

Synthesis of Nitro Derivative of 3-(4-Chlorophenyl)-2-Methyl-Quinazolin-4-One using Various Nitration Agents (article on The 2nd International Conference of the Indonesian Chemical Society October, 22-23 2013)

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Abstrak

ABSTRACT

Nitration of 3-(4-chlorophenyl)-2-methyl-quinazolin-4-one using various nitration agents have been performed. The purpose of the experiment was to get the best nitration agents for the synthesis of nitro derivative of the compound. The various nitration agents used were: fuming nitric acid-concentrated sulfuric acid, silver nitrate-N-bromosuccinimide (NBS), ammonium nitrate-silica supported sulfuric acid, and ammonium nitrate-concentrated sulfuric acid. The results showed that nitration with fuming nitric acid-concentrated sulfuric acid obtained 3-(4'-chloro-3'-nitrophenyl)-2-methyl-6-nitro-quinazolin-4-one in 49.74% yield. The structure was confirmed using FT-IR and ¹H-NMR. The other nitration methods were not give the desired results.