Methanesulfonyl chloride or mesyl chloride (abbreviation: MsCl) is the compound obtained when the hydroxy group in the molecule of methanesulfonic acid is replaced with a chlorine atom.

\[
\text{CH}_3\text{SO}\text{H} \quad \rightarrow \quad \text{CH}_3\text{SO}\text{Cl}
\]

methanesulfonyl chloride

Methanesulfonyl chloride is the reagent used to convert alcohols into alkyl mesylates.

eg:

\[
\text{CH}_3\text{SO}\text{Cl} + \text{HOOCH}_2\text{CH}_3 \xrightarrow{\text{weak base}} \text{CH}_3\text{SO}\text{OCH}_2\text{CH}_3 + \text{HCl}
\]

see also p-toluenesulfonyl chloride

Contributors

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