Fischer esterification is the esterification of a carboxylic acid by heating it with an alcohol in the presence of a strong acid as the catalyst.

e.g.:

\[
\text{CH}_3\text{COOH} + \text{C}_2\text{H}_5\text{OH} \xrightleftharpoons{\text{catalyst: conc. H}_2\text{SO}_4} \xrightarrow{\Delta} \text{CH}_3\text{CO}_2\text{C}_2\text{H}_5 + \text{H}_2\text{O}
\]

The overall reaction is reversible; to drive the reaction to completion, it is necessary to exploit Le Châteliers principle, which can be done either by continuously removing the water formed from the system or by using a large excess of the alcohol.

Mechanism:

Contributors

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