

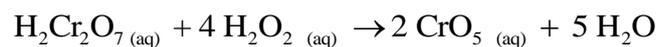
Question #48542, Chemistry, Inorganic Chemistry

Question:

An orange colored solution(X) acidified with H_2SO_4 and treated with H_2O_2 , gives a blue solution of CrO_5 .
What is (X)?

Answer:

Chromium peroxide is formed as the result of treatment $\text{H}_2\text{Cr}_2\text{O}_7$ (has orange color of $\text{Cr}_2\text{O}_7^{2-}$ ion in aqueous solution) with H_2O_2 in the acid solution. The balanced equation of the reaction:



Therefore, the compound X is $\text{H}_2\text{Cr}_2\text{O}_7$.