

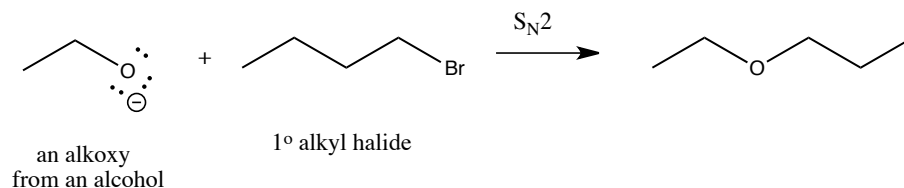
Chem 343 – Organic Reactions

Chapter 11

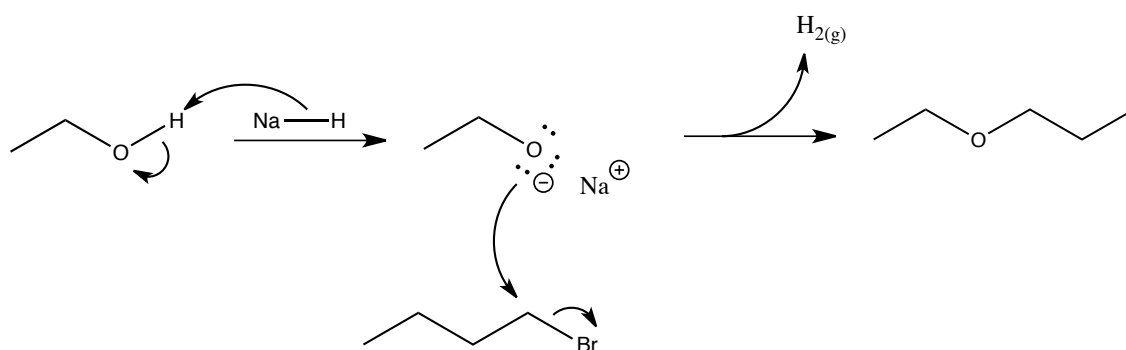
Prepared by José Laboy, MS

<http://www.chem.wisc.edu/areas/clc> (Resource page)

Synthesis and Reactions of Ethers #4: Williamson Ether Synthesis



Mechanism



To produce the alkoxy (strong base/nucleophile) either NaH (sodium hydride) or $NaNH_2$ (sodium amide) with an alcohol can be used. The alcohol can be 1° or 2°.

The alkyl halide has to be a 1° alkyl halide. Secondary alkyl halides under these conditions mostly produce elimination products by an E2 mechanism.