

"Selective Monoacetylation of Unsymmetrical Diols Catalyzed by Silica Gel-Supported Sodium Hydrogen Sulfate." Breton, G. W. *Journal of Organic Chemistry*, 1997, 62, 8952-8954.

Abstract: Selective monoacetylation of unsymmetrical diols is an important procedure in organic synthesis as is reflected by the number of methods that have been developed to effect this transformation.<sup>1,2</sup> Acetylation via the process of transesterification employing heterogeneous catalysts is of particular convenience since starting esters (e.g., ethyl acetate) are readily available and the catalyst may be easily separated from the product mixture through simple filtration.<sup>1c,3,4</sup> High selectivity for acetylation of primary hydroxyl group sites in the presence of secondary sites has been previously reported with the use of alumina as catalyst.<sup>1c,3</sup> This method suffers, however, from the large amounts of catalyst required (10g of Al<sub>2</sub>O<sub>3</sub>/mmol of diol) as well as relatively high reaction temperatures (75 – 80 °C).