

ABSTRACT

Provided is a method for treating production wastewater from the preparation of propylene oxide by co-oxidation, where the production wastewater includes a first portion of wastewater having a peroxide content of 2000 mg/L or more and a second portion of wastewater having a peroxide content of 50 mg/L or less. The method includes the following steps: (1) subjecting the first portion of wastewater to a catalytic oxidation treatment to obtain effluent wastewater; (2) rectifying mixed wastewater obtained by mixing the effluent wastewater with the second portion of wastewater by a first rectifying column to obtain a first overhead material and first concentrated wastewater as a first column kettle liquid, rectifying the first column kettle liquid by a second rectifying column to obtain a second overhead material and second concentrated wastewater as a second column kettle liquid, and rectifying the first overhead material and the second overhead material by a third rectifying column for oil-water separation; (3) subjecting the second column kettle liquid to an incineration treatment; and (4) subjecting the third column kettle liquid to a biochemical treatment. The treatment method is suitable for treating wastewater which is high in salinity, organic matter content and peroxide content, and can remove the peroxides therein, improve the biodegradability of wastewater, and reduce the difficulty and cost of wastewater treatment.

Fig. 1