INTEGRATED PROCESS FOR EPOXIDATION

ABSTRACT OF THE DISCLOSURE

Epoxides are produced by an integrated process involving molecular oxygen oxidation of a secondary alcohol, separation of the ketone by-product, and epoxidation of an olefin in the presence of a titanium silicalite catalyst and a diluent, wherein a crude alcohol stream obtained by removing epoxide from the epoxidation product mixture serves as the diluent. Despite use of the crude alcohol stream, which typically comprises water, organic acids and glycols, high selectivities to epoxides such as propylene oxide are realized.

Figure 1