

ORGANIC CHEMISTRY 1 LECTURE GUIDE 2019

BY RHETT C. SMITH

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By Rhett C. Smith, Ph.D.

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Organic Chemistry 1 Reactions and Practice Problems 2019

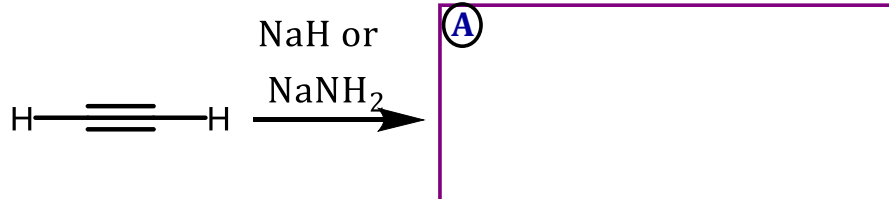
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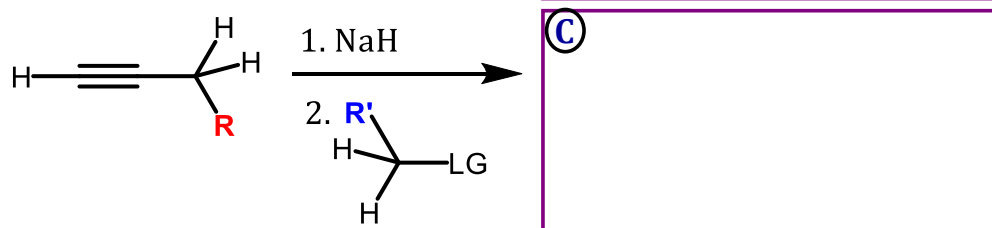
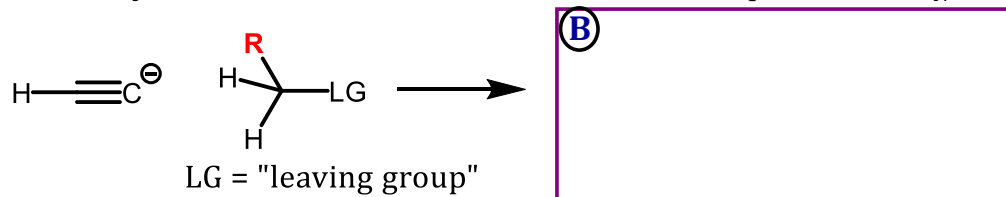
by Rhett C. Smith, Andrew G. Tennyson, and Tania Houjeiry

Lecture Topic III.16: Acetylide Anion Preparation and use as a Nucleophile
Chain Extension of Terminal Alkynes

A **strong** base can deprotonate a terminal alkyne:

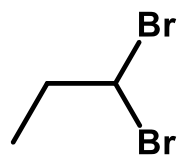


The **acetylide anion** can then be used as a nucleophile in an $\text{S}_{\text{N}}2$ reaction:

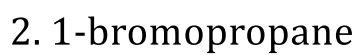
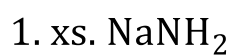
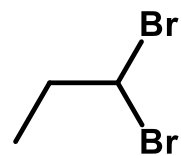


Notes

Lecture Topic III.16: Acetylide Anion Preparation and use as a Nucleophile
Chain Extension of Terminal Alkynes



(A)



(B)



Notes