

ABSTRACT

The present invention intends to provide a process for preparation of a solid titanium catalyst component for an olefin polymerization excellent in polymerization activity
5 per unit catalyst, and a process for preparation of a polyolefin using a catalyst containing the catalyst component.

The process according to the present invention is characterized by comprising the steps of contacting (A) a
10 magnesium compound with (B) a solution titanium compound to obtain a solid titanium catalyst component composed of titanium, magnesium and a halogen as the essential components, wherein a titanium compound mixture liquid composed of 88 to 99 % by weight of a titanium compound and
15 1 to 12 % by weight of hydrocarbon containing halogen-containing hydrocarbon is used as (B) the solution titanium compound.