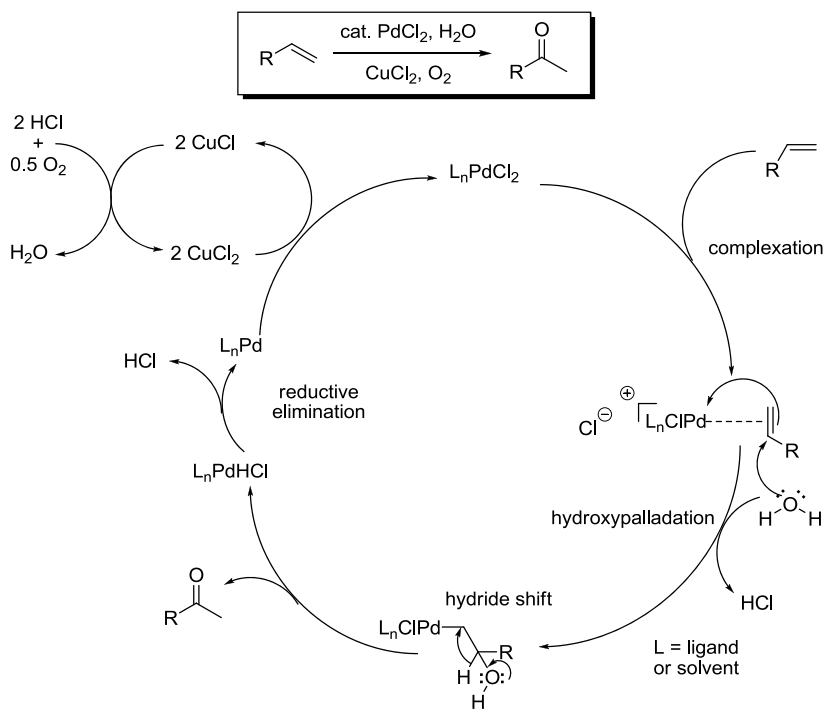
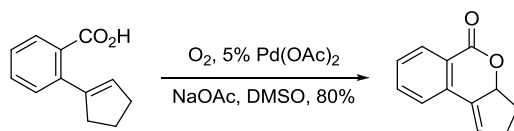


Wacker oxidation

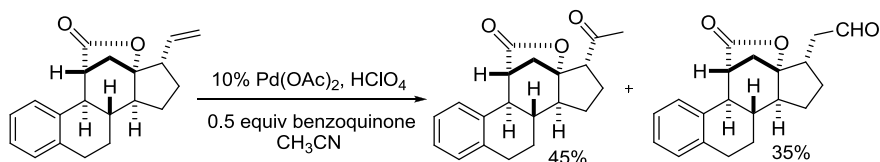
Palladium-catalyzed oxidation of olefins to ketones, and aldehydes in certain cases.



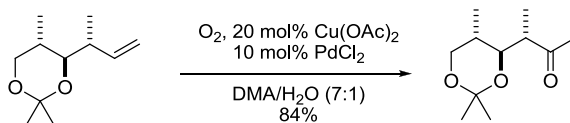
Example 1⁵

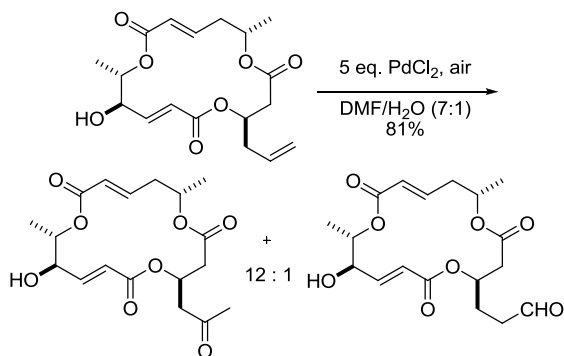
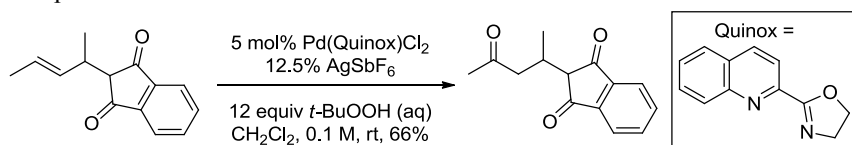


Example 2⁷



Example 3⁹



Example 4¹⁰Example 5¹⁰

References

- Smidt, J.; Sieber, R. *Angew. Chem. Int. Ed.* **1962**, *1*, 80–88. Wacker is not a person, but a place in Germany where Wacker Chemie developed this process. Since Hoechst AG later refined the reaction, this is sometimes called Hoechst–Wacker process.
- Tsuji, J. *Synthesis* **1984**, 369–384. (Review).
- Hegedus, L. S. In *Comp. Org. Syn.* Trost, B. M.; Fleming, I., Eds.; Pergamon, **1991**, *Vol. 4*, 552. (Review).
- Tsuji, J. In *Comp. Org. Syn.* Trost, B. M.; Fleming, I., Eds.; Pergamon, **1991**, *Vol. 7*, 449. (Review).
- Larock, R. C.; Hightower, T. R. *J. Org. Chem.* **1993**, *58*, 5298–5300.
- Hegedus, L. S. *Transition Metals in the Synthesis of Complex Organic Molecule* **1994**, University Science Books: Mill Valley, CA, pp 199–208. (Review).
- Pellissier, H.; Michellys, P.-Y.; Santelli, M. *Tetrahedron* **1997**, *53*, 10733–10742.
- Feringa, B. L. *Wacker oxidation*. In *Transition Met. Org. Synth.* Beller, M.; Bolm, C., eds.; Wiley–VCH: Weinheim, Germany. **1998**, *2*, 307–315. (Review).
- Smith, A. B.; Friestad, G. K.; Barbosa, J.; Bertounesque, E.; Hull, K. G.; Iwashima, M.; Qiu, Y.; Salvatore, B. A.; Spoons, P. G.; Duan, J. J.-W. *J. Am. Chem. Soc.* **1999**, *121*, 10468–10477.
- Kobayashi, Y.; Wang, Y.-G. *Tetrahedron Lett.* **2002**, *43*, 4381–4384.
- Hintermann, L. *Wacker-type Oxidations in Transition Met. Org. Synth.* (2nd edn.) Beller, M.; Bolm, C., eds., Wiley–VCH: Weinheim, Germany. **2004**, *2*, pp 379–388. (Review).
- Li, J. J. *Wacker–Tsuji oxidation*. In *Name Reactions for Functional Group Transformations*; Li, J. J., Ed.; Wiley: Hoboken, NJ, **2007**, pp 309–326. (Review).
- Okamoto, M.; Taniguchi, Y. *J. Cat.* **2009**, *261*, 195–200.
- DeLuca, R. J.; Edwards, J. L.; Steffens, L. D.; Michel, B. W.; Qiao, X.; Zhu, C.; Cook, S. P.; Sigman, M. S. *J. Org. Chem.* **2013**, *78*, 1682–1686.