Answer on Question #54408 – Chemistry – General chemistry

Questions:

The density of gold is 19.3 g/mL. If you had (2.39x10^1) kilograms of gold, how many milliliters would you have? Enter in scientific notation with 3 significant figures.

Answer:

The volume is defined:

$V = m/\rho$, where m – the mass and ρ – the density.

Thus,

$V = 2.39{\times}10$ kg$/19.3$ g ml$^{-1} = 2.39{\times}10^4$ g$/19.3$ g ml$^{-1} = 12.4 \times 10^2$ ml