

*Flammability Properties of Polymer Nanocomposites*

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Flammability of commodity polymers is improved using polymer nanocomposites with various types of nano particles. The effects of the shape of particles on flammability properties of the nanocomposites are studied using nano silica (sphere), nano clay (plate), and carbon nanotubes (tube). The effects of the dispersion of the nano particles on flammability properties and the relationship between viscoelastic properties and flammability properties of the nanocomposites are presented.