

Object

The present invention is intended to solve such problems associated with the prior arts as mentioned above, and an object of the present invention is to provide a titanium catalyst component for olefin polymerization capable of preparing olefin polymers having a narrow particle size distribution and an excellent copolymerization distribution with high polymerization activity, and to provide a process for polymerizing olefins using the titanium catalyst component for olefin polymerization.

Constitution

The titanium catalyst component for olefin polymerization according to the invention is prepared by contacting:

[A] a solid magnesium aluminum complex obtainable by contacting (a-1) a magnesium solution comprising a halogen-containing magnesium compound, an alcohol having at least 6 carbon atoms and a hydrocarbon solvent with (a-2) an organoaluminum compound, and containing magnesium, halogen, aluminum and an alkoxy group having at least 6 carbon atoms; with

[B] a tetravalent titanium compound.

The titanium catalyst component for olefin polymerization according to the invention essentially contains magnesium, halogen, aluminum, an alkoxy having at least 6 carbon atoms and titanium.

The process for an olefin polymerization is characterized by polymerizing or copolymerizing an olefin in the presence of a catalyst for the olefin polymerization comprising [I] the titanium catalyst component for the olefin polymerization and [II] an organoaluminum compound catalyst component.