

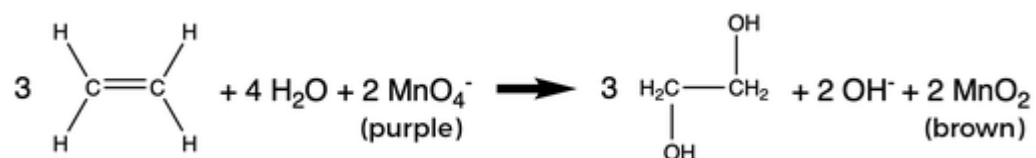
Start:

Hello students, hope you guys are doing well.

As you all know that chemistry is a practical based subject, so we need to understand those lab cleanly. Our visual system will help you guys in learning chemistry lab appropriately. So no more cheating in laboratory. Every student will understand the topic & can be able to apply the lab by themselves.

Today we are going to learn about “ **Baeyers Test** ”. The baeyers test is used to test for an unsaturated carbon carbon bond, such as an alkene or alkyne, but not an aromatic carbon carbon bond. Potassium permanganate (KMnO<sub>4</sub>) solution is a purple color. When potassium permanganate reacts with an alkene the solution changes from a purple color to a brown color, and a glycol is formed.

For example, potassium permanganate reacts with ethene to form ethylene glycol:



Materials we are going to use :

- Test tubes
- Test tube rack
- Potassium permanganate solution
- Sodium carbonate solution
- Acetone
- Compound to be tested

## Procedure

1. Dissolve 25-30 mg of organic compound in 2 mL of water or acetone (free of alcohol).
2. Add 1% potassium permanganate solution containing an equal volume of 1% sodium carbonate solution.
3. The potassium permanganate solution is purple. If the solution turns to a brown color when potassium permanganate is added an unsaturated carbon carbon bond is present. If the solution stays purple then no unsaturated carbon carbon bond is present. Carrying out the reaction under alkaline

conditions removes the possibility of confusion due to substitution in aromatic compounds.

4. This test should be confirmed with the **bromine test**.