

Chemguide – questions

NITRILES: REDUCTION

This is very short. There are just a few easy things you have to learn.

- Nitriles are reduced by lithium tetrahydridoaluminate(III). Write the formula for this compound.
 - Give the conditions for the reaction.
 - Write the equation for the reduction of propanenitrile with lithium tetrahydridoaluminate(III). (You can write a simplified equation showing the reducing agent as [H].)
- Nitriles can also be reduced using hydrogen in the presence of a suitable catalyst. Name such a catalyst.
 - Write the equation for the reaction of hydrogen gas with butanenitrile.