

Abstract

This invention provides a catalyst for producing isopropylbenzene and the
5 production method and use thereof. The catalyst comprises a support and
an active component supported on the support, wherein the support
comprises a support substrate and a modifying auxiliary component
supported on the support substrate, wherein the active component includes
10 metal palladium and/or oxides thereof, and the modifying auxiliary
component is phosphorus and/or oxides thereof; optionally, the active
component further includes metal copper and/or oxides thereof; the
catalyst further comprises a sulfur-containing compound. When used in the
production of isopropylbenzene, the catalyst of the present invention can
15 better inhibit local overheating of the catalyst caused by a relatively high
initial activity of the catalyst, avoids the growth of metal grains and the
excessive hydrogenation of isopropylbenzene to isopropylcyclohexane.
Meanwhile, it effectively controls the generation of dimerized isopropyl
benzene and significantly improves the operation stability of the catalyst
while enhancing the selectivity of isopropylbenzene.

20 Figure 1