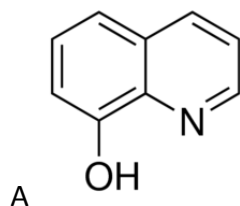




National Student Team Contest (first stage)
Solution of task 1. Nanopowder

1. A – 8-hydroxyquinoline



B - $[\text{Pb}_4(8\text{-Quin})_6](\text{ClO}_4)_2$, $\text{C}_{54}\text{H}_{36}\text{Cl}_2\text{N}_6\text{O}_{14}\text{Pb}_4$; C: 34.27, H: 1.92, N: 4.44%

C - KClO_4

2. In both cases PbO forms, but only ultrasonic treatment gives the nanoscale product.

3.

