

## 유기실리카와 나노기공형성 수지의 상용성 변화에 의한 나노기공의 구조 변화

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Recently, nanoporous low-k materials using porogen (pore generating material) template method have gained much attraction due to the feasible advantage of dielectric constant decrease with the increase of porogen content, which is burning out and making air void by thermal curing. In nanoporous thin films, further, control of pore size and its distribution is very important to retain suitable thermal, mechanical and electrical properties. In this study, nanoporous low-k films were prepared with MTMS-BTMSE copolymer and porogen. The effect of interaction of copolymer matrix and porogen on pore size and distribution was comparatively to investigate with molecular structure and end functional group. The characterization of nanoporous thin film prepared was also performed using various techniques including NMR, GPC, Ellipsometer, FE-SEM, TGA, and FT-IR.