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Highly transparent and flame-retardant epoxy composites based on a hybrid multi-element contained POSS derivative

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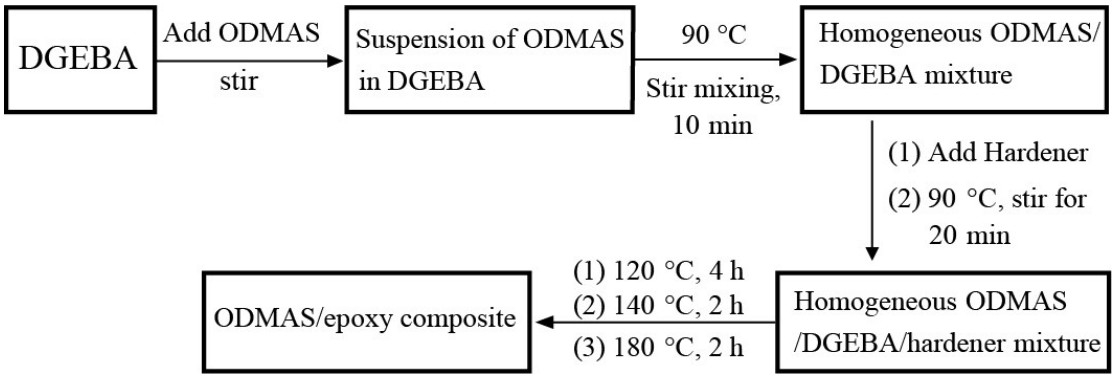

Figure S 1. Schematic illustration of the preparation of ODMAS/epoxy nanocomposites.

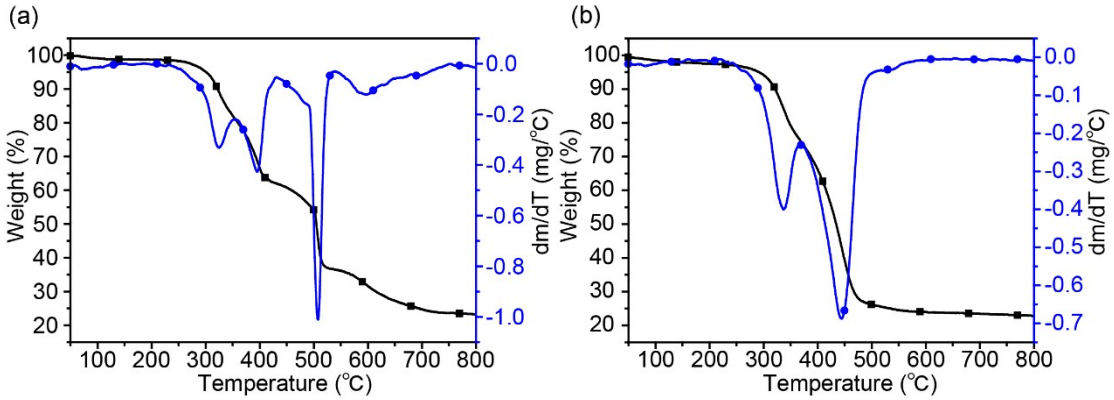

Figure S 2. TGA and DTG curves of ODMAS in (a) air atmosphere, (b) nitrogen atmosphere, heating rate 10 °Cmin^{-1}.

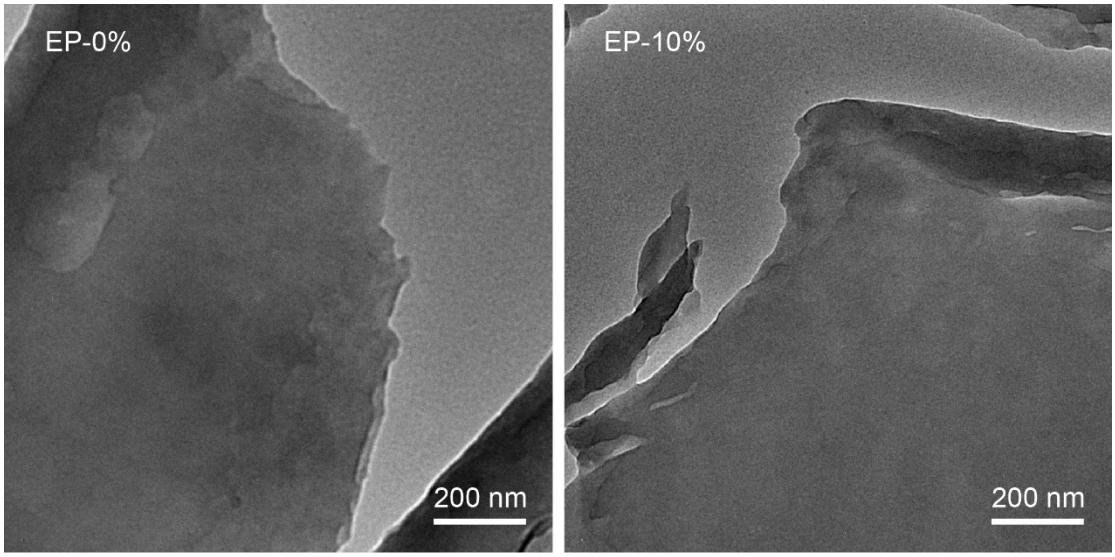

Figure S 3. TEM images of EP-0% and EP-10%.

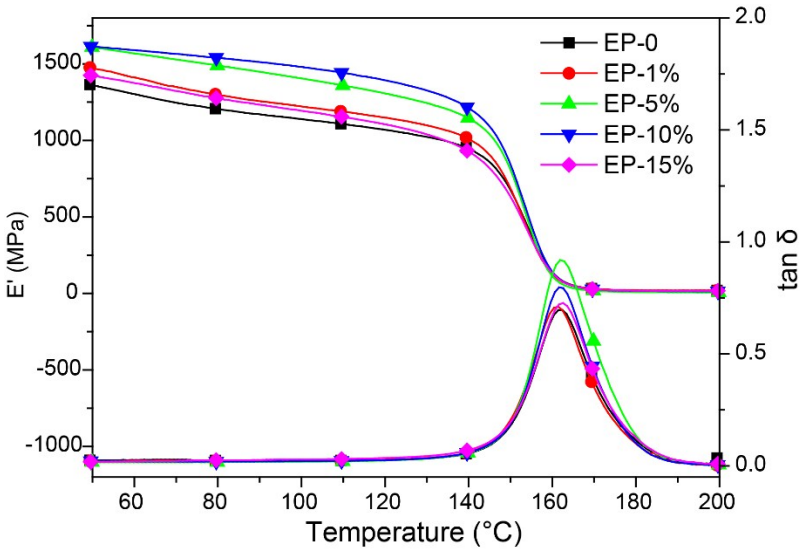

Figure S 4. Variations storage modulus and tan δ versus temperature of cured epoxy resin and ODMAS/EP.

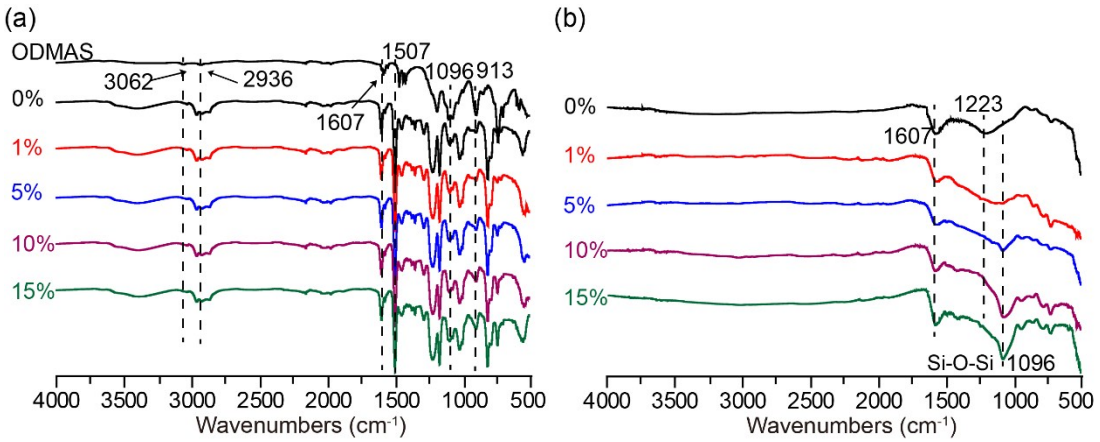

Figure S 5. FT-IR spectra of composites with vary ODMAS contents (a) and that of corresponding char residues (b).

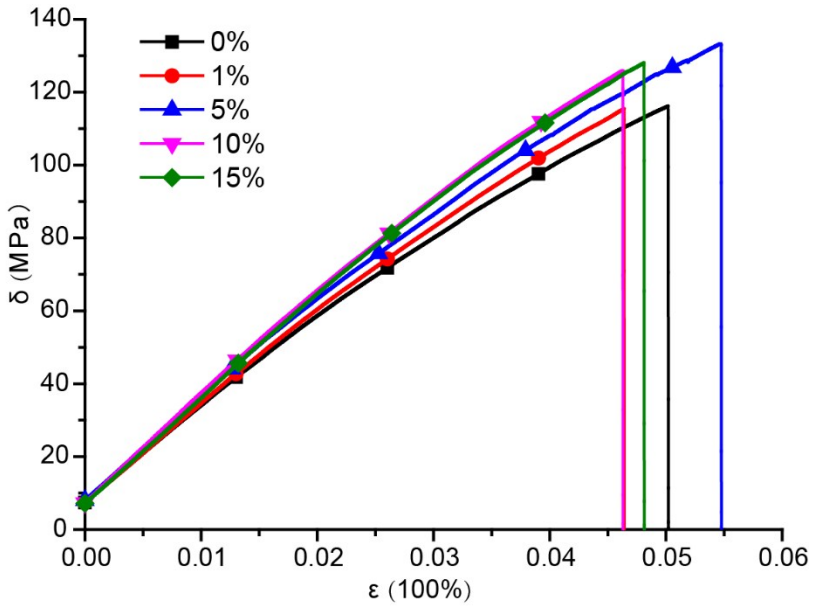

Figure S 6. The σ- ε curves of various ODMAS/EP systems.