

Abstract

The present invention relates to an improved process for preparing L-phenylephrine hydrochloride 3 on an industrial scale by asymmetric hydrogenation as the key step and a special sequence of subsequent steps, using $[\text{Rh}(\text{COD})\text{Cl}]_2$ as catalyst and a chiral, two-pronged phosphine ligand such as (2R, 4R)-4-(dicyclohexylphosphino)-2-(diphenylphosphino-methyl)-N-methyl-aminocarbonyl-pyrrolidine as the catalyst system.