



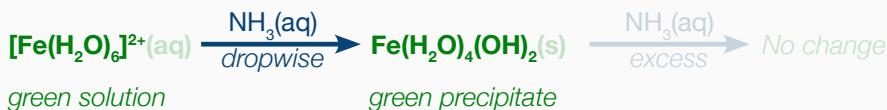
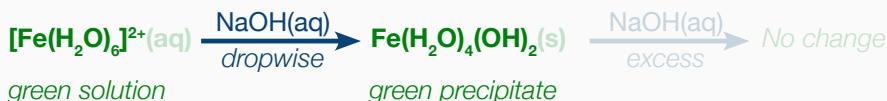
Inorganic Revision Sheet

Metal Aqua Ion Reactions for Edexcel

Fe²⁺, Fe³⁺, Cu²⁺, Cr³⁺ and Co²⁺

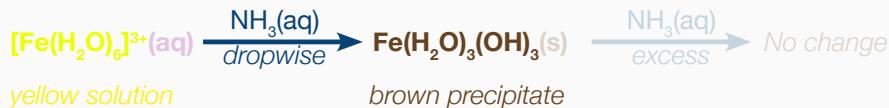
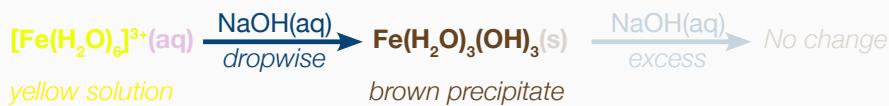
Iron (II), Fe²⁺

dropwise NaOH or NH₃ = green ppt
excess NaOH = no change
excess NH₃ = no change



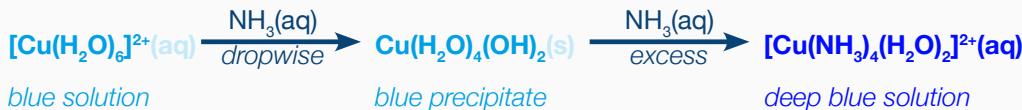
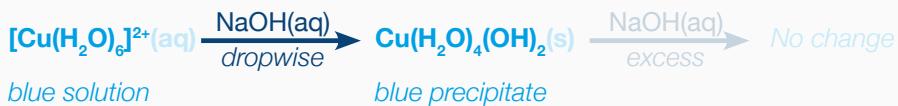
Iron (III), Fe³⁺

dropwise NaOH or NH₃ = brown ppt
excess NaOH = no change
excess NH₃ = no change



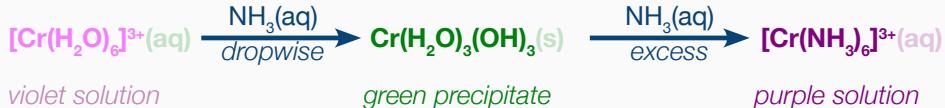
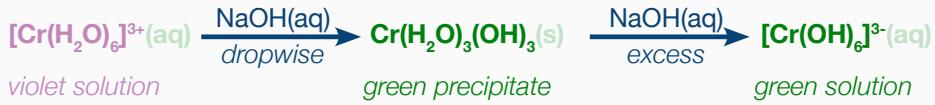
Copper (II), Cu²⁺

dropwise NaOH or NH₃ = blue ppt
excess NaOH = no change
excess NH₃ = deep blue solution



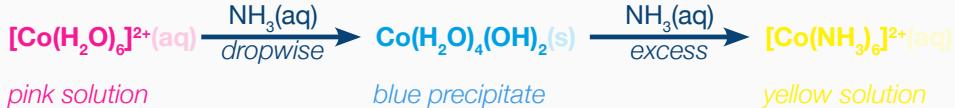
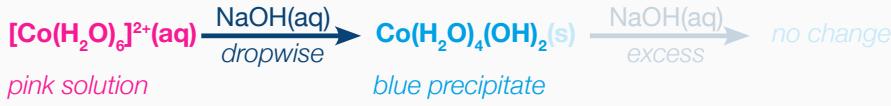
Chromium (III), Cr³⁺

dropwise NaOH or NH₃ = green ppt
excess NaOH = green solution
excess NH₃ = purple solution



Cobalt (II), Co²⁺

dropwise NaOH or NH₃ = blue ppt
excess NaOH = no change
excess NH₃ = yellow solution





Inorganic Revision Sheet

Metal Aqua Ion Reactions for Edexcel

Vanadium Colours

Can reduce Vanadium from +5 oxidation state to +2 using zinc in acid solution.

Oxidation State	Colour
+2 V^{2+}	Purple
+3 V^{3+}	Green
+4 VO^{2+}	Blue
+5 VO_2^+	Yellow

Ligand Exchange

Copper (II), Cu^{2+}



Cobalt (II), Co^{2+}

