

SYNTHESIS AND CHARACTERIZATION OF VERMICULITE POLY METHYL METHACRYLATE COMPOSITES

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ABSTRACT

Present manuscript reports the synthesis and characterization of organo vermiculite (OVt) and poly methyl methacrylate (PMMA) composite films by solution blending method. The synthesised OVt-PMMA composite films were characterised using appropriate analytical techniques, like XRD, FT-IR, TG-DTA, SEM, AFM and UTM. The experimental observations reveal the formation of OVt - PMMA composite film with better thermal stability and inhibition in burning behaviour as compared to the pristine PMMA film.

KEYWORDS: OVMT/PMMA Composites, Thermal Stability, Anti - Flammability and Mechanical Properties

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