

### Fabrication of Spherical boron nitride by Spray drying method

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The heat generated from the electronic circuit can adversely affect the device reliability and lifetime. Therefore, the development of high performance inorganic filler for enhancing the thermal dissipation capacities of electronic packages has received a lot of interest. Thermal conductivity of the composite polymer sheet is changed according to charging quantity, size and morphology of inorganic fillers. In this study, spherical Boron nitride (BN) of micro size was prepared for use as inorganic filler. BN is widely used as thermal dissipation fillers due to its outstanding heat conductivity, insulation and chemical safety. But preparing the spherical shape of BN is difficult because BN has sheet form structurally. Spherical BN of micro size is aggregated nano size BN by spray dryer. Spray dryer is capable of mass production and it has a relatively simple principle. So it is many used in the actual manufacturing process. The spherical BN were prepared under the various condition such as concentration of BN solution, dispersity, feed rate and temperature. And the morphology of prepared BN were confirmed through FE-SEM analysis.