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## **Polyetherimide Adhesive**

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## Polyetherimide Adhesive

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## Abstract

High-temperature adhesives which can be adhered at adhesive temperatures lower than those of conventional polyimide adhesives were investigated. Polyetherimide

(PEI), developed by General Electric Co., is one such promising low curing temperature adhesive because it melts at temperatures lower than those used for conventional polyimides. Lap shear adhesive strength was investigated in a 75  $\mu\text{m}$ -thick PEI film using steel test pieces. 350  $\text{kgf}/\text{cm}^2$  was achieved after curing for 1 hour at 270°C and 150  $\text{kgf}/\text{cm}^2$  was achieved at the test temperature of 200°C. PEI adhesive dissolved by N,N-dimethylformamide exhibited a high adhesive strength of 240  $\text{kgf}/\text{cm}^2$  after curing for 2 hours at 200°C. In addition, it was found that PEI could be used at much lower adhesive pressures than those of conventional polyimide adhesives.

Polyetherimide adhesive was found to exhibit excellent performance as a high temperature adhesive.

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