The Diels-Alder reaction is reversible. The equilibrium lies by far toward the Diels-Alder adduct at lower temperature and, at higher temperature, toward the diene and the dienophile.

eg:

If a Diels-Alder adduct is heated at a much higher temperature than the temperature at which it forms in a Diels-Alder reaction, it breaks down to give the diene and the dienophile. The reaction, which is a cycloreversion, is called the retro Diels-Alder Reaction.

Mechanism

Retro Diels-Alder reaction is a pericyclic reaction.

Contributors

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