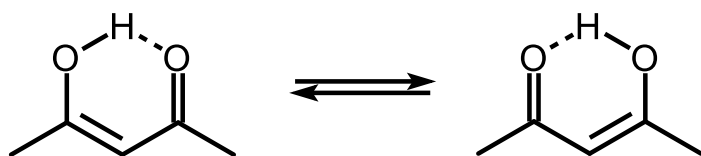


pseudopericyclic

A concerted transformation is pseudopericyclic if the primary changes in bonding occur within a cyclic array of atoms at one (or more) of which nonbonding and bonding atomic orbitals interchange roles. A formal example is the enol \rightarrow enol prototropy of pentane-2,4-dione (acetylacetone).



Because the π - and σ -atomic orbitals that interchange roles are orthogonal, such a reaction does not proceed through a fully conjugated transition state and is thus not a pericyclic reaction and therefore not governed by the rules that express orbital symmetry restrictions applicable to pericyclic reactions.

Source:

PAC, 1994, 66, 1077 (*Glossary of terms used in physical organic chemistry (IUPAC Recommendations 1994)*) on page 1154