

Polymer-supported DABCO for Transesterification of dimethyl carbonate with glycerol

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DABCO (1,4-diazabicyclo[2.2.2]octane) was immobilized on Merrifield peptide resin and characterized using solid state ^{13}C -NMR and IR. the results showed the DABCO was successfully immobilized on the surface of the Merrifield resin. Acid-base titration of Merrifield resin-supported DABCO revealed 2.17 mmol/g of basic site exist on the prepared catalyst. Merrifield resin-supported DABCO is highly active heterogeneous catalyst for synthesis of glycerol carbonate from glycerol and dimethyl carbonate and could be reused at least 5 times without losing its catalytic activity.