

ABSTRAK

Sintesis Senyawa Benzoilurea dari Urea dan Benzoil Klorida dengan Metode Irradiasi *Microwave*

Senyawa benzoilurea disintesis melalui reaksi asilasi antara urea dan benzoil klorida. Sintesis senyawa tersebut dilakukan dengan metode irradiasi *microwave* pada kekuatan 60% dan pada berbagai lama pemanasan, yaitu 60, 70, dan 80 detik. Persentase hasil sintesis pada masing-masing lama pemanasan adalah 19,89%, 12,75% dan 5,51%. Kemurnian hasil sintesis ditunjukkan dengan adanya bercak tunggal pada KLT dan jarak lebur yang sempit. Dari hasil pemeriksaan senyawa hasil sintesis dengan spektrofotometri UV, IR, dan spektrometri ¹H-RMI dapat disimpulkan bahwa senyawa hasil sintesis sesuai dengan senyawa yang diharapkan.

Kata kunci : benzoilurea, sintesis, irradiasi *microwave*

ABSTRACT

The Synthesis of Benzoilurea from Urea and Benzoil Chloride with Irradiation Microwave Method

The synthesis of benzoilurea was carried out by acylating urea with benzoyl chloride. The synthesis was done with microwave irradiation method at 60% power under different sets of temperature, which were 60, 70, and 80 seconds. The percentage yields were 19,89%, 12,75%, and 5,51%. The purity of the synthesized product were shown by single spot on the Thin Layer Chromatogram and narrow range of melting point. Based on the UV, IR, and ¹H-RMI spectroscopy, it was concluded that the structure of the synthesized product were in accordance to the prediction.

Keyword : benzoylurea, synthesis, irradiation microwave

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