

Preparation of amines and aminonitriles

5 Abstract

A process for preparing an NH_2 -containing compound by hydrogenating a compound containing at least one unsaturated carbon-nitrogen bond with hydrogen in the presence of a catalyst
10 at temperatures not below room temperature and elevated hydrogen partial pressure in the presence or absence of a solvent which comprises

- 15 a) using a catalyst comprising a cobalt- and/or iron-containing catalyst, and
- b) after the conversion based on the compound to be hydrogenated and/or the selectivity based on the desired product has or have dropped below a defined value or the amount of an
20 unwanted by-product has risen beyond a defined value, interrupting the hydrogenation by stopping the feed of the compound to be hydrogenated and of the solvent, if used,
- 25 c) treating the catalyst at from 150 to 400°C with hydrogen using a hydrogen pressure within the range from 0.1 to 30 MPa and a treatment time within the range from 2 to 48 h, and
- 30 d) subsequently continuing the hydrogenation of the compound containing at least one unsaturated carbon-nitrogen bond.

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