$$R = \frac{2.801 \times 10^6 |z_1 z_2| q}{(\epsilon T)^{3/2}(1 + \sqrt{q})}$$

$\mathring{a}$ = 14.28, Bjerrum critical distance in Ångstroms for a 2:2 electrolyte in water at 25°. This varies as a function of pressure

c = concentration in moles/l.

m = concentration in moles of solute/kg. of solvent

q = $1/2$ for symmetrical electrolytes, $z_1 = z_2$; $z_1 = z_2 = 2$ for $MgSO_4$

I = $4c\alpha$, ionic strength of 2–2 salt

T = absolute temperature

α = degree of dissociation

ϵ = dielectric constant

η = viscosity

ρ_r = relative density of water