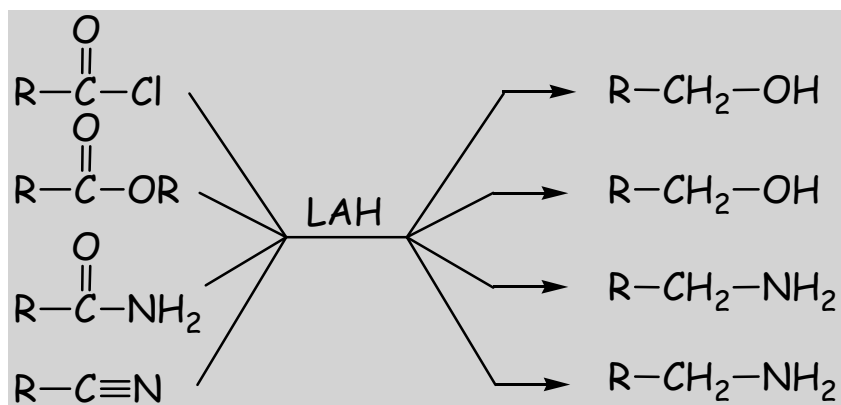


Reduction of acyl compounds

Strong reducing agent reduces down to 1° alcohol (or amine)

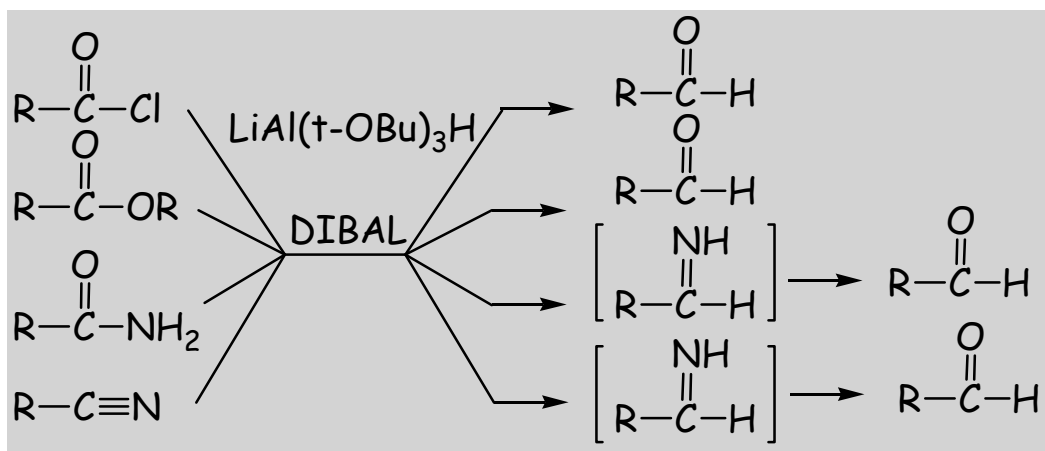
- Acids → 1° alcohol
- Acid chlorides → 1° alcohol
- Esters → 1° alcohol
- Amides → amine
- Nitriles → amine



Milder reducing agent reduces down to aldehyde

DIBAL or $LiAl(t-OBu)_3H$ *lithium aluminum tri(t-butoxy) hydride*

- Acid chlorides → aldehyde
- Esters → aldehyde
- Amides → [imine] → aldehyde
- Nitriles → [imine] → aldehyde



Catalytic hydrogenation of Nitriles to amines also common:

