In the production of printed circuit boards for the electronics industry, a 0.60 mm layer of copper is laminated onto an insulating board. Next, a circuit pattern made of a chemically resistant polymer is printed on the board. The unwanted copper is removed by chemical etching, and the protective polymer is finally removed by solvents. One etching reaction is:

$$\text{Cu(NH}_3\text{)}_4\text{Cl}_2(aq) + 4\text{NH}_3(aq) + \text{Cu}(s) \rightarrow 2\text{Cu(NH}_3\text{)}_4\text{Cl}(aq)$$

A plant needs to manufacture 10,000 printed circuit boards, each $8.0 \times 16.0$ cm in area. An average of 80.0% of the copper is removed from each board (density of copper = 8.96 g/cm$^3$). What masses of $\text{Cu(NH}_3\text{)}_4\text{Cl}_2$ and $\text{NH}_3$ are needed to remove the copper? Assume 100% yield.