Below is a standard procedure for the **Swern oxidation of an alcohol**.

### Procedure

To a solution of oxalyl chloride (5 mmol) and 3 Å MS in CH$_2$Cl$_2$ (1 mL) at -78 °C under N$_2$ is added dropwise a solution of DMSO (10 mmol) in CH$_2$Cl$_2$ (1 mL). After 15 min a solution of the alcohol in CH$_2$Cl$_2$ (3 mL) is slowly added dropwise. After 30 min, Et$_3$N (15 mmol) is added dropwise. The reaction is stirred 30 min at -78 °C then slowly allowed to warm to rt.

### Notes:

- Dichloromethane is usually the solvent of choice for this reaction, but Et$_2$O or THF may also be used.
- For secondary alcohols, warming the reaction to -40 °C after the addition of the alcohol for 20 min may help.
- Bulkier amines such as diisopropylethylamine can be used instead of triethylamine in case of epimerization of the α-center.

### Mechanism

![Mechanism Diagram]

### Contributors

- [OChemOnline](https://www.ochemonline.com)