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Functionalization of Cotton Fabric with Vitamin-E on Digital Printed Textiles

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Abstract—Vitamin E, an important nutrient naturally found in human food, is an antioxidant and helps recover body cells from damage due to free radicals, free radicals are a natural byproduct of the metabolic process. Vitamin E prevents coronary heart disease, improves immunity, reduces UV damage to the skin, improves vision, and prevent inflammation and cancer. Because of changes in climate millions of fatal skin deficiencies are aroused in human beings. In this study Vitamin-E finish was applied on a digital printed cotton. It provided aesthetic design as well as Vitamin E medication to the body. As it got the quality of dual exertion, it would be beneficial for both vitamin E deficient and as well as a normal individual, because the wearer can get benefits by the shifting of vitamin-E into the blood vessels. The initiative has been taken by the design experts of different fields to create and experiment on a loose fabric sample and tested for subjective, washing fastness, colorfastness, SEM, and FTR.

Keywords— Antioxidant, Fashion Design, Vitamin-E, Haute Couture, Garments