

Ksp--Precipitation**Problem**

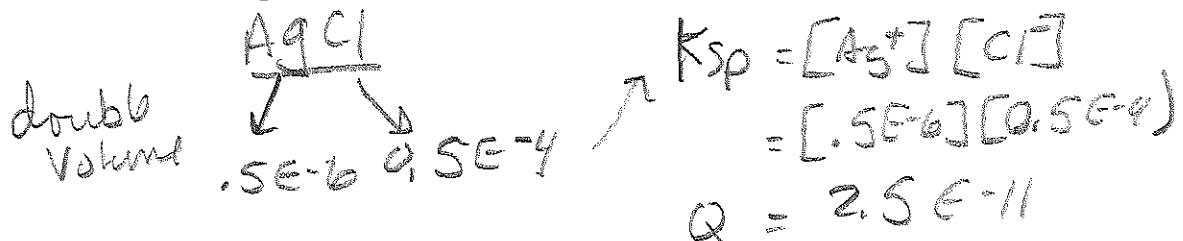
1. (brady770) A student wishes to prepare a 1.0L solution containing 0.015 mol of NaCl and 0.15mol of Pb(NO₃)₂. Using a reaction Quotient will a precipitation occur. Ksp of PbCl₂ = 3.4E-5 (Last modified 05-14-05)

$$K = [Pb^{2+}][Cl^-]^2 \quad Q < K$$

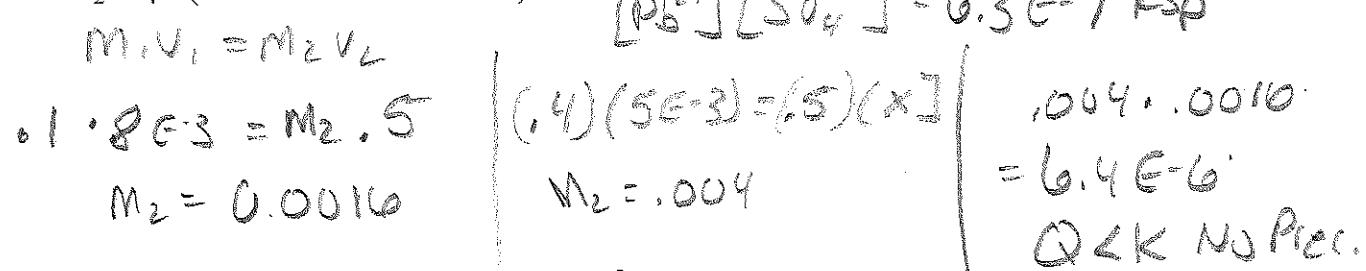
$$(0.15)(0.05)^2 = 3.37E-5$$

No Precipitate

2. (brady771) What possible precipitate might form by mixing 50.0mL of 1.0E-4 NaCl with 50.0mL of 1.0E-6M AgNO₃? Will it form? (Last modified 05-14-05)(ksp AgCl = 1.6E-10)



3. (brown670) Will a precipitate form when 0.10L of 8.0 E-3M Pb(NO₃)₂ is added to 0.40L of 5.0E-3M Na₂SO₄? (Last modified 12-4-2014)



4. (brown671) 1.0E-2M Ag⁺ and 2.0 E-2M Pb²⁺. When Cl⁻ is added to the solution, both AgCl (Ksp = 1.8E-10) and PbCl₂ (Ksp = 1.7E-8) precipitate from the salt solution. What concentration of Cl⁻ is necessary to begin the precipitation of each salt and since these are in the same jar which will precipitate first?(good Question©). (Last modified 05-14-05)

SKIP