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07**

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**AIM: TO PERFORM SYSTEMATIC
QUALITATIVE ANALYSIS OF ANILIDES**

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Requirements

Chemicals

1. KOH
2. H₂SO₄
3. Potassium dichromate
4. Sodium nitrate

Glass wares

1. Test-tube
2. Stands
3. Brush
4. Holder
5. Glass rod
6. Beakers

Theory: Anilides, also known as phenyl amides, are a class of amide-related chemical compounds that are produced from aniline. The reaction of aniline with acyl chlorides or carboxylic anhydrides produces anilides. For instance, the combination of aniline with acetyl chloride resulted in the formation of acetanilide (CH₃-CO-NH-C₆H₅). When aniline and carboxylic acids are heated to high temperatures and allowed to react, anilines are formed.

Functional Group Test for Anilides

S. No.	Identification Test	Observation	Inference
1	Carbylamines test (Isocyanides test): Add methanolic KOH and two drops of chloroform to a test	Offensive smell	Anilide may be present

	tube and heat slowly to prepare a sample.		
2	Tafels Test: To sample, add concentrated H ₂ SO ₄ and a small amount of potassium dichromate, then shake. A red or violet hue is produced. After a few minutes, the colour turns green.	Red or violet colour	Anilide is confirmed
3	Hydrolysis test: Add diluted HCl, boil, and cool to sample. Add the NaNO ₂ solution, and then add the cold alkaline-naphthol solution.	Orange red dye	Anilide is confirmed

Result: The results of the systemic qualitative tests performed and anilide was found and reported.