

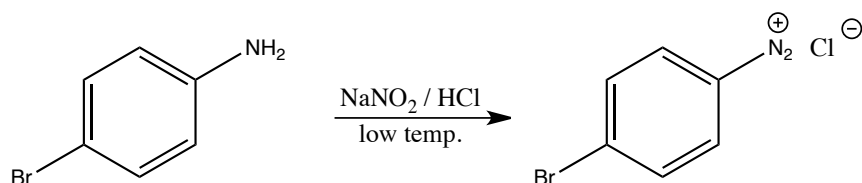
Chem 345 – Organic Reactions Chapter 23

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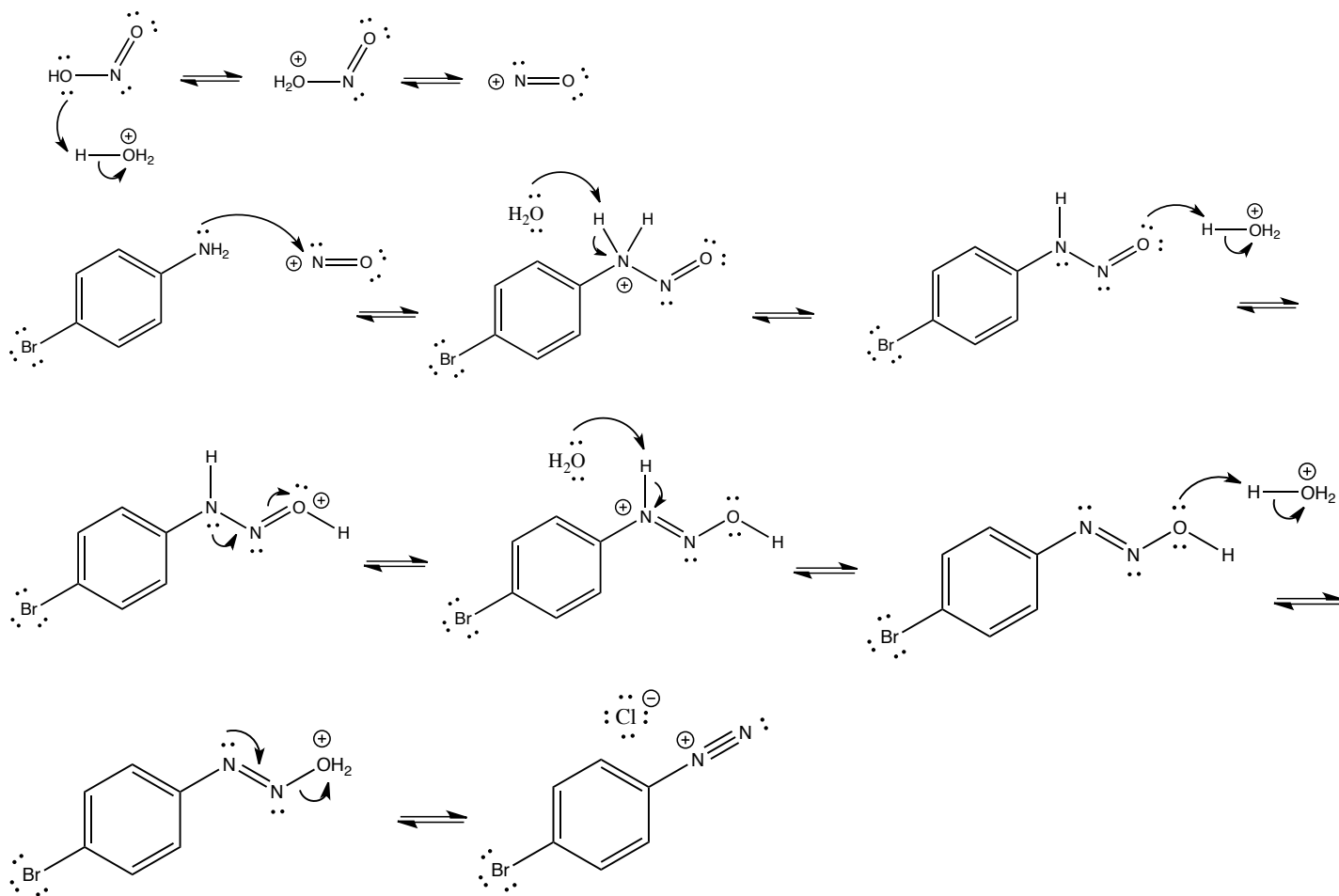
<http://www.chem.wisc.edu/areas/clc> (Resource page)

Reactions of Amines: Diazonium Salts

Reaction:



Mechanism:



The diazonium salts of aliphatic compounds are very unstable even at low temperatures, but aryl diazonium salts are stable at low temperatures. The above mechanism is a proposed one. Actually it is known that nitrous acid is in equilibrium with several nitrogen species, one of them being N_2O_3 . This reagent is thought to play a major role in nitrosation.

Treating aryl diazonium salts with potassium, KI, or hypophosphorus acid, H_3PO_2 produce an iodide derivative or substitution for a hydrogen, respectively. (See below).

