



Synthesis and Dyeing Properties of Bifunctional Reactive Dyes of 5(4 bromophenyl) 1, 3 thiazole 2-amine by using Gamma acid and OAVs

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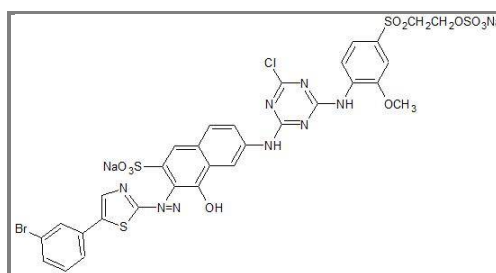
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Accepted on 2nd September, 2019

ABSTRACT

Bifunctional reactive dyes are colored compounds that possess more than one reactive moiety per molecule or groups, capable of forming covalent bonds between dye ions or molecules and the substrate. The bifunctional reactive dye was synthesized with *s*-triazine and vinyl sulphone groups via 5(4 bromophenyl) 1, 3 thiazole 2-amine. This intermediate was diazotized coupled with gamma acid and other various coupling components to derive such bifunctional reactive dyes by using ortho anisidine vinyl sulphone and λ_{max} of dyes were measured. % exhaustion, % fixation and % fixation efficiency of dyes was determined by Glauber salt using fixing agent at various temperature condition. Washing and light fastness were determined. The results were confirmed at λ_{max} 411 nm. The overall result concluded that bromo and methoxy group was introduced in para position of benzene ring induced hypsochromic shift.

Graphical Abstract



Structure of synthesized bifunctional reactive dye.

Keywords: Bifunctional, Co-valent bond, λ_{max} , Hypsochromic shift.