$$V = l_1 \cdot l_2 \cdot l_3 = 0.96 \cdot 0.99 \cdot 0.95 = 0.903 \text{ cm}^3$$
$$\rho = \frac{V}{m} = \frac{0.903 \text{ cm}^3}{8.81 \text{ g}} = 9.743 \text{ g} \cdot \text{cm}^{-3}$$

$$\frac{\Delta V}{|V|} = \sqrt{\left(\frac{\Delta l_1}{|l_1|}\right)^2 + \left(\frac{\Delta l_2}{|l_2|}\right)^2 + \left(\frac{\Delta l_3}{|l_3|}\right)^2}$$
$$\Delta V = |V| \sqrt{\left(\frac{\Delta l_1}{|l_1|}\right)^2 + \left(\frac{\Delta l_2}{|l_2|}\right)^2 + \left(\frac{\Delta l_3}{|l_3|}\right)^2}$$
$$\Delta V = 0.903 \cdot \sqrt{\left(\frac{0.01}{0.96}\right)^2 + \left(\frac{0.01}{0.99}\right)^2 + \left(\frac{0.01}{0.95}\right)^2} = 0.016 \text{ cm}$$

$$\frac{\Delta \rho}{|\rho|} = \sqrt{\left(\frac{\Delta V}{|V|}\right)^2 + \left(\frac{\Delta m}{|m|}\right)^2}$$
$$\Delta \rho = \rho \cdot \sqrt{\left(\frac{\Delta V}{|V|}\right)^2 + \left(\frac{\Delta m}{|m|}\right)^2}$$
$$\Delta \rho = 9.4731 \cdot \sqrt{\left(\frac{0.016}{0.903}\right)^2 + \left(\frac{0.01}{8.81}\right)^2}$$
$$\Delta \rho = 0.1682 \approx 0.2 \text{ g} \cdot \text{cm}^{-3}$$

$$V = (0.90 \pm 0.02) \text{ cm}^3$$
$$\rho = (9.8 \pm 0.2) \text{ g} \cdot \text{cm}^{-3}$$