

Organic Chemistry Portal

Reactions >> Name Reactions

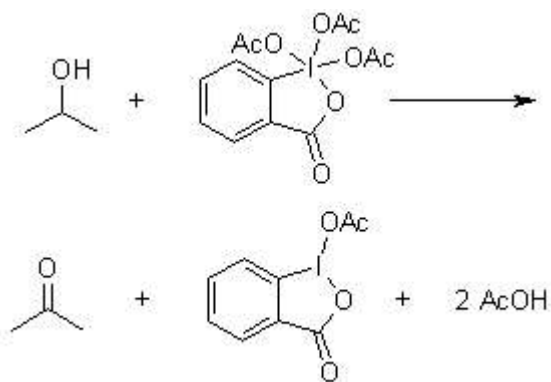
Further Information

[Literature](#)

Related Reactions

[Corey-Kim Oxidation](#)[Jones Oxidation](#)[Swern Oxidation](#)

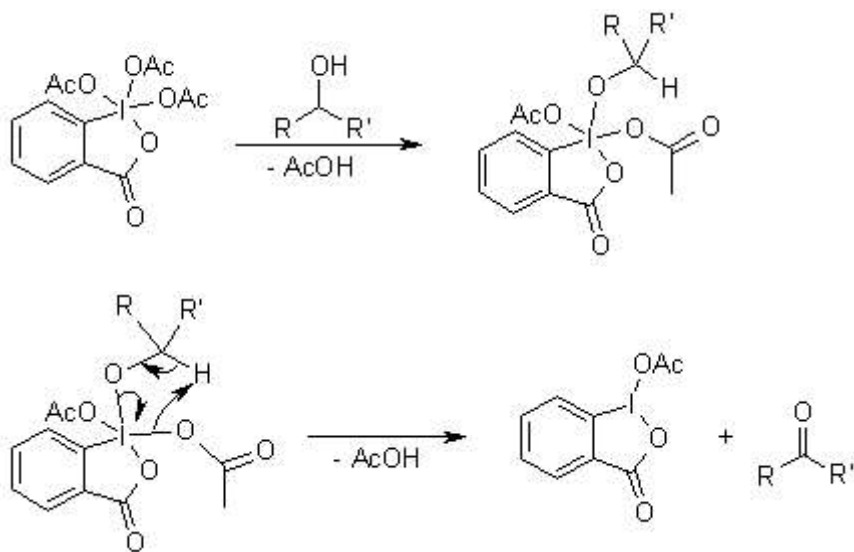
Dess-Martin Oxidation



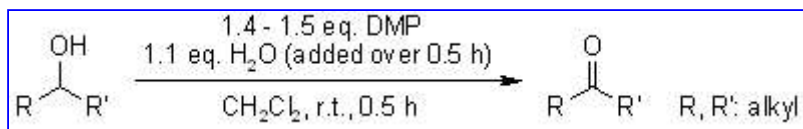
The [Dess-Martin Periodinane](#) (DMP), a hypervalent iodine compound, offers selective and very mild oxidation of alcohols to aldehydes or ketones.

The oxidation is performed in dichloromethane or chloroform at room temperature, and is usually complete within 0.5 - 2 hours. Products are easily separated from the iodo-compound byproduct after basic work-up.

Mechanism of the Dess-Martin Oxidation

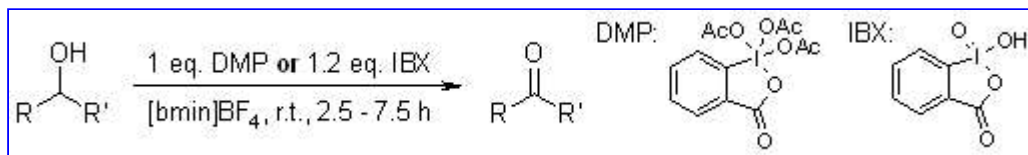


Recent Literature

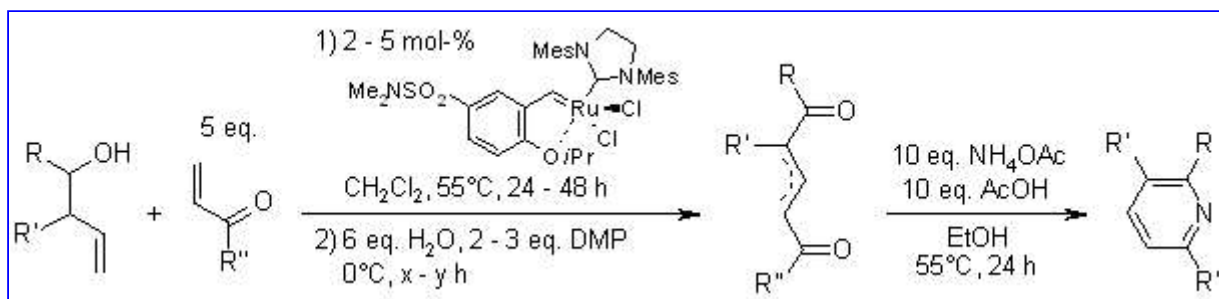


Acceleration of the Dess-Martin Oxidation by Water

S. D. Meyer, S. L. Schreiber, *J. Org. Chem.*, **1994**, 59, 7549-7552.



Recyclable 2nd generation ionic liquids as green solvents for the oxidation of alcohols with hypervalent iodine reagents
 J. S. Yadav, B. V. S. Reddy, A. K. Basak, A. V. Narsaiah, *Tetrahedron*, **2004**, *60*, 2131-2135.



Heteroaromatic Synthesis via Olefin Cross-Metathesis: Entry to Polysubstituted Pyridines

T. J. Donohoe, J. A. Basutto, J. F. Bower, A. Rathi, *Org. Lett.*, **2011**, *13*, 1036-1039.