

[ABSTRACT]

There is provided a catalyst that enables the production of isobutylene with a high selectivity in the production of isobutylene by dehydration of isobutanol. The catalyst according to the present invention contains at least one metal selected from

- 5 Group 6 to Group 14 metal elements in Period 4 to Period 6 of the periodic table, in alumina which includes alumina consisting of one or more crystal phases of a monoclinic crystal phase, a tetragonal crystal phase, and a cubic crystal phase.

Fig. 1 accompanies Abstract