

METHOD FOR PRODUCING ISOBUTYLENE FROM ISOBUTANOL

ABSTRACT:

The purpose of the present invention is to provide a method that can produce, with high yield or high selectivity isobutylene by means of isobutanol dehydration-reaction. An isobutylene production method of a first embodiment of the present invention is a method for producing isobutylene by means of isobutanol dehydration-reaction, wherein isobutanol is reacted using a catalyst for which the BET specific surface area is within the range of $60\text{m}^2/\text{g}$ - $175\text{m}^2/\text{g}$, and the reaction is carried out under a reaction pressure of 50kPa-750kPa as the absolute pressure. An isobutylene production method of a second embodiment of the present invention includes: using a catalyst which is filled into a reaction chamber and for which the particle diameters of at least 90 mass% of the catalyst are within the range of $700\mu\text{m}$ - $1000\mu\text{m}$; setting the isobutanol concentration within a supplied reaction gas to 30vol% -85vol%; setting the weight hourly velocity (WHSV) of the isobutanol to 0.175h^{-1} ~ 20h^{-1} ; and reacting isobutanol under a reaction pressure of 50kPa-750kPa as the absolute pressure.

[No Figure.]