



## Synthesis, Characterization and Fastness Properties of 2-amino 5-methyl-1,3,4-thiadiazole

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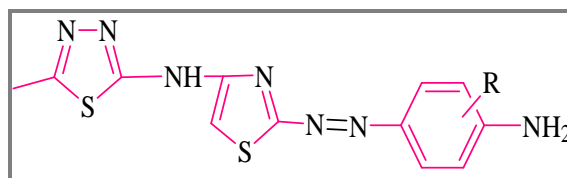
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### ABSTRACT

Disperse dyes  $D_1$ - $D_{12}$  have been synthesized by diazotization of  $N^4$ -(5-methyl-1, 3, 4-thiadiazole-2-yl)thiazole-2-4-diamine ( $Z_1$ ) and coupled with various primary anilines. These were characterized using elemental analysis, UV, IR and NMR spectra. Dyeing performance and fastness properties were evaluated by applying them to polyester fabric. The dye bath exhaustion and fixation on the fabric was also found to be very good. Computer color matching properties ( $L^*$ ,  $a^*$ ,  $b^*$ ,  $C^*$ ,  $H^*$  and  $K/S$ ) was assessed.

### Graphical Abstract



Synthesis of monoazo disperse dyes.

**Keywords:** 2-amino 5-methyl-1,3,4-thiadiazole, Chloroacetylchloride, Fastness properties.