IMPROVED EPOXIDATION PROCESS

ABSTRACT

In an epoxidation process wherein an olefin is reacted with hydrogen peroxide in the presence of a titanium-containing molecular sieve catalyst and a salt, the tendency of the catalyst to produce greater quantities of oxygen as it ages due to non-selective decomposition of the hydrogen peroxide may be counteracted by the addition of a chelating agent bearing hydroxyl, carboxyl, amino, and/or phosphoryl groups. The use of such a chelating agent enables selectivity to epoxide to be maintained at a desirably high level for a prolonged period of time in a continuous epoxidation unit.