When grey polyester/cotton fabrics are treated with alkaline solution at a high temperature, desizing and scouring effects can be brought about, together with the weight of polyester fiber reduced and cotton fibers mercerized.

In this study, the effects of alkali concentration and reaction time on the weight loss of polyester fibers, mercerization of cotton and other physical properties were investigated.

Furthermore the process of alkali treatment/mercerization of polyester/cotton fabrics in one bath and probabilities of omitting the desizing and scouring process were studied.