

$$n = \frac{\left(\frac{100}{\frac{25 \text{ wt\%}}{6.17 \text{ g/cm}^3} + \frac{75 \text{ wt\%}}{8.00 \text{ g/cm}^3}} \right) (3.32 \times 10^{-8} \text{ nm})^3 (6.023 \times 10^{23} \text{ atoms/mol})}{\left(\frac{100}{\frac{25 \text{ wt\%}}{171.3 \text{ g/mol}} + \frac{75 \text{ wt\%}}{162.0 \text{ g/mol}}} \right)}$$

$$= 1.00 \text{ atom/unit cell}$$

Therefore, on the basis of this value, the crystal structure is *simple cubic*.