



Predict the reactions when you mix any two bottles containing the labeled aqueous solutions.

SOLUBLE COMPOUNDS	INSOLUBLE COMPOUNDS
compounds of Group 1 elements	Carbonates (CO ₃ ²⁻), chromates (CrO ₄ ²⁻), oxalates (C ₂ O ₄ ²⁻), and phosphates (PO ₄ ³⁻) except those of Group I elements and NH ₄ ⁺
Ammonium (NH ₄ ⁺) compounds	sulfides (S ²⁻) except those of Group 1 and 2 elements and NH ₄ ⁺
chlorides (Cl ⁻), bromides (Br ⁻), iodides (I ⁻) except those of Ag ⁺ , Hg ₂ ²⁺ , and Pb ²⁺	hydroxides (OH ⁻) and oxides (O ²⁻) except those of group 1 and 2 elements
nitrates (NO ₃ ⁻), acetates (C ₂ H ₃ O ₂ ⁻), chlorates (ClO ₃ ⁻) and perchlorates (ClO ₄ ⁻)	
sulfates (SO ₄ ²⁻) except those of Ca ²⁺ , Sr ²⁺ , Ba ²⁺ , Pb ²⁺ , Hg ₂ ²⁺ and Ag ⁺	