

Investigation of Knitted Fabric Properties Effect on Evaporation Rate

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Abstract : Evaporation kinetics of water from porous knitted fabrics are studied: An experimental study of determining evaporated water mass (g) versus time (s) from different knitted fabrics was gravimetrically investigated in various atmospheric conditions. Then evaporation rates are calculated. The goal is to determine the effect of fabric composition, knit structure and yarns properties on evaporation rate. The results show that fabrics geometrical properties, such as porosity and thickness, have a significant influence on evaporated water quantities.

Keywords : evaporation rate, experimental study, geometrical properties, porous knitted fabrics

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