

Hard Coating Materials based on Photo-Reactive Silsesquioxane for Flexible Application: Improvement of Flexible and Hardness Properties by High Molecular Weight

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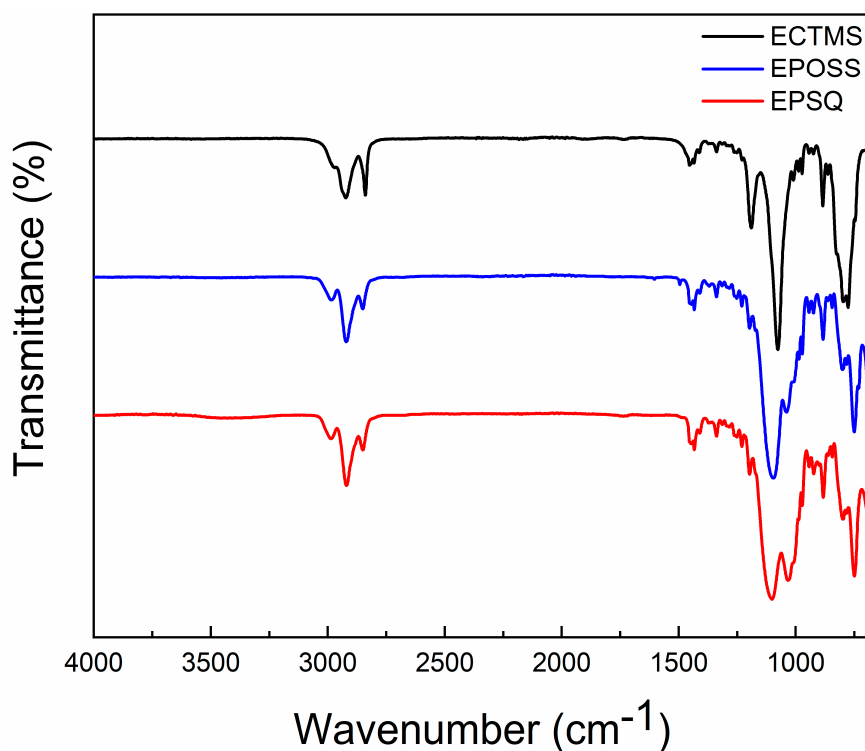


Figure S1. FT-IR spectra of ECTMS, EPOSS, and EPSQ.

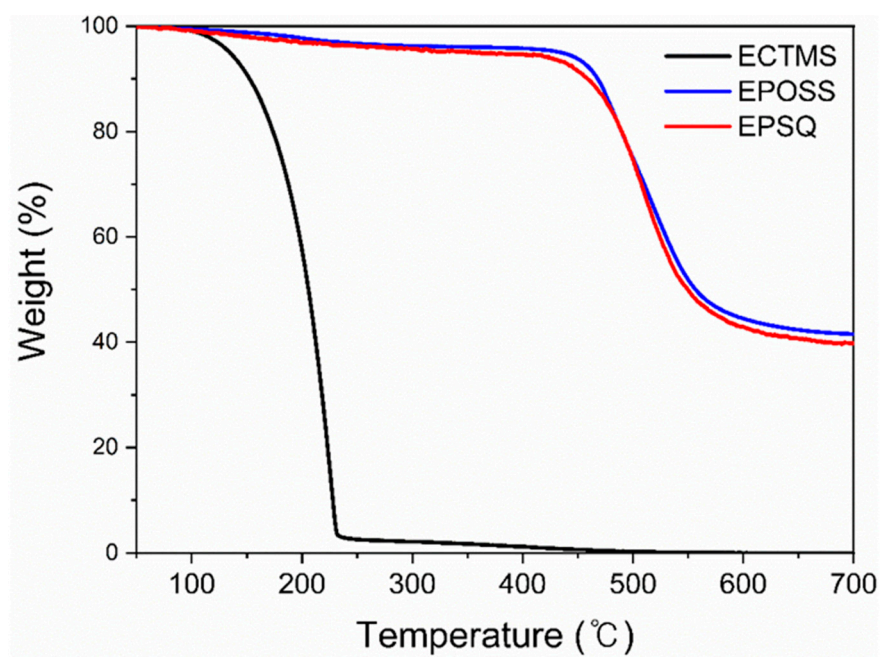


Figure S2. TGA spectra of ECTMS, EPOSS, and EPSQ.

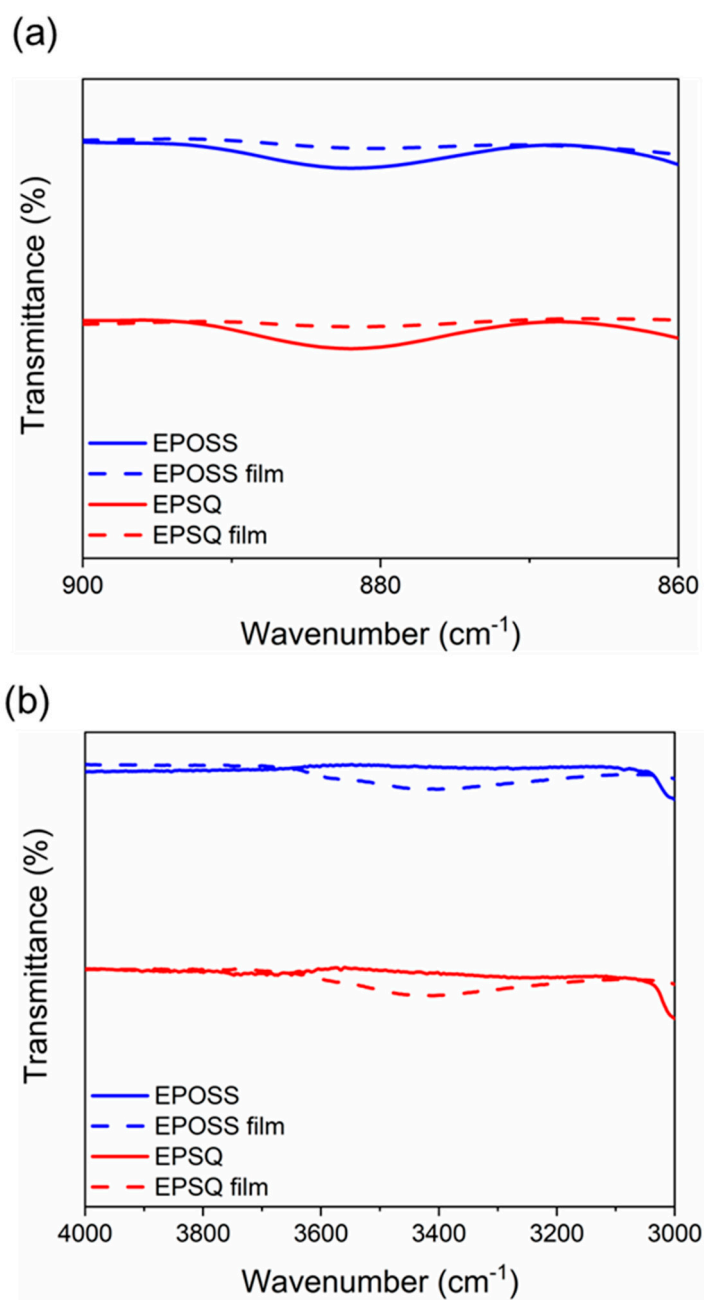


Figure S3. FT-IR spectra of UV curing for EPOSS and EPSQ: (a) epoxy group in the range of 860-900 cm^{-1} and (b) hydroxyl group in the range of 3000-4000 cm^{-1} .

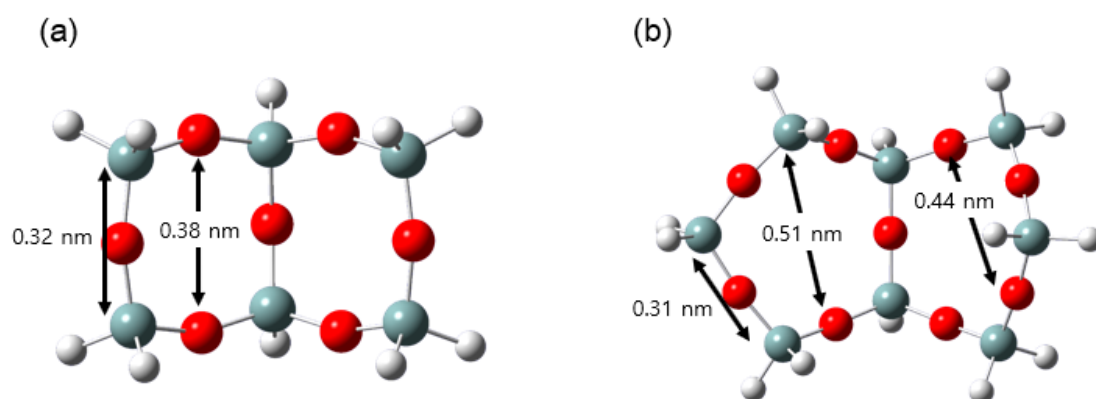


Figure S4. Molecular structures of silsesquioxane analyzed by DFT calculation (Gaussian): (a) square shape and (b) pentagon shape.

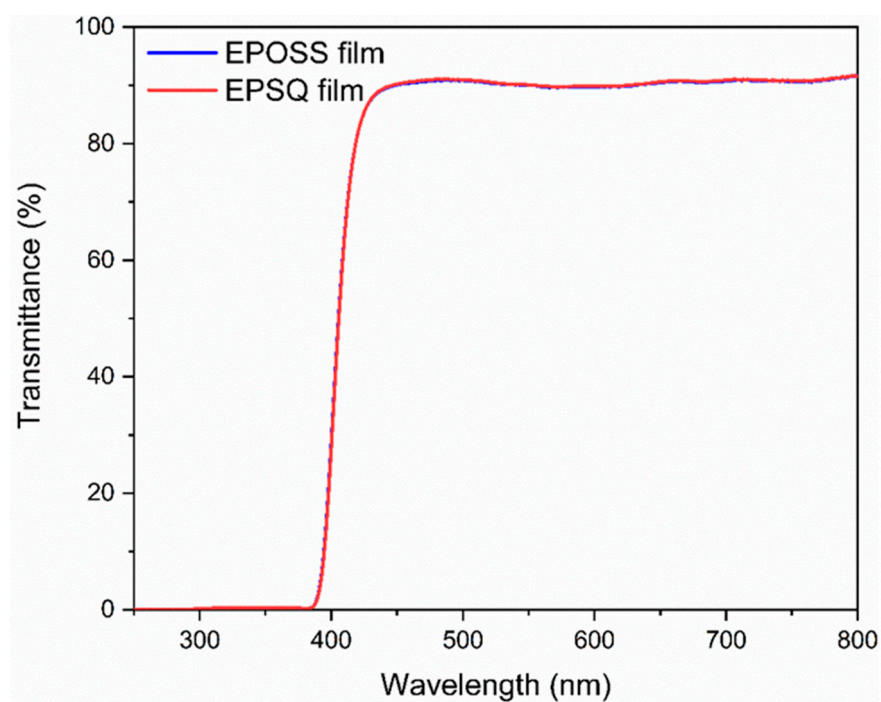


Figure S5. UV-vis spectra of EPOSS and EPSQ films.