

PROCESSES FOR PRODUCTION OF ISOBUTENE AND TERTIARY BUTANOL**ABSTRACT**

An object of the present invention is to provide, for the production of isobutene,
5 a high-yielding, highly-selective, and long-term stable production process of
isobutene from TBA. With respect to the production of TBA, an object of the present
invention is to provide a TBA production process in which, through long-term stable
maintenance of a high reaction activity, long-term continuous operation is enabled
and the productivity is improved. The present invention discloses a process for
10 producing isobutene that employs a dehydration temperature of from 200 to 450°C in
use of an alumina catalyst that contains a Na content of 0.6 % by weight or less in
terms of NaO₂ and a Na content of 0.4 % by weight in terms of NaO₂, and has a
specific surface area of from 200 to 600 m²/g.

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