

Synthesis of 4-Tosyl-5-chloro-1,3-thiazole-2-carbonitrile and Its Transformations

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Abstract—Reaction of the available 1-tosyl-2,2-dichloroethenyl isothiocyanate with sodium cyanide yields new clearly electrophilic substrate of thiazole nature containing the nitrile group, the tosyl residue, and the chlorine atom at C², C⁴, and C⁵ respectively. The direction of the reaction of this substrate with nucleophile depends significantly on the nature of the latter. It was used in regioselective syntheses of a series of the unknown previously trifunctional thiazoles.

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