

EXPERIMENTAL DESIGN FOR PREPRAG FORMULATION

Utai Meekum., W. Na-chai

School of Polymer Engineering, Institute of Engineering,

Suranaree University of Technology

Abstract

The preprag formulation comprised of the DGEBA epoxy based resin mixture and amines based hardener. The hardener was formulated from three components chemical group, Dicyandiamides, Urea catalysts and aliphatic and aromatic amines compound. The effect of epoxy ratio in mixture of the resin based, ratio of Dicyandiamides, B-stage hardener, amines composition and concentration of the catalyst on the tensile, flexural, impact, heat distortion temperature and B-stage cure of the preprag formulation were studied. For the given optimal formulation, the consequence of cure and post curing conditions on those properties were also reviewed.

Published in : In International Conference and Exhibition W fibrous Materials –XXI Century
Saint- Petersburg, Russia. May 23-28, 2005.