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## STUDY OF THE THERMAL PROPERTIES OF MISCIBLE BLENDS BETWEEN POLY(ETHER KETONE KETONE) (PEKK) AND POLYIMIDE

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**Abstract** - This study deals with the enhancement of the thermal behavior of thermostable thermoplastic polymers dedicated to high performance composites. Semi-crystalline Poly(Ether Ketone Ketone) and amorphous poly(Imide) have been blended at different ratios by using a high temperature co-rotative twin screw extruder and injected using an injection-molding machine with a “cold” mold. Injected samples have been characterized by different techniques and we especially discuss how crystallinity affects the composition of the amorphous phase and consequently the variation of the glass transition temperature value according to the composition that we propose to model by a modified Gordon-Taylor law.

**Keywords:** thermostable polymers, miscible blends, thermomechanical analysis

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