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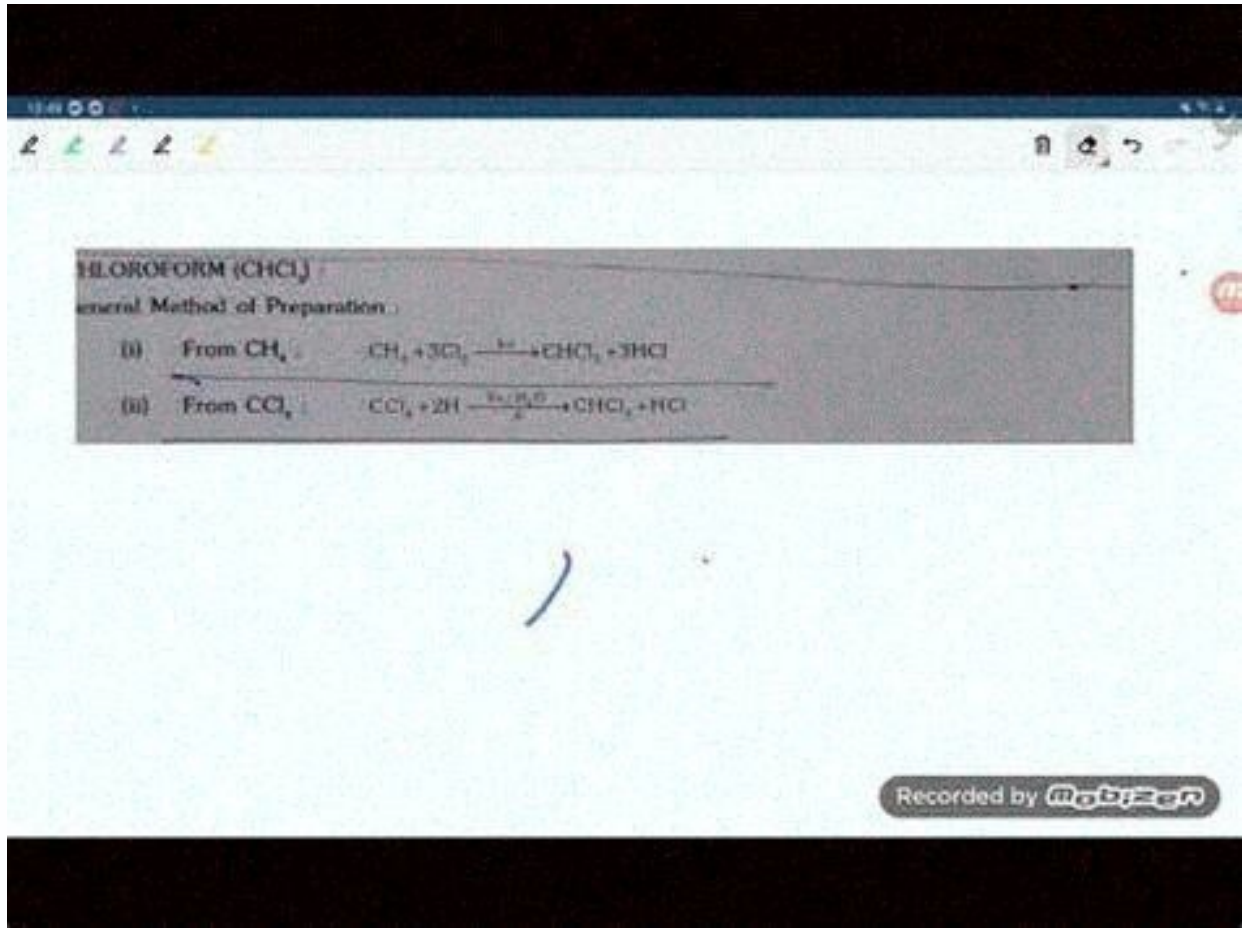
Preparation of chloroform from methane

How to prepare chloroform from ethanol. Formation of chloroform from methane. How chloroform is prepared.

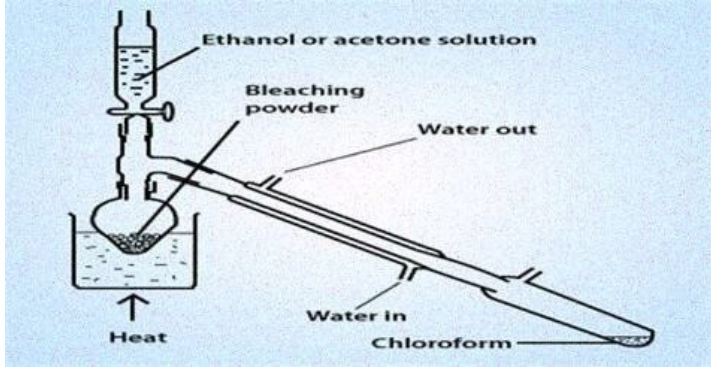
SolutionWas this answer helpful?



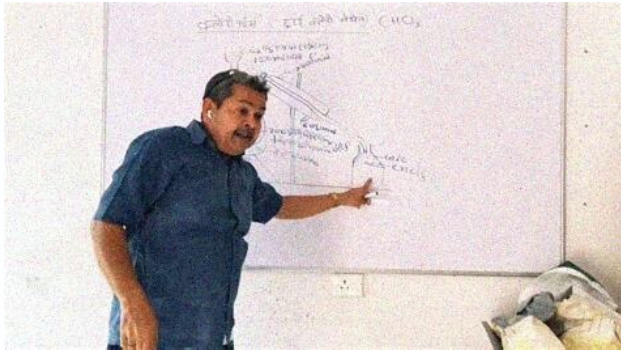
The flask is heated gently on a water bath until a mixture of chloroform and water distills over, as shown in figure . The mixture from receiver is transferred into a separating funnel and the lower layer of chloroform is separated. Purification : The impure chloroform is washed with dilute caustic soda (NaOH) solution and then with water successively in the separating funnel. It is then dried over anhydrous calcium chloride and re-distilled between 60 - 650C. In this way, pure and dry chloroform is obtained. Physical properties of chloroform Chloroform is a colourless sweet smelling liquid. It's freezing point is - 630C and boiling point is 610 C. It is heavier than water.



Bleaching powder paste acts as oxidizing, chlorinating and hydrolyzing agent. From ethanol : Step I : Oxidation : Step II : Chlorination : Step III : Hydrolysis : From acetone (propanone) : Step I : Chlorination : Step II : Hydrolysis : Procedure : First of all, bleaching powder paste is prepared by mixing 100 gm of bleaching powder with 200 ml of water in one liter round bottomed flask and 25 ml of ethanol or acetone is added to it. The flask is heated gently on a water bath until a mixture of chloroform and water distills over, as shown in figure . The mixture from receiver is transferred into a separating funnel and the lower layer of chloroform is separated. Purification : The impure chloroform is washed with dilute caustic soda (NaOH) solution and then with water successively in the separating funnel. It is then dried over anhydrous calcium chloride and re-distilled between 60 - 650C. In this way, pure and dry chloroform is obtained. Physical properties of chloroform Chloroform is a colourless sweet smelling liquid. It's freezing point is - 630C and boiling point is 610 C.



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