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**Nanocomposites Produced with Vinyl Esther resins and Silica Nanoparticles**

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In this work we analyze the macroscopic effects of the addition of silica nanoparticles (7 nm) with and without surface modification (silane agent) on the properties of vinyl ester resins. Various silica nanoparticle concentrations and different methods of treatment of them with silane are considered. We found that the presence of silica nanoparticles at 5 wt% of concentration the flexural strength show the maximum and the elastic modules remain without modification. On the other hand, the silane affected the mechanical properties of the nanocomposite and has strongly dependence of the treatment method. The mechanical properties are compared with those composite composed of silica particle at macroscopic scale. The different between micron and nanoscale fillers is the biggest increases in interfacial area in nanocomposite. In addition, an analysis of the dielectric properties is presented.