

Answer on Question#40598-Chemistry-Other

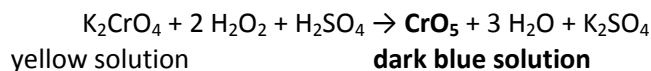
Question

What is the colour when hydrogen peroxide reacts with potassium chromate?

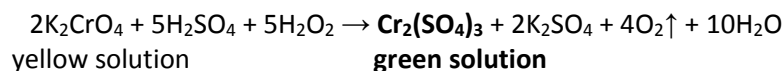
Answer

Potassium chromate solution is yellow. When reacting with hydrogen peroxide the latter is oxidized forming water and oxygen gas, and potassium chromate is reduced in generally from Cr^{+6} to Cr^{+3} . The exact reduction product and consequently the colour depends on the solution pH.

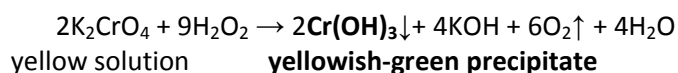
pH < 7 (acidic):



But the blue chromium(VI)peroxide is an unstable compound and after a few seconds it decomposes to turn green as chromium(III) compounds are formed, so the reaction may be written as follows:



pH = 7 (neutral):



pH > 7 (basic):

