催化学报 » 2012, Vol. 33 » Issue (12) :1945-1949 DOI: 10.1016/S1872-2067(11)60477-4

研究论文

1,3,5-Tris(hydrogensulfato) Benzene: A New and Efficient Catalyst for Synthesis of 4,4'-(arylmethylene)bis(1H-pyrazol-5-ol) Derivatives

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摘要 1,3,5-Tris(hydrogensulfato) benzene (THSB) was easily prepared by the reaction between phloroglucinol and chlorosulfonic acid in dichloromethane at room temperature. This compound was then used as an efficient catalyst for the synthesis of 4,4'-(arylmethylene)bis(1*H*-pyrazol-5-ols) through the condensation reactions of 1-phenyl-3-methylpyrazol-5-one with several different aromatic aldehydes in ethanol at 75 ° C. The present methodology offers several advantages over existing methodologies, such as excellent yields, simple procedure, easy work-up and ecofriendly reaction conditions.

关键词： 1,3,5-tris(hydrogensulfato) benzene aromatic aldehydes 1-phenyl-3-methylpyrazol-5-one 4,4'-(arylmethylene)bis(1H-pyrazol-5-ols) ethanol multicomponent reaction

Abstract： 1,3,5-Tris(hydrogensulfato) benzene (THSB) was easily prepared by the reaction between phloroglucinol and chlorosulfonic acid in dichloromethane at room temperature. This compound was then used as an efficient catalyst for the synthesis of 4,4'-(arylmethylene)bis(1*H*-pyrazol-5-ols) through the condensation reactions of 1-phenyl-3-methylpyrazol-5-one with several different aromatic aldehydes in ethanol at 75 ° C. The present methodology offers several advantages over existing methodologies, such as excellent yields, simple procedure, easy work-up and ecofriendly reaction conditions.

Keywords： 1,3,5-tris(hydrogensulfato) benzene, aromatic aldehydes, 1-phenyl-3-methylpyrazol-5-one, 4,4'-(arylmethylene)bis(1H-pyrazol-5-ols), ethanol, multicomponent reaction

收稿日期: 2012-07-30; 出版日期: 2012-12-18

引用本文:

Zahed KARIMI-JABERI, Baharak POOLADIAN, Masoud MORADI等 .1,3,5-Tris(hydrogensulfato) Benzene: A New and Efficient Catalyst for Synthesis of 4,4'-(arylmethylene)bis(1H-pyrazol-5-ol) Derivatives[J] 催化学报, 2012,V33(12): 1945-1949

Zahed KARIMI-JABERI, Baharak POOLADIAN, Masoud MORADI etc .1,3,5-Tris(hydrogensulfato) Benzene: A New and Efficient Catalyst for Synthesis of 4,4'-(arylmethylene)bis(1H-pyrazol-5-ol) Derivatives[J] Chinese Journal of Catalysis, 2012,V33(12): 1945-1949

链接本文:

http://www.chxb.cn/CN/10.1016/S1872-2067(11)60477-4 或 http://www.chxb.cn/CN/Y2012/V33/I12/1945

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