

The equation for the Debye length, κ , is given in the limit of low concentration as:

$$\kappa = \sqrt{\frac{2c_0 e^2}{\epsilon \epsilon_0 k_B T}}$$

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c0 = 0.134
e = 1.602e-19
eps = 24.5
eps0 = 8.854e-12
kb = 1.3806e-23
Temp=298.15
Na = 6.022e23
#kappa = sqrt((2*c0*e^2)/(eps*eps0*kb*Temp))
kappa = sqrt((1000*e^2*Na*c0)/(eps*eps0*kb*Temp))
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The Debye length is:

$$\kappa = 2.1537542 \times 10^9 \text{ m}^{-1}$$

$$\lambda_D = 4.6430553 \times 10^{-10} \text{ m} = 4.6430553 \text{ \AA}$$