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MATHEMATICAL MODELING OF PHYSICAL PROPERTIES OF TERRY TISSUE PRODUCTS

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ABSTRACT

In this paper, the main physical properties of terry towels are air permeability, absorption and drying of vapor, capillary properties of body and back yarns, and the construction of a mathematical model using statistical analysis based on experimental results. In the mathematical modeling of the physical properties of terry products, the method of determining the regression model based on the results of experiments from multivariate planning was used to analyze the effect of changes in Pili length and fiber composition on the physical properties.

KEYWORDS: Terry, Terry Towel, Pili Length, Fiber, Cotton, Polypropylene, Air Permeability, Water Vapor Permeability, Liquid Transfer Rate.

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