

GRUPA IV ANALITICA Ca^{2+} , Ba^{2+}

	Ca^{2+}	Ba^{2+}
in mediu de hidroxid de amoniu (NH_4OH) sau clorura de amoniu(NH_4Cl)		
reactiv de grupa : $(\text{NH}_4)_2\text{CO}_3$ carbonat de amoniu	CaCO_3	BaCO_3
	carbonat de calciu pp alb amorf $\xrightarrow{\text{incalzire}}$ alb	carbonat de Bariu pp alb cristalin
	usor sol in acid acetic	sol in acizi
oxalat de amoniu $(\text{NH}_4)_2\text{C}_2\text{O}_4$ $2\text{NH}_4^+ + \begin{array}{c} \text{COO}^- \\ \\ \text{COO}^- \end{array}$	$\begin{array}{c} \text{COO} \\ \diagdown \\ \text{Ca} \\ \diagup \\ \text{COO} \end{array}$	$\begin{array}{c} \text{COO} \\ \diagdown \\ \text{Ba} \\ \diagup \\ \text{COO} \end{array}$
	oxalat de calciu pp alb cristalin sol acizi min, insolub acid acetic	oxalat de Bariu pp alb sol in acid acetic
☆ H_2SO_4	sol conc de ioni de Ca sol conc de H_2SO_4	sol diluata de H_2SO_4
	CaSO_4	BaSO_4
	sulfat de calciu pp alb cristalin insol in alcool	sulfat de bariu pp alb cristalin greu solubil in acizi
Na_2HPO_4 fosfat disodic in prez de NH_4OH	$\text{Ca}_3(\text{PO}_4)_2$	$\text{Ba}_3(\text{PO}_4)_2$
	fosfatul tricalcic pp alb	
	sol in acizi minerali, acid acetic	
<u>r specifica</u> acidul picrolonic	complex cristalin de cul galben-rosat, greu solubil	
<u>r specifica</u> rodizonat de sodiu $\text{C}_6\text{O}_6\text{Na}_2$ in sol neutra sau slab acida		rodizonat de bariu, rosu-brun greu solubil
☆ K_2CrO_4	CaCrO_4	BaCrO_4
	se adauga alcool pt a precipita	cromat de bariu pp galben
		sol in acizi min, insol in acid acetic