

### Oxidation

“Reactions of alkynes with oxidizing agents such as potassium permanganate and ozone usually result in cleavage of the triple-bond to give carboxylic acid products. The symbol [O] is often used in a general way to denote an oxidation.”

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### Real World Application

Discover processes or disciplines in the natural or man-made worlds that employ the concept.

Acetylene ( $C_2H_2$ ) is a colorless gas, and is widely used in the fuel production as a building block for other molecules. Approximately 20% of acetylene is consumed in the welding industry because it has a very high temperature as a flame.

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### Vocabulary

Learn important vocabulary for this concept, including words that might appear in assessments (tests, quizzes, homework, etc.) that indicate the use of this concept.

Important Vocabulary

Term

Context

Hydration

The reaction that is the combination of the alkyne with water (OH and H) across

### Videos

Browse relevant videos from the Journal of Chemical Education's (JCE) Chemistry Comes Alive! library and other video sources.

#### Hydrogenation

alkenes and alkynes

## Works Cited

Review the works cited to write the researched parts of this page, such as the discover's biographical information and other areas.

### Works Cited

1 - [LINK URL: <http://www.ucc.ie/academic/chem/dolchem/html/dict/alkynes.html>]

2 - [LINK URL: <http://www2.chemistry.msu.edu/faculty/reusch/VirtTxtJml/addyne1.htm>]

3 - [LINK URL: [http://www.c-f-c.com/specgas\\_products/acetylene.htm](http://www.c-f-c.com/specgas_products/acetylene.htm)]