24. Ye, J. D., 1962, "An Experimental Study on Artificial Condensation Nuclei," Acta Meteorologica Sinica, 32(3), AFCRL translation, 1968, 13 pp.

### ATMOSPHERIC SCIENCES RESEARCH PAPERS

1. Webb, W.L., "Development of Droplet Size Distributions in the Atmosphere," June 1954.
2. Hanson, F. V., and H. Rachele, "Wind Structure Analysis and Forecasting Methods for Rockets," June 1954.
3. Webb, W. L., "Net Electrification of Water Droplets at the Earth's Surface," *J. Meteorol.*, December 1954.
4. Mitchell, R., "The Determination of Non-Ballistic Projectile Trajectories," March 1955.
5. Webb, W. L., and A. McPike, "Sound Ranging Technique for Determining the Trajectory of Supersonic Missiles," #1, March 1955.
6. Mitchell, R., and W. L. Webb, "Electromagnetic Radiation through the Atmosphere," #1, April 1955.
7. Webb, W. L., A. McPike, and H. Thompson, "Sound Ranging Technique for Determining the Trajectory of Supersonic Missiles," #2, July 1955.
8. Barichivich, A., "Meteorological Effects on the Refractive Index and Curvature of Microwaves in the Atmosphere," August 1955.
9. Webb, W. L., A. McPike and H. Thompson, "Sound Ranging Technique for Determining the Trajectory of Supersonic Missiles," #3, September 1955.
10. Mitchell, R., "Notes on the Theory of Longitudinal Wave Motion in the Atmosphere," February 1956.
11. Webb, W. L., "Particulate Counts in Natural Clouds," *J. Meteorol.*, April 1956.
12. Webb, W. L., "Wind Effect on the Aerobee," #1, May 1956.
13. Rachele, H., and L. Anderson, "Wind Effect on the Aerobee," #2, August 1956.
14. Beyers, N., "Electromagnetic Radiation through the Atmosphere," #2, January 1957.
15. Hansen, F. V., "Wind Effect on the Aerobee," #3, January 1957.
16. Kershner, J., and H. Bear, "Wind Effect on the Aerobee," #4, January 1957.
17. Hoidale, G., "Electromagnetic Radiation through the Atmosphere," #3, February 1957.
18. Querfeld, C. W., "The Index of Refraction of the Atmosphere for 2.2 Micron Radiation," March 1957.
19. White, Lloyd, "Wind Effect on the Aerobee," #5, March 1957.
20. Kershner, J. G., "Development of a Method for Forecasting Component Ballistic Wind," August 1957.
21. Layton, Ivan, "Atmospheric Particle Size Distribution," December 1957.
22. Rachele, Henry and W. H. Hatch, "Wind Effect on the Aerobee," #6, February 1958.
23. Beyers, N. J., "Electromagnetic Radiation through the Atmosphere," #4, March 1958.
24. Prosser, Shirley J., "Electromagnetic Radiation through the Atmosphere," #5, April 1958.
25. Armendariz, M., and P. H. Taft, "Double Theodolite Ballistic Wind Computations," June 1958.
26. Jenkins, K. R. and W. L. Webb, "Rocket Wind Measurements," June 1958.
27. Jenkins, K. R., "Measurement of High Altitude Winds with Loki," July 1958.
28. Hoidale, G., "Electromagnetic Propagation through the Atmosphere," #6, February 1959.
29. McLardie, M., R. Helvey, and L. Traylor, "Low-Level Wind Profile Prediction Techniques," #1, June 1959.
30. Lamberth, Roy, "Gustiness at White Sands Missile Range," #1, May 1959.
31. Beyers, N. J., B. Hinds, and G. Hoidale, "Electromagnetic Propagation through the Atmosphere," #7, June 1959.
32. Beyers, N. J., "Radar Refraction at Low Elevation Angles (U)," Proceedings of the Army Science Conference, June 1959.
33. White, L., O. W. Thiele and P. H. Taft, "Summary of Ballistic and Meteorological Support During IGY Operations at Fort Churchill, Canada," August 1959.
34. Hainline, D. A., "Drag Cord-Aerovane Equation Analysis for Computer Application," August 1959.
35. Hoidale, G. B., "Slope-Valley Wind at WSMR," October 1959.
36. Webb, W. L., and K. R. Jenkins, "High Altitude Wind Measurements," *J. Meteorol.*, 16, 5, October 1959.

37. White, Lloyd. "The Aerobee in the Stratosphere." #9, October 1958.
38. Webb, W. L. "Wind Effects on the Aerobee." #3, High Altitude Acoustic Sensing System, November 1959.
39. Webb, W. L. and K. R. Jenkins. "Application of Meteorological Rocket Systems." *J. Geophys. Res.*, 64, 11, November 1959.
40. Traylor, Larry. "Wind Effects on the Aerobee." #10, February 1960.
41. Helvey, R. A. "Low-Level Wind Profile Prediction Techniques." #2, February 1960.
42. Webb, W. L. and K. R. Jenkins. "Rocket Sounding of High-Altitude Parameters." *Proc. GM Rel. Symp.*, Dept. of Defense, February 1960.
43. Armendariz, M., and H. H. Menahan. "A Comparison Between the Double Theodolite and Single-Theodolite Wind Measuring Systems." April 1960.
44. Jenkins, K. R. and P. H. Tait. "Weather Elements in the Tularosa Basin." July 1960.
45. Beyers, N. J. "Preliminary Radar Performance Data on Passive Rocket-Borne Wind Sensors." *IRE TRANS. MIL ELECT.*, MIL-4, 2-3, April-July 1960.
46. Webb, W. L. and K. R. Jenkins. "Speed of Sound in the Stratosphere." June 1960.
47. Webb, W. L., K. R. Jenkins and G. Q. Clark. "Rocket Sounding of High Atmosphere Meteorological Parameters." *IRE Trans. Mil. Elect.*, MIL-4, 2-3, April-July 1960.
48. Helvey, R. A. "Low-Level Wind Profile Prediction Techniques." #3, September 1960.
49. Beyers, N. J., and C. W. Thiele. "Meteorological Wind Sensors." August 1960.
50. Arnajo, Larry. "Determination of Trajectories Using Range Data from Three Non-collinear Radar Stations." September 1960.
51. Carnes, Patsy Sue. "Temperature Variations in the First 200 Feet of the Atmosphere in an Arid Region." July 1961.
52. Springer, H. S., and R. O. Olsen. "Launch Noise Distribution of Nike-Zeus Missiles." July 1961.
53. Thiele, O. W. "Density and Pressure Profiles Derived from Meteorological Rocket Measurements." September 1961.
54. Diamond, M. and A. B. Gray. "Accuracy of Missile Sound Ranging." November 1961.
55. Lamberth, R. L. and D. R. Veitch. "Variability of Surface Wind in Short Distances." #1, October 1961.
56. Swanson, R. N. "Low-Level Wind Measurements for Ballistic Missile Application." January 1962.
57. Lamberth, R. L. and J. H. Grace. "Gustiness at White Sands Missile Range." #2, January 1962.
58. Swanson, R. N. and M. M. Hoidale. "Low-Level Wind Profile Prediction Techniques." #4, January 1962.
59. Rachele, Henry. "Surface Wind Model for Unguided Rockets Using Spectrum and Cross Spectrum Techniques." January 1962.
60. Rachele, Henry. "Sound Propagation through a Windy Atmosphere." #2, February 1962.
61. Webb, W. L. and K. R. Jenkins. "Sonic Structure of the Mesosphere." *J. Acous. Soc. Amer.*, 34, 2, February 1962.
62. Tourin, M. H. and M. M. Hoidale. "Low-Level Turbulence Characteristics at White Sands Missile Range." April 1962.
63. Miers, Bruce T. "Mesospheric Wind Reversal over White Sands Missile Range." March 1962.
64. Fisker, E., R. Lee and H. Rachele. "Meteorological Effects on an Acoustic Wave within a Sound Ranging Array." May 1962.
65. Walter, E. L. "Six Variable Ballistic Model for a Rocket." June 1962.
66. Webb, W. L. "Detailed Acoustic Structure Above the Tropopause." *J. Applied Meteorol.*, 1, 2, June 1962.
67. Jenkins, K. R. "Empirical Comparisons of Meteorological Rocket Wind Sensors." *J. Appl. Meteorol.*, June 1962.
68. Lamberth, Roy. "Wind Variability Estimates as a Function of Sampling Interval." July 1962.
69. Rachele, Henry. "Surface Wind Sampling Periods for Unguided Rocket Impact Prediction." July 1962.
70. Traylor, Larry. "Coriolis Effects on the Aerobee-I Sounding Rocket." August 1962.
71. McCoy, J., and C. Q. Clark. "Meteorological Rocket Thermometry." August 1962.
72. Rachele, Henry. "Real-Time Prelaunch Impact Prediction System." August 1962.

72. ... N. J., O. W. Thiele, and N. K. Wagner. "Performance Characteristics of Meteorological Rocket Wind and Temperature Sensors." October 1962.
73. ... and R. Price. "Some Errors Associated with Acoustical Wind Measurements through a Layer." October 1962.
74. Armendariz, M., E. Fisher, and J. Serna. "Wind Shear in the Jet Stream at WS-MR." November 1962.
75. Armendariz, M., F. Hansen, and S. Carnes. "Wind Variability and its Effect on Rocket Impact Prediction." January 1963.
76. Querfeld, C., and Wayne Yunker. "Pure Rotational Spectrum of Water Vapor. I: Table of Line Parameters." February 1963.
77. Woo, W. L. "Acoustic Component of Turbulence." *J. Applied Meteorol.*, 2, 2, April 1963.
78. Beyers, N. and L. Engberg. "Seasonal Variability in the Upper Atmosphere." May 1963.
79. Williamson, L. E. "Atmospheric Acoustic Structure of the Sub-polar Fall." May 1963.
80. Lamberth, Roy and D. Veith. "Upper Wind Correlations in Southwestern United States." June 1963.
81. Sandlin, E. "An analysis of Wind Shear Differences as Measured by AN FPS-16 Radar and AN GMD-1B Rawinsonde." August 1963.
82. Diamond, M. and R. P. Lee. "Statistical Data on Atmospheric Design Properties Above 30 km." August 1963.
83. Thiele, O. W. "Mesospheric Density Variability Based on Recent Meteorological Rocket Measurements." *J. Applied Meteorol.*, 2, 5, October 1963.
84. Diamond, M., and O. Esserwanger. "Statistical Data on Atmospheric Design Properties to 30 km." *Astro. Aero. Engr.*, December 1963.
85. Hansen, F. V. "Turbulence Characteristics of the First 60 Meters of the Atmosphere." December 1963.
86. Morris, J. E., and B. T. Miers. "Circulation Disturbances Between 20 and 70 kilometers Associated with the Sudden Warming of 1963." *J. of Geophys. Res.*, January 1964.
87. Thiele, O. W. "Some Observed Short Term and Diurnal Variations of Stratospheric Density Above 30 km." January 1964.
88. Sandlin, R. E., Jr. and E. Armijo. "An Analysis of AN FPS-16 Radar and AN GMD-1B Rawinsonde Data Differences." January 1964.
89. Miers, B. T., and N. J. Beyers. "Rocketsonde Wind and Temperature Measurements Between 30 and 70 km for Selected Stations." *J. Applied Meteorol.*, February 1964.
90. Webb, W. L. "The Dynamic Stratosphere." *Astronautics and Aerospace Engineering*, March 1964.
91. Low, R. D. H. "Acoustic Measurements of Wind through a Layer." March 1964.
92. Diamond, M. "Cross Wind Effect on Sound Propagation." *J. Applied Meteorol.*, April 1964.
93. Lee, R. P. "Acoustic Ray Tracing." April 1964.
94. Reynolds, R. D. "Investigation of the Effect of Lapse Rate on Balloon Ascent Rate." May 1964.
95. Webb, W. L. "Scale of Stratospheric Detail Structure." *Space Research V*, May 1964.
96. Barber, T. L. "Proposed X-Ray-Infrared Method for Identification of Atmospheric Mineral Dust." June 1964.
97. Thiele, O. W. "Ballistic Procedures for Unguided Rocket Studies of Nuclear Environments (U)." Proceedings of the Army Science Conference, June 1964.
98. Horn, J. D., and E. J. Trawle. "Orographic Effects on Wind Variability." July 1964.
99. Hoidtsie, G., C. Querfeld, T. Hail, and R. Mireles. "Spectral Transmissivity of the Earth's Atmosphere in the 250 to 500 Wave Number Interval." #1, September 1964.
100. Duncan, L. D., R. Ensey, and B. Engebos. "Athena Launch Angle Determination." September 1964.
101. Thiele, O. W. "Feasibility Experiment for Measuring Atmospheric Density Through the Altitude Range of 60 to 100 KM Over White Sands Missile Range." October 1964.
102. Duncan, L. D., and R. Ensey. "Six-Degree-of-Freedom Digital Simulation Model for Unguided, Fin-Stabilized Rockets." November 1964.



104. Hoidale, G., C. Querfeld, T. Hall, and R. Mireles. "Spectral Transmissivity of the Earth's Atmosphere in the 250 to 500 Wave Number Interval." #2, November 1964.
105. Webb, W. L. "Stratospheric Solar Response," *J. Atmos. Sci.*, November 1964.
106. McCoy, J. and G. Clark, "Rocketsonde Measurement of Stratospheric Temperature," December 1964.
107. Farone, W. A. "Electromagnetic Scattering from Radially Inhomogeneous Spheres as Applied to the Problem of Clear Atmosphere Radar Echoes," December 1964.
108. Farone, W. A. "The Effect of the Solid Angle of Illumination or Observation on the Color Spectra of 'White Light' Scattered by Cylinders," January 1965.
109. Williamson, L. E. "Seasonal and Regional Characteristics of Acoustic Atmospheres," *J. Geophys. Res.*, January 1965.
110. Armendariz, M. "Ballistic Wind Variability at Green River, Utah," January 1965.
111. Low, R. D. H. "Sound Speed Variability Due to Atmospheric Composition," January 1965.
112. Querfeld, C. W. "Mie Atmospheric Optics," *J. Opt. Soc. Amer.*, January 1965.
113. Coffman, J. "A Measurement of the Effect of Atmospheric Turbulence on the Coherent Properties of a Sound Wave," January 1965.
114. Rachele, H., and D. Veith. "Surface Wind Sampling for Unguided Rocket Impact Prediction," January 1965.
115. Ballard, H., and M. Izquierdo. "Reduction of Microphone Wind Noise by the Generation of a Proper Turbulent Flow," February 1965.
116. Mireles, R. "An Algorithm for Computing Half Widths of Overlapping Lines  $\propto$  Experimental Spectra," February 1965.
117. Richart, H. "Inaccuracies of the Single-Theodolite Wind Measuring System in Ballistic Application," February 1965.
118. D'Arcy, M. "Theoretical and Practical Study of Aerobee-150 Ballistics," March 1965.
119. McCoy, J. "Improved Method for the Reduction of Rocketsonde Temperature Data," March 1965.
120. Mireles, R. "Uniqueness Theorem in Inverse Electromagnetic Cylindrical Scattering," April 1965.
121. Coffman, J. "The Focusing of Sound Propagating Vertically in a Horizontally Stratified Medium," April 1965.
122. Farone, W. A., and C. Querfeld. "Electromagnetic Scattering from an Infinite Circular Cylinder at Oblique Incidence," April 1965.
123. Rachele, H. "Sound Propagation through a Windy Atmosphere," April 1965.
124. Miers, B. "Upper Stratospheric Circulation over Ascension Island," April 1965.
125. Rider, L., and M. Armendariz. "A Comparison of Pibal and Tower Wind Measurements," April 1965.
126. Hoidale, G. B. "Meteorological Conditions Allowing a Rare Observation of 24 Micron Solar Radiation Near Sea Level," *Meteorol. Magazine*, May 1965.
127. Beyers, N. J., and B. T. Miers. "Diurnal Temperature Change in the Atmosphere Between 30 and 60 km over White Sands Missile Range," *J. Atmos. Sci.*, May 1965.
128. Querfeld, C., and W. A. Farone. "Tables of the Mie Forward Lobe," May 1965.
129. Farone, W. A. "Generalization of Rayleigh-Gans Scattering from Radially Inhomogeneous Spheres," *J. Opt. Soc. Amer.*, June 1965.
130. Diamond, M. "Note on Mesospheric Winds Above White Sands Missile Range," *J. Applied Meteorol.*, June 1965.
131. Clark, G. Q., and J. G. McCoy, "Measurement of Stratospheric Temperature," *J. Applied Meteorol.*, June 1965.
132. Hall, T., G. Hoidale, R. Mireles, and C. Querfeld. "Spectral Transmissivity of the Earth's Atmosphere in the 250 to 500 Wave Number Interval," #3, July 1965.
133. McCoy, J., and C. Tate. "The Delta-T Meteorological Rocket Payload," June 1964.
134. Horn, J. D. "Obstacle Influence in a Wind Tunnel," July 1965.
135. McCoy, J. "An AC Probe for the Measurement of Electron Density and Collision Frequency in the Lower Ionosphere," July 1965.
136. Miers, B. T., M. D. Kays, O. W. Thiele and E. M. Newby. "Investigation of Short Term Variations of Several Atmospheric Parameters Above 30 KM," July 1965.

137. Serna, J., "An Acoustic Ray Tracing Method for Digital Computation," September 1965.
138. Webb, W. L., "Morphology of Noctilucent Clouds," *J. Geophys. Res.*, 70, 18, 4463-4475, September 1965.
139. Kays, M., and R. A. Craig, "On the Order of Magnitude of Large-Scale Vertical Motions in the Upper Stratosphere," *J. Geophys. Res.*, 70, 13, 4453-4462, September 1965.
140. Rider, L., "Low-Level Jet at White Sands Missile Range," September 1965.
141. Lamberth, R. L., R. Reynolds, and Morton Warteke, "The Mountain Lee Wave at White Sands Missile Range," *Bull. Amer. Meteorol. Soc.*, 46, 10, October 1965.
142. Reynolds, R. and R. L. Lamberth, "Ambient Temperature Measurements from Radiosondes Flown on Constant-Level Balloons," October 1965.
143. McCluney, E., "Theoretical Trajectory Performance of the Five-Inch Gun Probe System," October 1965.
144. Pena, R. and M. Diamond, "Atmospheric Sound Propagation near the Earth's Surface," October 1965.
145. Mason, J. B., "A Study of the Feasibility of Using Radar Chaff For Stratospheric Temperature Measurements," November 1965.
146. Diamond, M., and R. P. Lee, "Long-Range Atmospheric Sound Propagation," *J. Geophys. Res.*, 70, 22, November 1965.
147. Lamberth, R. L., "On the Measurement of Dust Devil Parameters," November 1965.
148. Hansen, F. V., and P. S. Hansen, "Formation of an Internal Boundary over Heterogeneous Terrain," November 1965.
149. Webb, W. L., "Mechanics of Stratospheric Seasonal Reversals," November 1965.
150. U. S. Army Electronics R & D Activity, "U. S. Army Participation in the Meteorological Rocket Network," January 1966.
151. Rider, L. J., and M. Armendariz, "Low-Level Jet Winds at Green River, Utah," February 1966.
152. Webb, W. L., "Diurnal Variations in the Stratospheric Circulation," February 1966.
153. Beyers, N. J., B. T. Miers, and R. J. Reed, "Diurnal Tidal Motions near the Stratopause During 48 Hours at WSMR," February 1966.
154. Webb, W. L., "The Stratospheric Tidal Jet," February 1966.
155. Hall, J. T., "Focal Properties of a Plane Grating in a Convergent Beam," February 1966.
156. Duncan, L. D., and Henry Rachele, "Real-Time Meteorological System for Firing of Unguided Rockets," February 1966.
157. Kays, M. D., "A Note on the Comparison of Rocket and Estimated Geostrophic Winds at the 10-mb Level," *J. Appl. Meteor.*, February 1966.
158. Rider, L., and M. Armendariz, "A Comparison of Pibal and Tower Wind Measurements," *J. Appl. Meteor.*, 5, February 1966.
159. Duncan, L. D., "Coordinate Transformations in Trajectory Simulations," February 1966.
160. Williamson, L. E., "Gun-Launched Vertical Probes at White Sands Missile Range," February 1966.
161. Randhawa, J. S., "Ozone Measurements with Rocket-Borne Ozonesondes," March 1966.
162. Armendariz, Manuel, and Laurence J. Rider, "Wind Shear for Small Thickness Layers," March 1966.
163. Low, R. D. H., "Continuous Determination of the Average Sound Velocity over an Arbitrary Path," March 1966.
164. Hansen, Frank V., "Richardson Number Tables for the Surface Boundary Layer," March 1966.
165. Cochran, V. C., E. M. D'Arcy, and Florencio Ramirez, "Digital Computer Program for Five-Degree-of-Freedom Trajectory," March 1966.
166. Thiele, O. W., and N. J. Beyers, "Comparison of Rocketsonde and Radiosonde Temperature and a Verification of Computed Rocketsonde Pressure and Density," April 1966.
167. Thiele, O. W., "Observed Diurnal Oscillations of Pressure and Density in the Upper Stratosphere and Lower Mesosphere," April 1966.
168. Kays, M. D., and R. A. Craig, "On the Order of Magnitude of Large-Scale Vertical Motions in the Upper Stratosphere," *J. Geophys. Res.*, April 1966.
169. Hansen, F. V., "The Richardson Number in the Planetary Boundary Layer," May 1966.

170. Ballard, H. N., "The Measurement of Temperature in the Stratosphere and Mesosphere," June 1966.
171. Hansen, Frank V., "The Ratio of the Exchange Coefficients for Heat and Momentum in a Homogeneous, Thermally Stratified Atmosphere," June 1966.
172. Hansen, Frank V., "Comparison of Nine Profile Models for the Diabatic Boundary Layer," June 1966.
173. Rachele, Henry, "A Sound-Ranging Technique for Locating Supersonic Missiles," May 1966.
174. Farone, W. A., and C. W. Querfeld, "Electromagnetic Scattering from Inhomogeneous Infinite Cylinders at Oblique Incidence," *J. Opt. Soc. Amer.* 56, 4, 476-480, April 1966.
175. Mireles, Ramon, "Determination of Parameters in Absorption Spectra by Numerical Minimization Techniques," *J. Opt. Soc. Amer.* 56, 5, 644-647, May 1966.
175. Reynolds, R., and R. L. Lamberth, "Ambient Temperature Measurements from Radiosondes Flown on Constant-Level Balloons," *J. Appl. Meteorol.*, 5, 3, 364-367, June 1966.
177. Hall, James T., "Focal Properties of a Plane Grating in a Convergent Beam," *Appl. Opt.*, 5, 1051, June 1966.
178. Rider, Laurence J., "Low-Level Jet at White Sands Missile Range," *J. Appl. Meteorol.*, 5, 3, 283-287, June 1966.
179. McCluney, Eugene, "Projectile Dispersion as Caused by Barrel Displacement in the 5-Inch Gun Probe System," July 1966.
180. Armendariz, Manuel, and Laurence J. Rider, "Wind Shear Calculations for Small Shear Layers," June 1966.
181. Lamberth, Roy L., and Manuel Armendariz, "Upper Wind Correlations in the Central Rocky Mountains," June 1966.
182. Hansen, Frank V., and Virgil D. Lang, "The Wind Regime in the First 62 Meters of the Atmosphere," June 1966.
183. Randhawa, Jagir S., "Rocket-Borne Ozonesonde," July 1966.
184. Rachele, Henry, and L. D. Duncan, "The Desirability of Using a Fast Sampling Rate for Computing Wind Velocity from Pilot-Balloon Data," July 1966.
185. Hinds, B. D., and R. G. Pappas, "A Comparison of Three Methods for the Correction of Radar Elevation Angle Refraction Errors," August 1966.
186. Riedmuller, G. F., and T. L. Barber, "A Mineral Transition in Atmospheric Dust Transport," August 1966.
187. Hall, J. T., C. W. Querfeld, and G. B. Hoidt, "Spectral Transmissivity of the Earth's Atmosphere in the 250 to 500 Wave Number Interval," Part IV (Final), July 1966.
188. Duncan, L. D., and E. F. Engebos, "Techniques for Computing Launcher Settings for Unguided Rockets," September 1966.
189. Duncan, L. D., "Basic Considerations in the Development of an Unguided Rocket Trajectory Simulation Model," September 1966.
190. Miller, Walter B., "Consideration of Some Problems in Curve Fitting," September 1966.
191. Cermak, J. E., and J. D. Horn, "The Tower Shadow Effect," August 1966.
192. Webb, W. L., "Stratospheric Circulation Response to a Solar Eclipse," October 1966.
193. Kennedy, Bruce, "Muzzle Velocity Measurement," October 1966.
194. Traylor, Larry E., "A Refinement Technique for Unguided Rocket Drag Coefficients," October 1966.
195. Nusbaum, Henry, "A Reagent for the Simultaneous Microscope Determination of Quartz and Halides," October 1966.
196. Kays, Marvin and R. O. Olsen, "Improved Rocketsonde Parachute-derived Wind Profiles," October 1966.
197. Engebos, Bernard F. and Duncan, Louis D., "A Nomogram for Field Determination of Launcher Angles for Unguided Rockets," October 1966.
198. Webb, W. L., "Midlatitude Clouds in the Upper Atmosphere," November 1966.
199. Hansen, Frank V., "The Lateral Intensity of Turbulence as a Function of Stability," November 1966.
200. Rider, L. J. and M. Armendariz, "Differences of Tower and Pibal Wind Profiles," November 1966.
201. Lee, Robert P., "A Comparison of Eight Mathematical Models for Atmospheric Acoustical Ray Tracing," November 1966.
202. Low, R. D. H., et al., "Acoustical and Meteorological Data Report SOTRAN I and II," November 1966.

203. Hunt, J. A. and J. D. Horn, "Drag Plate Balance," December 1966.
204. Armendariz, M., and H. Rachele, "Determination of a Representative Wind Profile from Balloon Data," December 1966.
205. Haasen, Frank V., "The Aerodynamic Roughness of the Complex Terrain of White Sands Missile Range," January 1967.
206. Morris, James E., "Wind Measurements in the Subpolar Mesopause Region," January 1967.
207. Hall, James T., "Attenuation of Millimeter Wavelength Radiation by Gaseous Water," January 1967.
208. Thiele, O. W., and N. J. Beyers, "Upper Atmosphere Pressure Measurements With Thermal Conductivity Gauges," January 1967.
209. Armendariz, M., and H. Rachele, "Determination of a Representative Wind Profile from Balloon Data," January 1967.
210. Hansen, F. V., "The Aerodynamic Roughness of the Complex Terrain of White Sands Missile Range, New Mexico," January 1967.
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<b>13. ABSTRACT</b> This is Part II of "A Comprehensive Report on Nineteen Condensation Nuclei," which contains tabulations of the growth times of these nuclei under various assumed supersaturations. The growth time of each nucleus at a given supersaturation is obtained from a newly developed growth rate equation which utilizes a single parameter to denote the hygroscopicity of the nucleus and which includes an additional term to reflect the inefficiency of the condensation process. This volume and its predecessor serve as a valuable reference for the experimental cloud physicist in his study of the growth behaviors of condensation nuclei and for the field cloud physicist in his selection of the proper artificial nuclei for warm fog or cloud modification.			

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