



## **Synthesis & Characterization of Novel Aniline—Formaldehyde-- $\alpha$ - Naphthol Terpolymers**

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### **ABSTRACT**

*The present manuscript reported the synthesis of organic terpolymers of aniline, formaldehyde &  $\alpha$ -naphthol. The reaction is catalyzed by strong acids, weak acids, organic acids and also by Lewis acids. The composition of terpolymers has been determined by elemental analysis and spectral studies such as UV, IR and NMR have been carried out to elucidate the structure of the terpolymers. The polymer exhibit high temperature resistance better thermal properties as evident from the TGA data. The polymer undergo degradation under inert atmosphere at increasing temperature provides good for nature. Spectroscopic data reveals that long chain polymer hold together not only by C-C bond, but also the electrons are delocalized in conjugation showing coloured aniline- formaldehyde- $\alpha$ -naphthol terpolymers.*

**Keywords:** Terpolymerization, aniline, formaldehyde,  $\alpha$ -naphthol.

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