The Diels-Alder reaction is a [4+2] cycloaddition in which a conjugated diene, called the diene, reacts with an alkene group or an alkyne group in a compound, called the dienophile, to give a cycloadduct, called the Diels-Alder adduct.

**eg. 1:**

![Diels-Alder reaction example 1](image)

**eg. 2:**

![Diels-Alder reaction example 2](image)

**Mechanism**

The Diels-Alder reaction is a pericyclic reaction.

![Mechanism of Diels-Alder reaction](image)

*see also* retro Diels-Alder reaction.