
Adhesion strength in multilayer polymer films

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Multilayer films from incompatible polymers polymethylmetacrylate — polystyrene have poor adhesion and interlayer strength. Application of copolymers enhances adhesion between layers and delaminating strength. Intersection of layers as a result of irregular morphology also improves delamination strength. For test of multilayer films with poor interlayer strength the torsion technique is recommended. Frictional microscopy of delaminated surfaces reveals mechanism of interlayer bond in films.

Keywords: polymers, films, adhesion, frictional microscopy.

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