

# Fischer Esterification using Benzoic Acid as Model Compound

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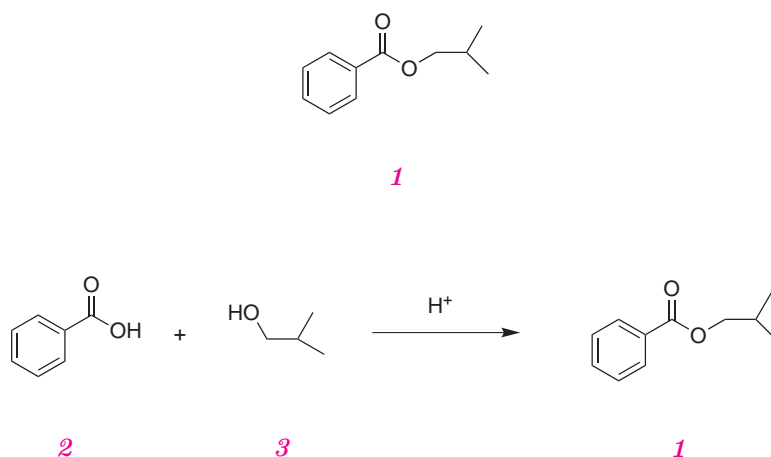
March 23, 2010

## List of Schemes

1	Model Fischer Esterification with <b>1</b> and <b>2</b> . . . . .	1
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## 1 Background

Our research project requires a target ester, whose starting material requires 15 synthetic steps. We decided to optimize the conditions of this Fischer esterification by preparing a closely related analogue **3**. The starting materials in this model reaction is the readily available benzoic acid (**1**) and *i*-PrOH (**2**).



Scheme 1: Model Fischer Esterification with **1** and **2**.

In this reaction (Scheme 1), benzoic acid (**1**) is dissolved in excess *i*-PrOH (**2**). The heterogenous, incompletely dissolved solution was transferred to a 25ml round-bottom flask equipped with a condenser. The solution was heated to reflux, then catalytic H<sub>2</sub>SO<sub>4</sub> was added carefully through the top of the condenser. The reaction was monitored by thin-layer chromatography at hourly intervals.