

ABSTRACT

Provided are a catalyst for α -olefin production and a method of using the catalyst for producing α -olefins, of which the advantages are that the catalyst exhibits high activity of ethylene oligomerization and the amount of the side products such as heavy components and waxy components that may be produced in the method is reduced. In one aspect, the catalyst is prepared by contacting (a) any of clay, clay minerals and ion-exchange layer compounds with (b) a transition metal complex of which the center metal is a transition metal of Groups 8 to 10 of the Periodic Table, for a period of at least 10 minutes, and the catalyst is used for ethylene oligomerization to produce α -olefins. In another aspect, the catalyst is prepared by contacting (a') any of clay, clay minerals or ion-exchange layer compounds having been processed with an alkylating, with (b) a transition metal complex of which the center metal is a transition metal of Groups 8 to 10 of the Periodic Table, wherein the component (a') is such that its suspension formed by adding an inert medium thereto releases at most 1 mmols, per gram of the component (a'), of the alkylating agent in the medium, and the catalyst is used for ethylene oligomerization to produce α -olefins.