

## Fabrication of polyurethane foams with various types of inorganic fillers

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Polyurethane composite foam as a sound absorption materials can be fabricated with various inorganic fillers. Sound efficiency of polyurethane composite foams are affected by morphological properties (porosity, cavity and pore size) and their thermos-mechanical properties (storage and loss modulus). For analyzing morphological, thermos-mechanical property and sound absorption efficiency of polyurethane foam, scanning electron microscopy (SEM), dynamic mechanical analysis(DMA) and impedance tube were used. As a result, plate-like filler leads more increase of sound absorption efficiency than other inorganic fillers.