

تم تحضير استخدام مركب ١-اندانون في تحضير صبغات الأزو بنسبة ناتج و نقاوة عالية و بطرق تقليدية بسيطة عن طريق التفاعل مع الثايوسيمي كربازيد ثم التفاعل مع هيدرازونات الكلوريد. حيث تم معالجة الأقمشة القطنية بهذه الصبغات حيث اثبتت فاعليتها في منع نفاذ الأشعة فوق بنفسجية.

Eight 2-[1-(1,2-dihydroinden-3-ylidene)hydrazono]-5-aryldiazo-4-methyl-1,3-thiazole dyes (λ max 355-460 nm) were synthesized by reaction of 1-(1,2-dihydroinden-3-ylidene)thiosemicarbazide with different hydrazonyl chlorides. These azo dyes are water insol. and UV absorbers with UPF-rating values, and their H₂O/DMF solns. were used in simultaneous dyeing and resin finishing of cotton fabrics. Finishing of cotton samples using the dyes brings about an improvement in percent nitrogen, wrinkle recovery angle (WRA), dyeability, and UV protection rating values along with slight decrease of tensile strength (TS) compared with the untreated samples. Irresp. of dye structure, increasing the dye concn. from 0.5 and up to 1.7% results in an improvement in the percent nitrogen, TS and a remarkable improvement in both the dyeability and UPF-rating values along with a slight decrease in WRA and lower fastness properties of the treated fabrics. The treated fabrics were characterized using energy-dispersive X-ray anal., indicating entrapped dye within the fabric structure.