$$a = \left[\frac{(4 \text{ atoms/unit cell}) \left(\dfrac{100}{\dfrac{80 \text{ wt\%}}{107.9 \text{ g/mol}} + \dfrac{20 \text{ wt\%}}{106.4 \text{ g/mol}}} \right)}{\left(\dfrac{100}{\dfrac{80 \text{ wt\%}}{10.49 \text{ g/cm}^3} + \dfrac{20 \text{ wt\%}}{12.02 \text{ g/cm}^3}} \right) \left(6.023 \times 10^{23} \text{ atoms/mol} \right)} \right]^{1/3}$$

$$= 4.050 \times 10^{-8} \text{ cm} = 0.4050 \text{ nm}$$