Process for the preparation of epoxides from olefins

Abstract

The invention relates to a process for the preparation of epoxides by epoxidation of olefinic compounds with hydrogen peroxide in the presence of a titanium silicalite as a catalyst.

According to the invention, a base is introduced into the epoxidation reactor directly or as a mixture with one or more starting substances, under pH control, a pH in the range from 4 to 9.5, in particular 5 to 9.5, being established and maintained in the reaction mixture or in the starting substance containing the base. Preferably, an aqueous-organic hydrogen peroxide solution with a pH in the range from 8 to 9 is employed and the epoxidation is carried out on a fixed bed reactor.