

Influence of Resin Finishes on Properties of Khadi Fabric

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Abstract : Khadi is an Indian fabric and also known by another name "Khaddar". During pre-independence era, the movement of khadi manufacturing gained momentum. Over the years, khadi fabrics that were generally considered as the "second skin" of the Swadesh revolutionists changed its uniqueness. It underwent a metamorphosis from that of a patriot's fabric, and a farmer's apparel, to become a "fashion fabric". Drape of garment is governed by draping quality of fabric used. Drape is an essential parameter to decide both appearance and handle of fabric. It is also a secondary determinant of fabric mechanical properties as influenced by the low stress properties, like bending length, formability, tensile and shear properties and compressibility of the fabric. In finishing, fabric is treated to add something to coat the fabric or fiber and thereby temporarily or permanently fix. Film forming agents such as thermoplastic and thermosetting resins and other surface deposits alter hand. In this study, resins were used to modify fabric hand. Three types of resins have been applied on the khadi fabric at three concentration. The effect of these finishes on drapeability, crease recovery, stiffness, tearing strength and smoothness of khadi fabrics were assessed. Silicone gave good results in imparting properties specially drape, smoothness and softness and hand of cotton and khadi fabric. KES result also showed that silicone treated samples enhanced THV rating amongst all treated samples when compared to the control fabric.

Keywords : crease recovery, drapeability, KES, silicone, THV

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