

# Synthesis and Single Crystal X-Ray Structure of Ethyl 2-(1,3-Benzoxazol-2-yl)-5-oxo-3-(4-toluidino)-2,5-dihydro-4-isoxazolecarboxylate

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*Z. Naturforsch.* **2007**, 62b, 705 – 710; received October 24, 2006

Ethyl 5-oxo-3-(4-toluidino)-2,5-dihydro-4-isoxazolecarboxylate was prepared from the reaction of diethyl 2-(4-toluidinocarbothioyl)malonate with hydroxylamine. Its reaction with 2-chlorobenzoxazole gave the corresponding *N*-substituted isoxazolone. The structure of the final product **4** was confirmed by IR, <sup>1</sup>H and <sup>13</sup>C NMR spectroscopy and mass spectrometry, and by X-ray single crystal structure determination.

**Key words:** Synthesis, Hydroxylamine, 2-Chlorobenzoxazole, *N*-Substituted Isoxazolone, X-Ray Single Crystal Structure