

26. The volume of 250 cm^3 corresponds to a mass of 250 g since the density of water is 1.0 g/cm^3 . This mass corresponds to $250/18 = 14$ moles since the molar mass of water is 18. There are ten protons (each with charge $q = +e$) in each molecule of H_2O , so

$$Q = 14N_Aq = 14(6.02 \times 10^{23})(10)(1.60 \times 10^{-19}\text{ C}) = 1.3 \times 10^7\text{ C} = 13\text{ MC} .$$