

COMPRESSIVE PROPERTIES OF POLYCARBONATE TOUGHENED EPOXY- BAMBOO FIBER COMPOSITES

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ABSTRACT

Polycarbonate toughened epoxy-bamboo fiber composites are prepared by varying fiber mat content. The blend matrix Epoxy-PC with varying weight percentage (wt%) of PC content in epoxy are prepared. It is observed that the blend matrix epoxy PC containing 10% of weight of PC showed to have minimum compressive strength.

With varying in fiber mat content, toughened epoxy-bamboo fiber composites have been developed and it is evident that the Compressive strength of the composites is increased with the increase in the fiber content from 10% of wt. However, the compressive strength of these reinforced samples is found to be lower than that of un-reinforced matrix.

KEYWORDS: Poly Carbonate, Epoxy-PC Blend Matrix, Compressive Strength, and Fiber Mat Content