

PHARMACEUTICAL ORGANIC CHEMISTRY-II- BP301T

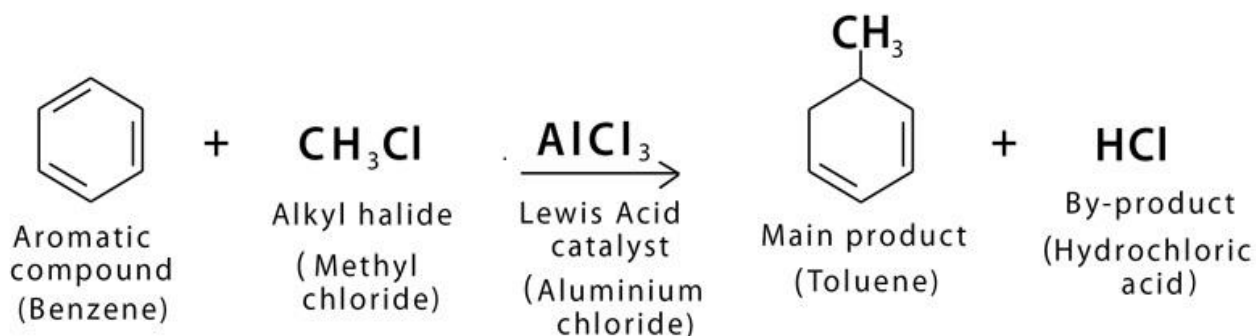
UNIT: 1 Benzene and its derivatives

CLASS: 5

TOPIC: Friedel crafts alkylation:

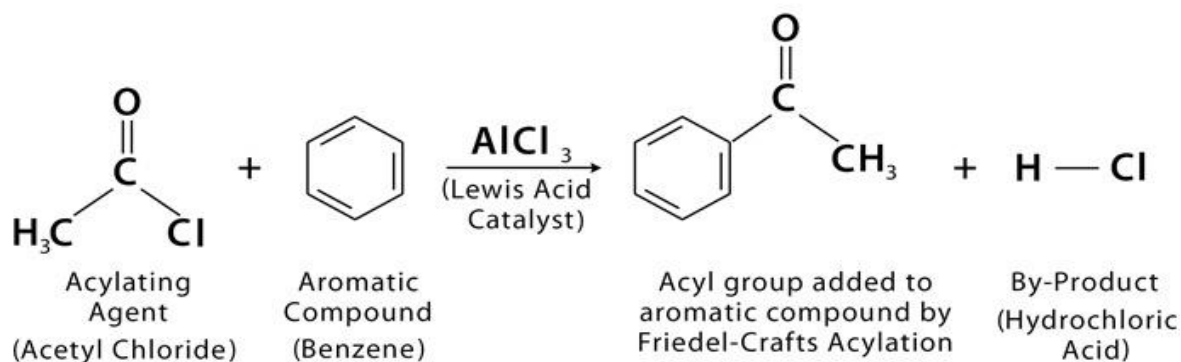
An alkyl group can be added to a benzene molecule by an electrophile aromatic substitution reaction called the Friedel-Crafts alkylation.

Friedel-Crafts Alkylation Reaction

**Friedel crafts acylation:**

In a Friedel-Crafts acylation reaction, the aromatic ring is transformed into a ketone.

Friedel-Crafts Acylation



Substituent's, effect of substituents on reactivity and orientation of mono substituted benzene:

Benzene has 6 hydrogen atoms which all are equal

If the replace of any one hydrogen atom by a substituent's it gives a mono substituted derivative of benzene.

When mono substituted benzene is converted in to di substituted derivative then 3 isomers are possible.