



## Cure Index demonstrates curing of epoxy composites containing silica nanoparticles of variable morphology and porosity

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### Highlights

- Synthesis and characterization of nanosilica in different morphology and porosity was performed.
- Non-porous curved-like and spherical and mesoporous spherical nanosilica were added to epoxy.
- *Cure Index* was used to study the effects of amount of **nanoparticles** and cure condition on *Cure Index*.
- Mesoporous-filled system had *Good* cure regardless of heating rate at intermediate nanoparticle content.
- Cure state of epoxy/non-porous particles (*Poor* or *Good*) was additionally dependent on heating rate.

### Abstract

An image was taken by *Cure Index* on curability of epoxy with silica nanoparticles having variable morphology and porosity. Three kinds of silica nanoparticles with non-porous curved-rod, non-porous