

Flame retardant finish of polyester/cotton blended fabrics

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Polyester/cotton(50/50) blended fabrics were treated with tetrabromobisphenol - A (TBBA) - hexamethylenediisocyanate (HDI) and THPC-urea precondensate by pad-dry-cure method varying the concentration of solution in 2-bath system. Br-P synergistic effect was investigated through the LOI measurement and thermal analysis was also carried out.

When fabrics were treated with TBBA-HDI or THPC-urea, LOI was increased with the content of flame retardants in fabrics, but flame retardancy was not satisfactory. However, fabrics treated with two kinds of flame retardant in 2-bath system showed satisfactory flame retardancy, and synergism between Br and P compound was also confirmed.