

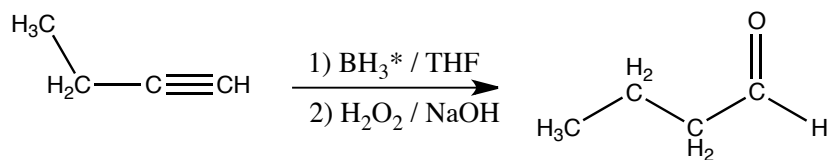
Chem 343 – Organic Reactions

Chapter 14

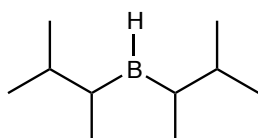
Prepared by José Laboy, MS

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

Synthesis and Reactions of Alkynes #8: Hydroboration Oxidation of Terminal Alkynes

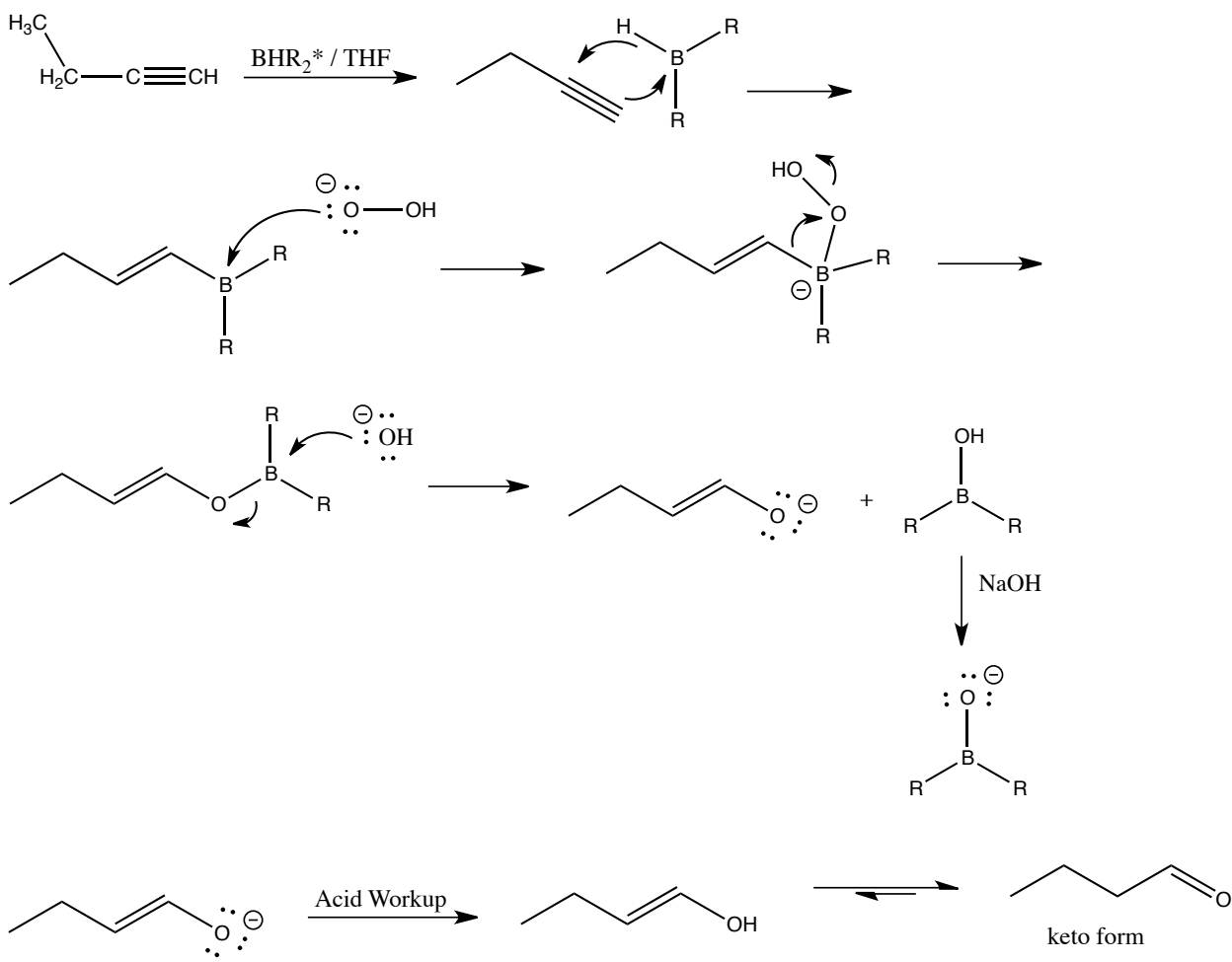


* Disiamylborane is the preferred reagent with terminal alkynes. It is a highly branched derivative of borane.



Disiamylborane

Mechanism



Terminal alkynes give a variety of oxidation products with BH_3 . Using a highly branched alkyl-borane will provide the aldehyde in a higher yield.

The keto-enol equilibrium favors the keto form.