IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
Impact Factor: 7.301
Volume 3, Issue 13, May 2023

Synthesis of Benzil From Benzoin by Oxidation Reaction

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Abstract: *The synthesis of benzil from benzoin is a classic organic chemistry experiment that involves the oxidation of secondary alcohol to a ketone using an oxidizing agent, such as nitric acid. Benzil is a useful compound that is often used as a starting material for the synthesis of other organic compounds, such as dyes and pharmaceuticals. The reaction involves the conversion of benzoin to benzil via a mechanism that involves the formation of hemiketel intermediate. This reaction is typically carried out in a solvent, such as ethanol or methanol, and the product is isolated by recrystallization. This experiment provides students with an opportunity to learn about oxidation reaction, the chemistry of carbonyl compounds, and importance of purification techniques in organic synthesis.*

Keywords: Benzil, benzoin, conc. Nitric acid

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