



Facile and Green Syntheses of Substituted-5-arylidene-2,4-thiazolidinediones using Polymer Supported DABCO as an Eco-Friendly Catalyst in Aqueous Medium

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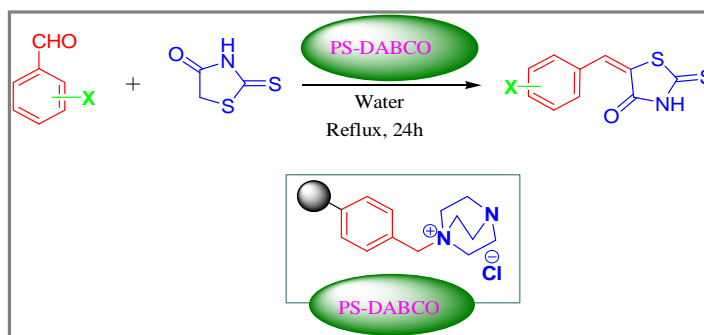
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ABSTRACT

An efficient, high-yielding and rapid protocol has been developed for the synthesis of 5-benzylidene rhodanine derivatives via C-C bond forming reaction of aryl aldehydes and rhodanine by using PS-DABCO as green reusable heterogeneous catalyst in water as reaction solvent. Absence of unwanted products, general applicability, reusability of the catalyst, non-chromatographic purification procedure, green synthesis avoiding toxic reagents and improved and operational simplicity make this protocol a useful, greener, cost effective and practical for both academic as well as industrial purposes.

Graphical Abstract



Keywords: C-C bond formation reaction, 5-benzylidene rhodanine, Polymer supported DABCO, Heterogeneous catalyst