N-Alkylation Of 6,6'-Dibromoisoindigo via Tosylate: An Economical Pathway

ABSTRACT

This paper introduces a substantial and price reasonable pathway to N-alkylate the 6,6'dibromoisoindigo. The conventional method for this N-alkylation involves the usage of alkyl bromides, which are available in the commercial with high-priced and limited amount. In this research, the price to purchase 7-(bromomethyl) pentadecane is fourfold than the cost to synthesize the relevant tosylate from 2-hexyl-1-decanol. The most suitable reaction condition to N-alkylate this 6,6'-dibromoisoindigo is by refluxing it with potassium carbonate in dried DMF under nitrogen atmosphere. After characterization, it can be concluded that 6,6'-dibromoisoindigo has been successfully N-alkylated with tosylate without involved the expensive alkyl bromide.