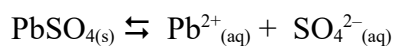


Problema656: Calcula a solubilidade en auga pura, expresada en g/L, do sulfato de chumbo(II).

Dato: $K_s(\text{PbSO}_4, 25^\circ\text{C}) = 1,8 \cdot 10^{-8}$



[inic]

[equi]

s s

$$K_s = [\text{Pb}^{2+}] \cdot [\text{SO}_4^{2-}] = s^2 = 1,8 \cdot 10^{-8} \quad s = \sqrt{1,8 \cdot 10^{-8}} = 1,34 \cdot 10^{-4} \text{ M}$$

$$M_m(\text{PbSO}_4) = 207,2 + 32,07 + 4 \cdot 16 = 303,27 \text{ g/mol}$$

$$s = 1,34 \cdot 10^{-4} \frac{\text{mol}}{\text{L}} \cdot \frac{303,27 \text{ g}}{1 \text{ mol}} = \underline{0,0406 \text{ g/L}}$$