A Process For Preparing Propylene Oxide

Abstract

A continuous process for the preparation of propylene oxide, comprising (i) providing a liquid feed stream comprising propene, hydrogen peroxide, acetonitrile, water, optionally propane, and at least one dissolved potassium salt; (ii) passing the feed stream provided in (i) into an epoxidation reactor comprising a catalyst comprising a titanium zeolite of structure type MWW, and subjecting the feed stream to epoxidation reaction conditions in the epoxidation reactor, obtaining a reaction mixture comprising propylene oxide, acetonitrile, water, the at least one potassium salt, optionally propene, and optionally propane; (iii) removing an effluent stream from the epoxidation reactor, the effluent stream comprising propylene oxide, acetonitrile, water, at least a portion of the at least one potassium salt, optionally propene, and optionally propane.

(No suitable figure)