ABSTRACT OF THE DISCLOSURE

METHOD FOR PRODUCING PROPYLENE OXIDE

A method for producing propylene oxide by reacting propylene with ethylbenzene hydroperoxide, wherein said reaction is conducted in the presence of a catalyst comprising a titanium-containing silicon oxide and satisfying all of the following conditions (1) to (5):

(1): There is at least one peak showing a interplanar spacing (d) larger than 18 Å in X-ray diffra on.

(2): An average pore size is 10 Å or mo

(3): A pore size of 90% or more of the total pore volume is 5 to 200 Å.

(4): A specific pore volume is 0.2 cm^3/g or more.

(5): A quarternary ammonium ion represented by the following general formula (I) is used as a template and then said template is removed by calcination operation;

$[NR^1R^2R^3R^4]^+$ (I)

(wherein, R^1 represents a linear or branched hydrocarbon chain having 2 to 36 carbon atoms, and R^2 to R^4 represent an alkyl group having 1 to 6 carbon atoms.).