

$$\begin{aligned}
E(d_c) &= \frac{(1 + \nu).14.k_b.T}{5.L_p^{1/5}.\xi_0^{14/5}} \times \left(\frac{d_c}{d_0}\right)^{\frac{7}{5}(2\nu-1)} \\
&= E_0.d_c^{\frac{7}{5}(2\nu-1)}
\end{aligned}$$