

Fabrication of Eco-Friendly Pigment Printed Textiles by Reducing Formaldehyde Content

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Abstract : This research aimed to decrease formaldehyde content in substrates printed by pigments using different fixation temperature and concentration of urea in order to produce eco-friendly textiles. Substrates were printed by hand screen printing method as per recipe followed by drying and curing. Standard test methods were adapted to measure formaldehyde content washing and rubbing fastness. Formaldehyde content is instantaneously decreased by raising the temperature during curing printed fabric. Good results of both dry and wet rubbing fastness were found at 160°C slightly improved dry rubbing results are achieved with 2% urea at a curing temperature of 150°C.

Keywords : formaldehyde content, pigment printing, urea, washing fastness, rubbing fastness

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