

Hydroformylation processes serve industrial production of aldehydes and/or alcohols.

Abstract

- 5 A process for preparing C₄ to C₁₃ monohydroxy compounds from a bottom fraction arising in the distillation of a crude mixture of C₄ to C₁₃ oxo-process aldehydes from cobalt-catalyzed or rhodium-catalyzed hydroformylation, or in the distillation of a crude mixture of C₄ to C₁₃ oxo-process alcohols, which comprises contacting the bottom fraction in the presence of hydrogen with a catalyst comprising copper oxide and
- 10 aluminum oxide, at a temperature of 150°C to 300°C and a pressure of 20 bar to 300 bar and subjecting the resulting crude hydrogenation product to distillation, and the amount of C₄ to C₁₃ monohydroxy compounds present in the crude hydrogenation product after the hydrogenation being greater than the amount of C₄ to C₁₃ monohydroxy compounds given stoichiometrically from the hydrogenation of the ester
- 15 and aldehyde compounds present in the bottom fraction, including the C₄ to C₁₃ monohydroxy compounds still present in the bottom fraction before the hydrogenation.