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Properties of Poly(Amide-Imide) with Low Residual Stress for Electronic Material

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Abstract : Polyimide is a superior polymer in the electronics industry, and we conducted a study to synthesize poly(amide-imide) at low temperatures. Poly(amide-imide) was synthesized at low-temperature curing to offer a thermal stable membrane with low residual stress and good processability. As a result, the low crack polymer with good processability could be used to various applications such as semiconductors, integrated circuits, coating materials, membranes, and display. The synthesis of poly(amide-imide) at low temperatures was confirmed by Fourier transform infrared spectroscopy (FT-IR). Thermal stabilities of the polymer was confirmed by thermogravimetric analysis (TGA) and differential scanning calorimetry (DSC).

Keywords : poly(amide-imide), residual stress, thermal stability
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