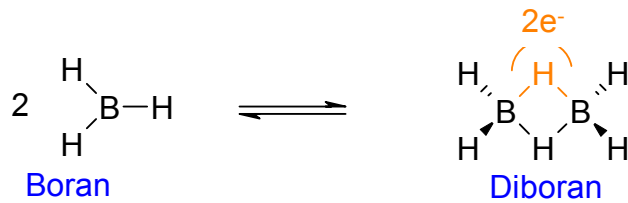
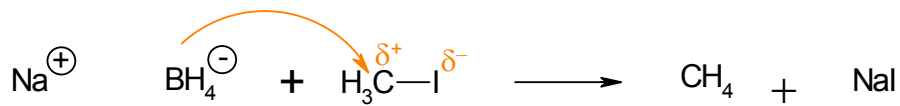
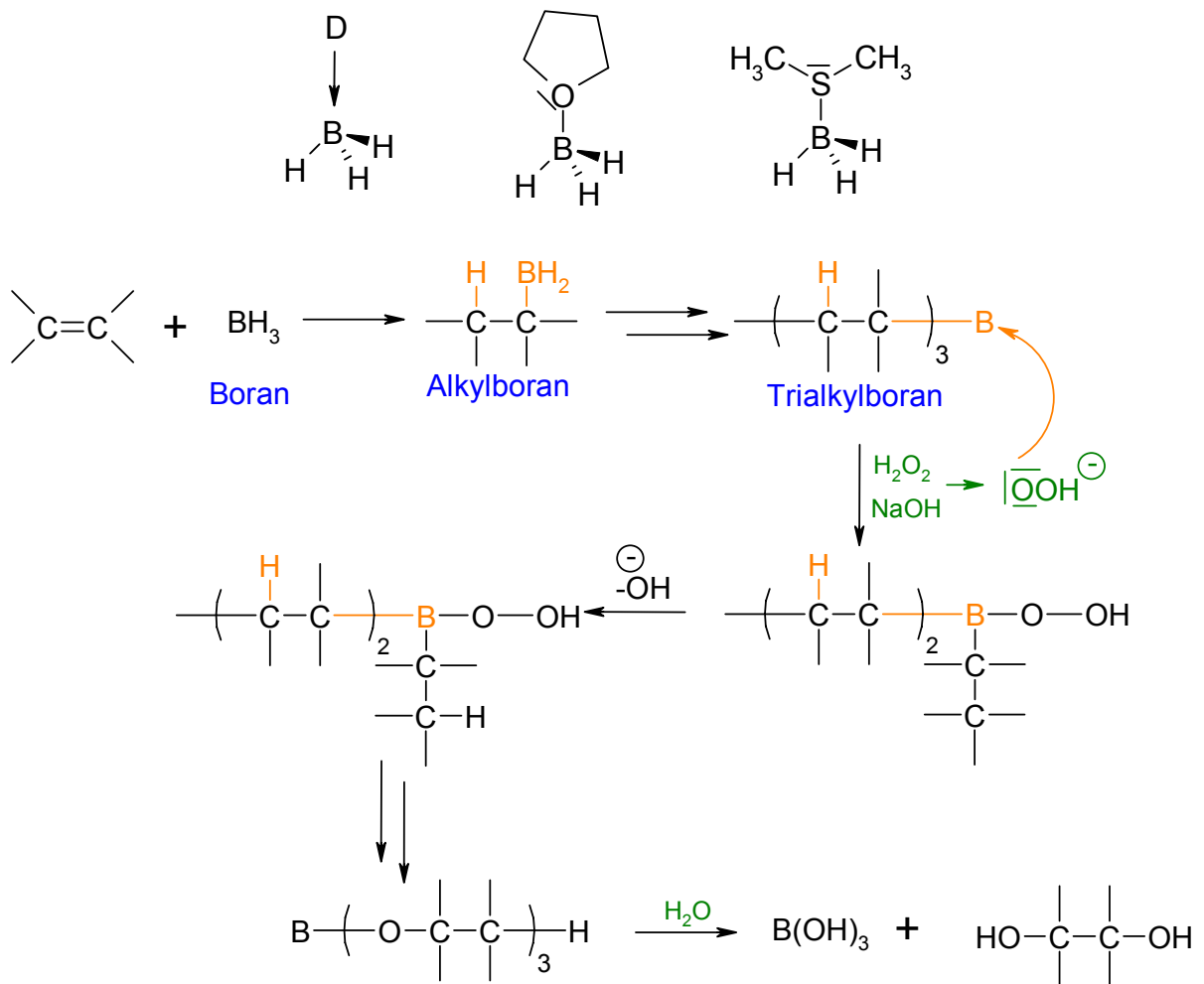


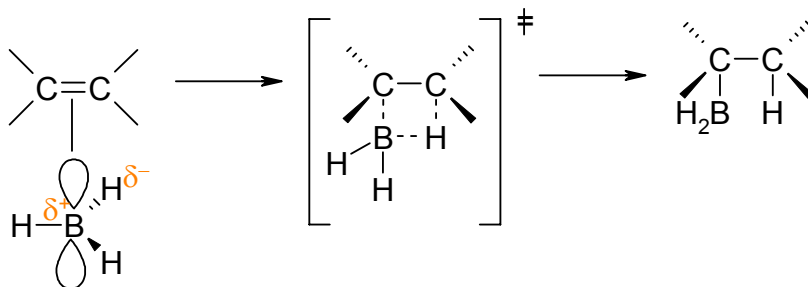
Die Hydrobromierung

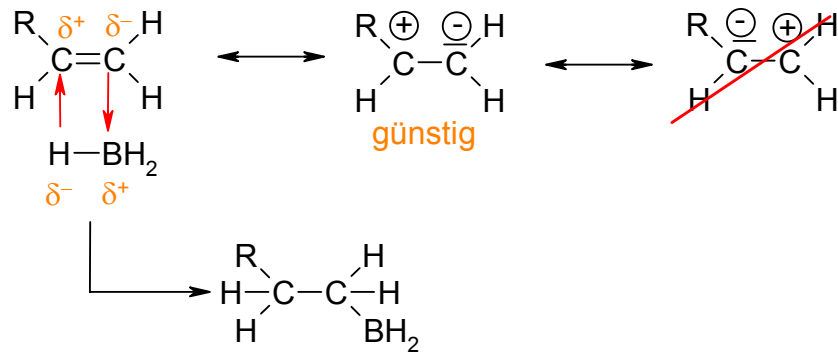


Elektronenmangelverbindung (3-Zentren-2-Elektronen-Bindung)

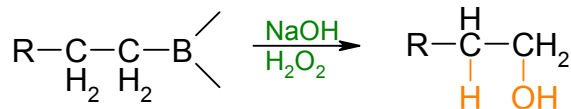


Doppelpfeile bedeuten, dass der vorhergehende Schritt noch 2x abläuft



**Markovnikov**

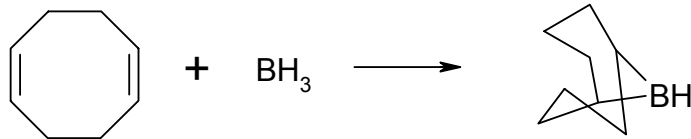
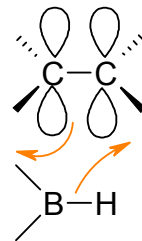
- Das Elektrophil greift an dem niedriger substituierten Ende der Doppelbindung an
- Das stabilste Carbeniumion wird gebildet



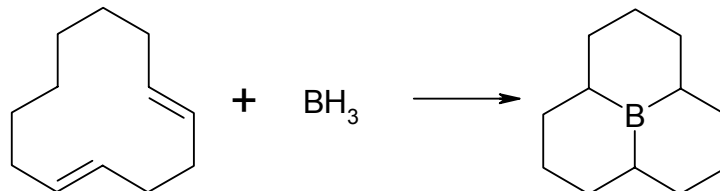
formal: Antimarkovnikov-Additionsprodukt von Wasser

Stereoselektivität

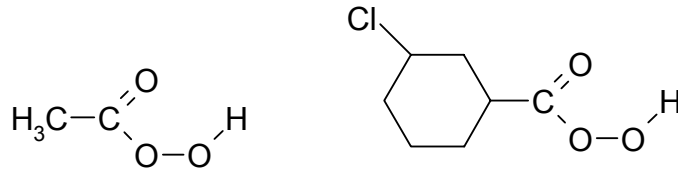
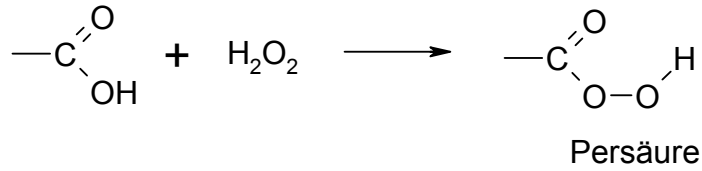
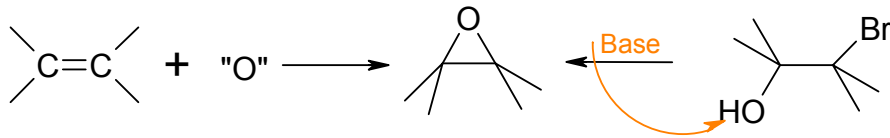
syn. Addition



9-BBN
9-Boralciclo[3.3.1]nonan

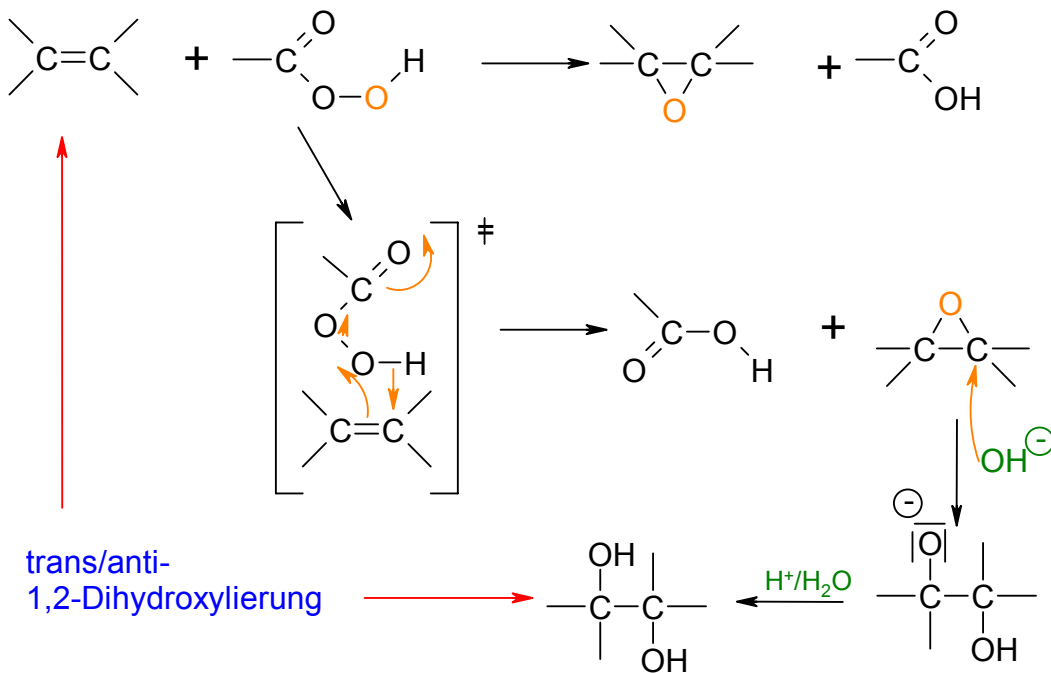


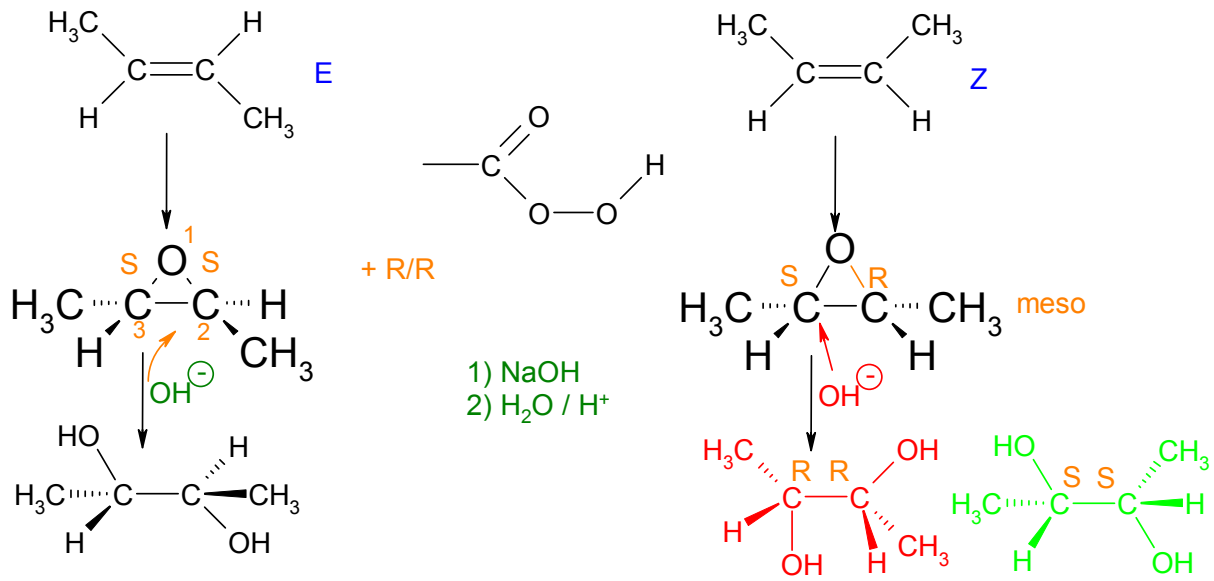
Epoxide, Oxirane, Oxacyclopropane



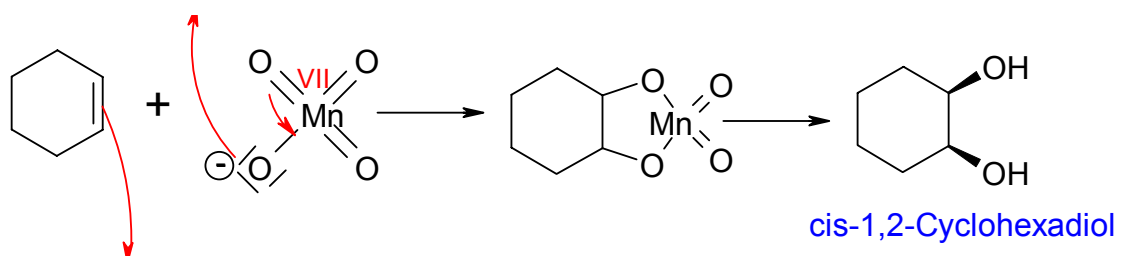
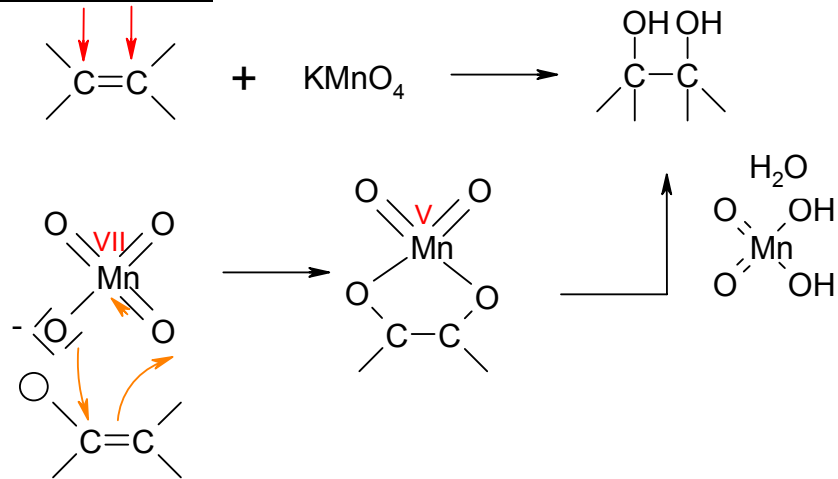
Peressigsäure
flüssig, explosiv

meta-Chlbenzoesäure (MCPBA)
kristallin, käuflich

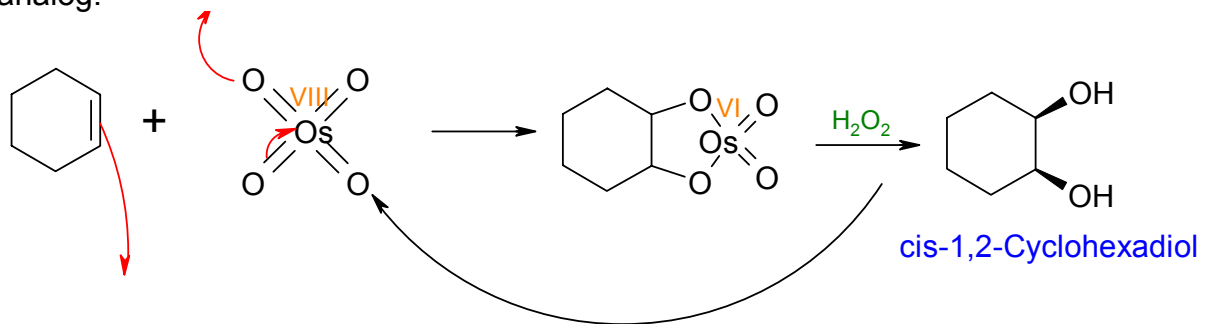


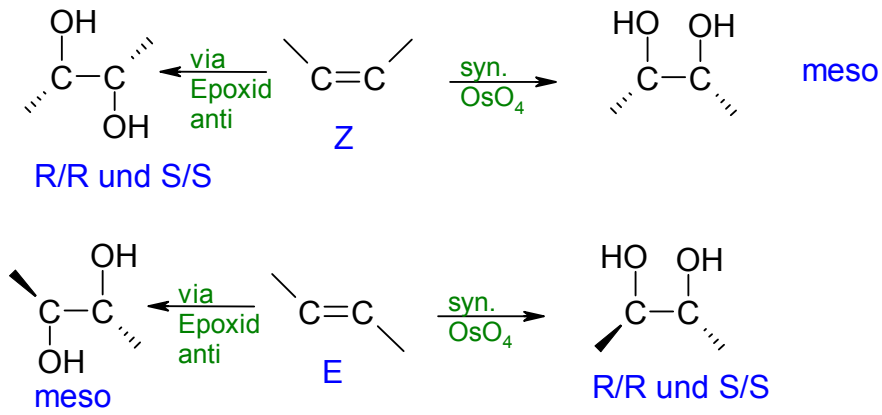


syn./cis-Dihydroxylierung

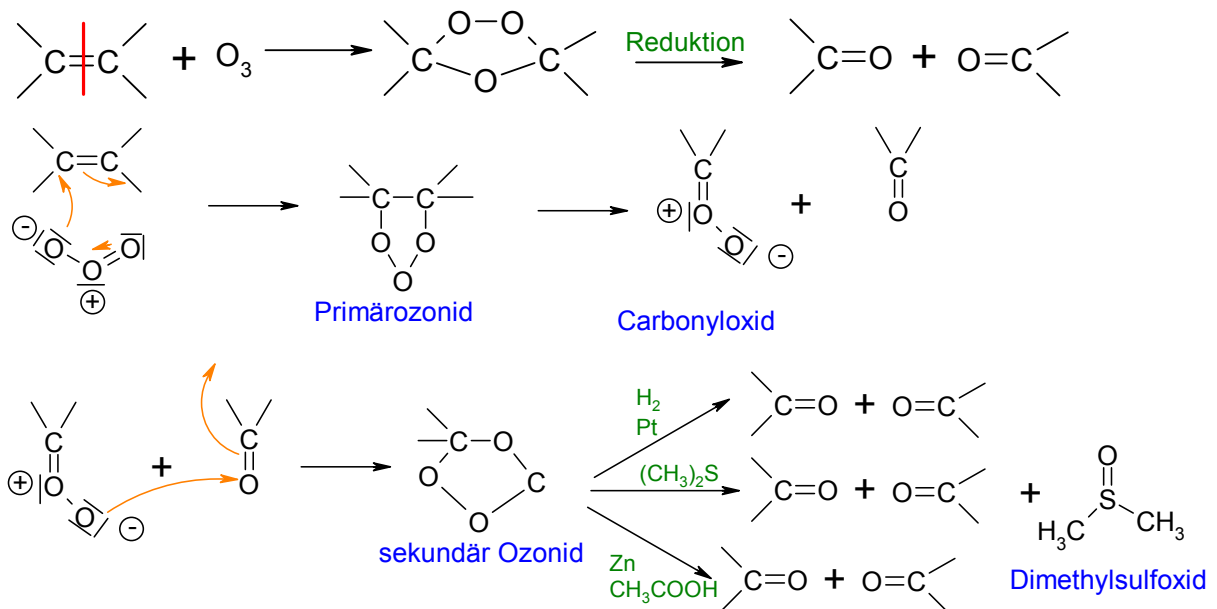


analog:

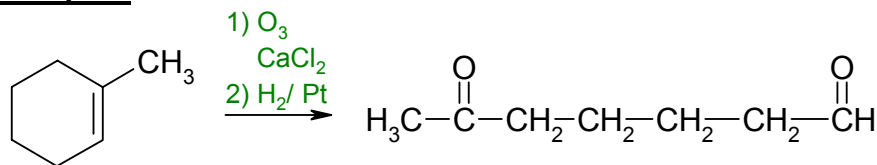




Ozonolyse



Beispiel:



Addition von Radikalen

