

Preparation and characterization of silicon derivatives for the applications of surfactant in the rigid polyurethane foams

_____, _____, _____, _____, _____*

(sanghocha@kyonggi.ac.kr*)

Silicone derivatives were obtained by the reaction of polymethylhydrosiloxane with poly(ethylene glycol) methyl ether methacrylates (PEGMEM)s or di(ethylene glycol) methyl ether methacrylates (DEGMEM)s via hydrosilylation for the application of surfactant in the rigid polyurethane foams, PUFs. The thermal conductivity of PUFs was changed by the types of surfactant. From the SEM analyses, it was found that the cell size of PUFs decreased with increasing the ratio of hydrophilic part in surfactant, which in turn, decreased the thermal conductivity. The detailed results will be presented in conference.