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## Composites by doum fiber and bakelite matrix: Mechanical and thermal studies

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In this study, we figured Phenolic resin (Bakelite). Based composites strengthened with chemically treated doum fiber at different packing from 10 to 40 wt. that were prepared by compression molding procedure that showed that These composites are characterized particularly by mechanical and thermal properties presenting some kind of smoothness in their comportment that were measured by some flow tests and cup .as a result, we found that Increasing fiber's weight percentage in these composites was the solution for the Improvement of their properties. For example, adding chemical drum fibers [20 wt. %] is able to increase the flexural properties significantly without losing strain values. For the thermal conductivities of composite illustrations were measured by homemade system. Besides, we found gradual decrease in thermal conductivity for an incensement in fiber content. Plus, dynamic mechanical analysis has shown the effect of tension, regularity and fiber charging as in the rheological properties of the composites.

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