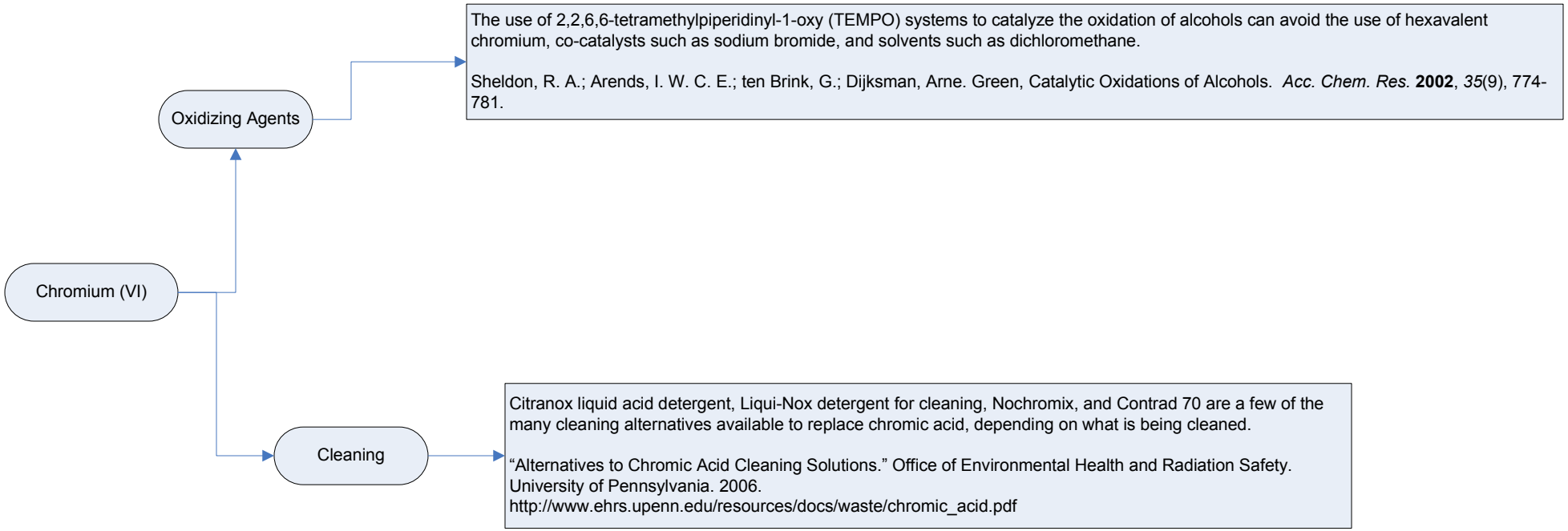
Chromium (VI)
Oxidizing Agents
The use of 2,2,6,6-tetramethylpiperidinyl-1-oxy (TEMPO) systems to catalyze the oxidation of alcohols can avoid the use of hexavalent chromium, co-catalysts such as sodium bromide, and solvents such as dichloromethane.
Sheldon, R. A.; Arends, I. W. C. E.; ten Brink, G.; Dijksman, Arne. Green, Catalytic Oxidations of Alcohols. Acc. Chem. Res. 2002, 35(9), 774-781.
Cleaning
Citranox liquid acid detergent, Liqui-Nox detergent for cleaning, Nochromix, and Contrad 70 are a few of the many cleaning alternatives available to replace chromic acid, depending on what is being cleaned.
"Alternatives to Chromic Acid Cleaning Solutions." Office of Environmental Health and Radiation Safety. University of Pennsylvania. 2006.
http://www.ehrs.upenn.edu/resources/docs/waste/chromic_acid.pdf