

Nanoscale engineering of photo aligning Cibacron Brilliant Yellow

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ABSTRACT

Photoalignment properties on commercially available textile dye Cibacron Brilliant Yellow exhibit excellent alignment quality. Thin layer of solid films (about 20–100nm in thickness) shows high thermal and photo stability. Excellent surface energy values (both azimuthal and polar) were achieved. The distinguished alignment properties of this dye extend the field of the sulfuric azo dyes effective for photoalignment. An attractive feature of this dye is its low curing temperature, which is essential for plastic substrates to use it as flexible devices

KEYWORDS: CBY, photoalignment, flexible displays, liquid crystals, anchoring energy.

DOI: 10.1002/jsid.209