

3-(Chloro-2-hydroxypropyltriethyl Ammonium Chloride를 이용한 셀룰로오스 직물의 카치온화

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3-chloro-2-hydroxypropyltriethyl ammonium chloride was prepared by the reaction of epichlorohydrin and triethylamine in the presence of hydrochloric acid and it was used for the cationisation of cellulose fabric. Cationisation of cellulose fabric using 3-chloro-2-hydroxypropyltriethyl ammonium chloride was carried out by these 3 methods such as pad-cure, pad-batch, and immersion method and the cationised cellulose fabric was dyed with acid dyes.

Cationised cellulose fabric can be dyed with acid dyes because the quaternary ammonium groups introduced by the cationisation leads to the formation of ionic bonds with negatively charged anionic groups of the dyes. Colorfastness to light of the cationised cellulose fabric dyed with acid dyes was as good as that of nylon or wool, but the colorfastness to laundering was worse than that of nylon and similar to that of wool. Antimicrobial activity of the cationised cellulose fabric was high.