ABSTRACT

The progress of the times has made many technologies to facilitate all activities and human needs, one of which is technology in the field of making fiber. Many activities require an adhesive to glue the various materials needed. In this final project research conducted a study of making adhesives for lightweight materials such as paper, using the main ingredient of polyvinyl alcohol polymers, experiments have been conducted with the electrospinning method that produces adhesives from fiber. The adhesive strength of fiber adhesives has been tested with various variations in the concentration of the solution, the solution concentrations of 12%, 15%, and 18%, respectively, have produced fibers that succeeded in becoming adhesives with adhesives of 0.8 N / cm2, 2.6 N / cm2 respectively and 3.2 N / cm2, the results of the adhesive power are the results obtained during the electrospinning process for 90 minutes. Further experiments were carried out using fibers that had the highest adhesive power, namely concentrations of 18%, by increasing the amount of time during the electrospinning process for 150 minutes, resulting in a sticky power of 6.1 N/cm2. The volume of fiber collected affects the adhesion produced.