Marks
5

- Cisplatin, $[Pt(NH_3)_2Cl_2]$, is a particularly effective chemotherapy agent against certain types of cancer. Calculate the concentration of Pt^{2+}(aq) ions in solution when 0.075 mol of cisplatin is dissolved in 1.00 L of a 1.00 M solution of NH_3. K_{stab} of $[Pt(NH_3)_2Cl_2] = 3.4 \times 10^{12}$.

Answer:

What changes would occur to the values of K_{stab} for cisplatin and the concentration of Pt^{2+}(aq) ions if solid KCl were dissolved in the above solution?

K_{stab}	increase no change decrease
$[Pt^{2+}$(aq)$]$	increase no change decrease