



ABSTRACT

A process for producing propylene oxide, which comprises steps described below, wherein the concentration of isopropylbenzene hydroperoxide in a solution containing cumyl alcohol is 5 % by weight or less when the epoxidation step is completed:

oxidation step; a step in which isopropylbenzene is oxidized to obtain isopropylbenzene hydroperoxide,

epoxidation step; a step in which isopropyl hydroperoxide obtained in the oxidation step is reacted with propylene to obtain propylene oxide and cumyl alcohol, and

hydrogenolysis step; a step in which cumyl alcohol obtained in the epoxidation step is subjected to hydrogenolysis to obtain isopropylbenzene, and said isopropylbenzene is recycled to the oxidation step as a raw material for the oxidation step.