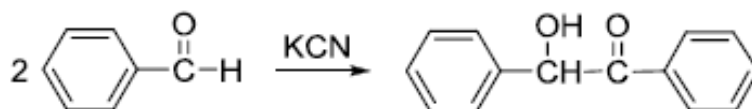


Synthesis of Benzoin

Equation of the reaction:



Attention: KCN is a very poisonous substance. While working on this reaction, be careful, you should have no cut or cracks in hand, all materials used should be washed several times with water, you should not eat anything until the reaction is complete. After the work is completed, the hands and work table should be washed thoroughly.

Required reagents:

KCN
Ethanol %95
Benzaldehyde

Deneyin yapılışı:

125 mg of KCN, 2 ml of H₂O, 2 ml of ethanol 95% and 1 ml of benzaldehyde were taken in the round bottom flask and are refluxed for 30 minutes.

Then, the mixture is cooled in ice bath.

The product crystallized as needles is filtered and washed with cold water and air dried.

Yield: 90-92%; **melting point:** 134-136 °C

Questions:

1. What is the type of this reaction?
2. What are the properties of the reagents used?
3. Describe the mechanism of the reaction.,