



Short Communication

**A Facile Synthesis of 5-(2-Bromo-4-Methylthiazol-5-yl)-
3-(Methylthio)-1H-Pyrazole**

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ABSTRACT

Ethyl-2-bromo-4-methylthiazole-5-carboxylate (2) was obtained by bromination of 2-Amino-4-methylthiazole-5-ethylcarboxylate (1) using hydrogen bromide in presence of sodium nitrite. This compound undergoes hydrolysis with sodium hydroxide in THF to form 2-bromo-4-methylthiazole-5-carboxylic acid (3). Then acid 3 is transformed to 2-bromo-N-methoxy-N,4-dimethylthiazole-5-carboxamide using N, O-dimethyl hydroxylamine hydrochloride in presence of EDC.HCl (4) which on treating with Grignard reagent gave 1-(2-bromo-4-methylthiazol-5-yl)ethanone (5). The ethanone gave compound 6 on reaction with carbon disulphide in presence of sodium hydride and methyl iodide which is cyclised to form 5-(2-bromo-4-methylthiazol-5-yl)-3-(methylthio)-1H-pyrazole (7) in presence of hydrazine hydride and ethanol.

Keywords: Thiazoles, Cyclocondensation, Heterocycles, 5-(2-bromo-4-methylthiazol-5-yl)-3-(methylthio)-1H-pyrazole.
