Supporting Information

Evaluation of azobenzene nanogels as anti-bacterial additives in adhesive dentistry

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Figure S1. The methacrylated azobenzene nanogels were synthesized using thermally-initiated, solution polymerization protocol in which the isocyanate and alcohol functional groups at 2225 cm^{-1} (A) and 3350 cm^{-1} (B) were monitored throughout the synthesis.

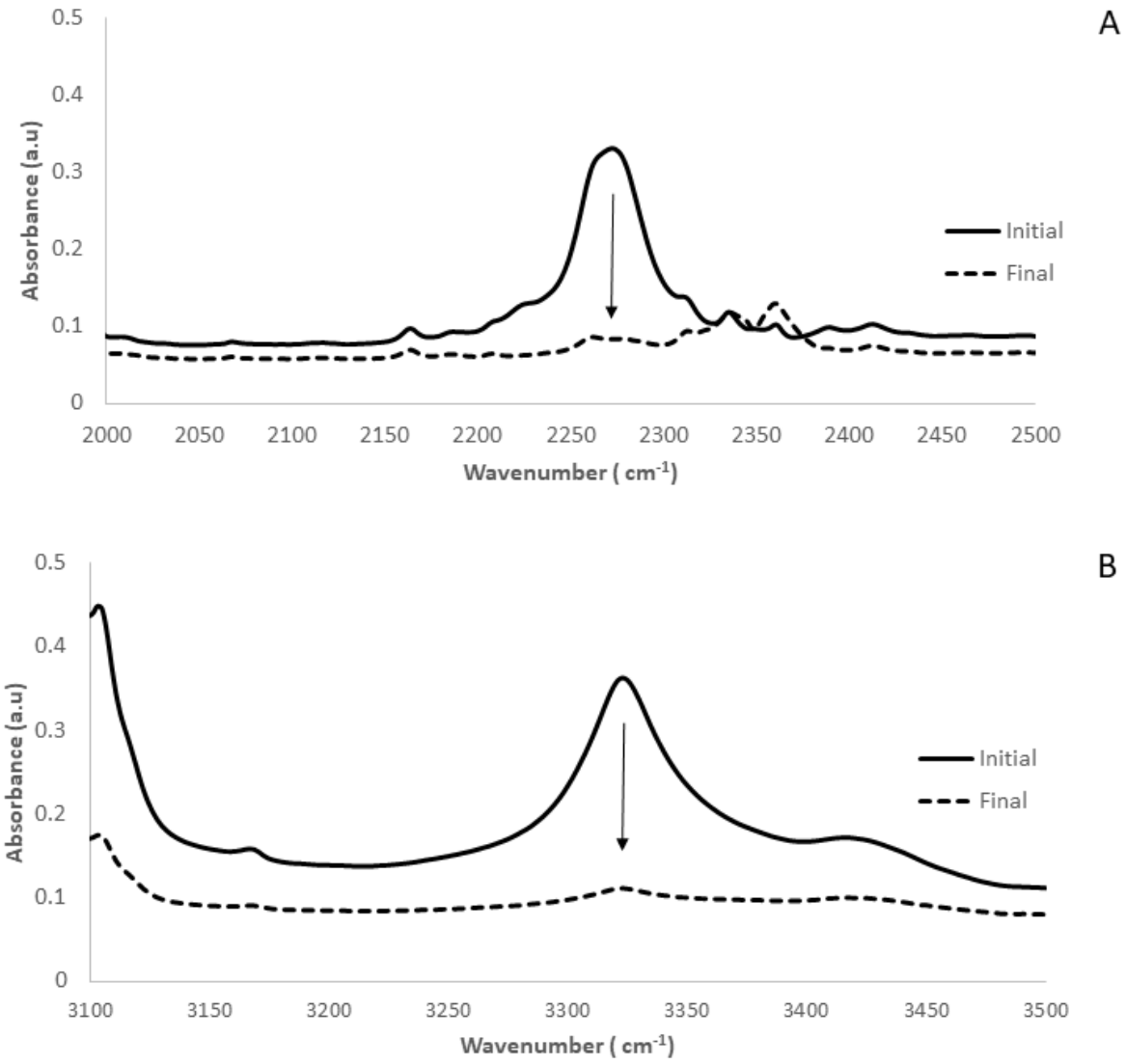

Figure S2. The rate of polymerization for the B/H/E system with 0 wt.%, 0.5 wt.%, 1.5 wt.%, and 2.5 wt.% methacrylated azobenzene nanogels was evaluated using two different photoinitiating methods. The first initiating system (A) incorporated 2wt% of a 1:1 ratio of camphorquinone (CQ) and ethyl 4-(dimethylamino)benzoate (EDMAB) along with a four min exposure with a 700 mW/cm^2 (400-500 nm) LED light source. The second initiating system (B) consisted of both, 2wt. % the photoinitiators CQ-EDMAB, along with the redox initiators benzoyl peroxide (4 wt.%) and dimethyl-p-toluidine (2 wt.%) followed by two 20 s exposures of the same 700 mW/cm^2 (400-500 nm) LED light source.

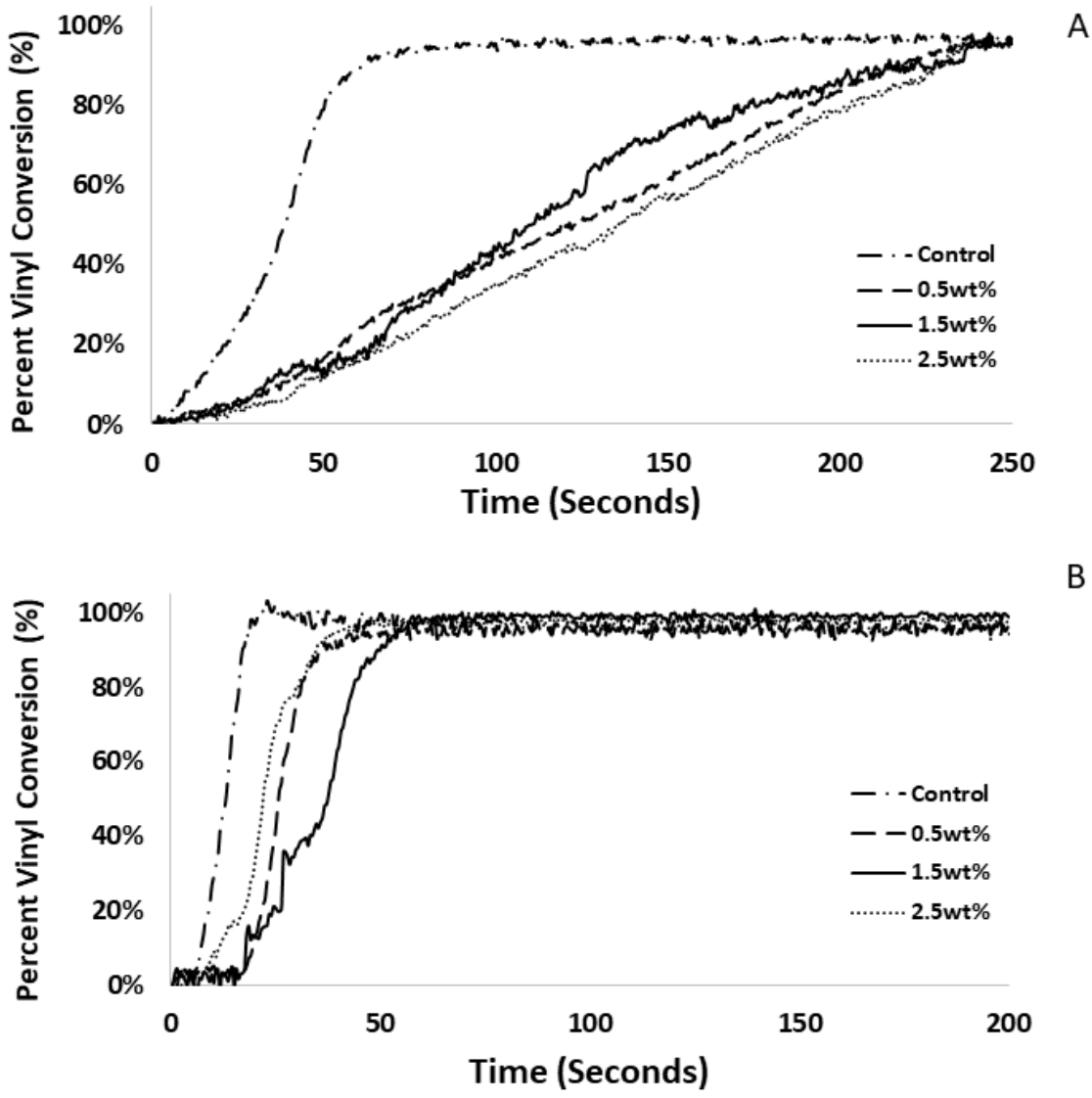

Table S1. The AB-NG nanogels were characterized with GPC in Tetrahydrofuran.

Molecular Weight (Da)	Radius (nm)	Polydispersity Index
12,118	1.74	1.64