

Drugs & Dyes

Experiment 1. O-methylation of β -Naphthol

1. Which reagent used for O-Methylation of β -Naphthol?
2. Which solvent is used for recrystallization of –Methoxy Naphthalene?
3. What is the reaction temperature of O-methylation of β -Naphthol?
4. What will be the Theoretical yield of 2-methoxy Naphthalene? when we take 2 gm of β -Naphthol as a starting material.
5. How much ethylating reagent is used for methylation of β -Naphthol?
6. What % of sodium hydroxide is used for methylation of β -Naphthol?
7. What is the formula for calculation of percentage of product yield?
8. What is mean by alkylation?
9. What is the functional group of Nerolin.

Experiment 2. Preparation of Paracetamol

1. Which acetylating reagent is used for acetylation of P-aminophenol?
2. Which by-product is formed when p-aminophenol undergo acetylation?
3. What is the chemical name of Paracetamol?
4. After addition of acetylating reagent, in how much time ppt of the product will form?
5. Which solvent is used for recrystallization of Paracetamol?
6. If you take 2gm of P-aminophenol as a starting material, what will be the theoretical yield?
7. If compound has –OH and –NH₂ functional group than, which functional group preferably undergo acetylation?
8. Which formula is used for calculation of theoretical yield?

Experiment 3 Preparation of fluorescein from Phthalic anhydride

1. For formation of fluorescein how much mole of resorcinol is used?
2. In resorcinol structure, how many hydroxyl functional group is present?
3. Which catalyst is used for the formation of fluorescein from phthalic anhydride and resorcinol?
4. For the formation of fluorescein, if you take 2 gm of Phthalic anhydride than, how much gm of resorcinol is required?
5. Which bath is used for heat the reaction mixture?
6. During the reaction process how much quantity of Con. HCl is added?
7. If you take 2gm of Phthalic anhydride as starting material than, what will be the theoretical yield of the product?
8. What temperature is used to dry the product?

Experiment 4 Thin layer chromatography of Mixture of a Dye

1. What is the use of thin layer chromatography?
2. Thin layer chromatography is a form of.....adsorption chromatography.
3. From which year this technique was largely used?
4. Is this technique useful in purity detection of the substance?
5. Which absorbent is used in TLC?
6. What is the use of calcium sulphate in TLC?
7. In carboxylic acid and phenol, which one is more polar?
8. For effective separation of component selected solvent should be less polar or more polar than the component of the mixture?
9. What is the formula for calculate the RF Value?

Project Work: Preparation of Monogram of Drug Aspirin

1. What is the chemical name of Aspirin?
2. What is the medicinal use of aspirin?
3. What is the identification test for Aspirin?
4. If aspirin is coming contact with Moisture than what will happen?
5. What concertation of NaOH is required for the preparation of Aspirin?
6. What is the melting point of Aspirin?
7. Which standard method is use for preparation of aspirin?
8. What is the starting material for preparation of Aspirin?