

## **EFFECT OF POFA ON THERMAL STABILITY OF BENTONITE FILLED POLYPROPYLENE COMPOSITES.**

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### **ABSTRACT**

The PP composites with the presence of Palm Oil Fatty Acid Additive (POFA) were compounded using a Polydrive Thermo Haake with Rheomix R 600 for about 7 minutes. The temperature and the rotor speed used were 180°C and 50 rpm respectively. POFA was introduced in bentonite filled PP composites as a compatibiliser. The thermal stability of the composites with the presence of POFA measured by DSC show that fusion enthalpy for crystallisation ( $\Delta H_c$ ) and melting ( $\Delta H_m$ ), the melting and cooling temperature reduced as compared to control. Thermal degradation of composites which is analysed by TGA improved with the addition of POFA compared to control system (without compatibiliser).

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