

ABSTRACT

A solid titanium catalyst component (I) comprising titanium, magnesium, halogen, a specific cyclic ester compound (a) and a specific cyclic ester compound (b), an
5 olefin polymerization catalyst containing this catalyst component (I), and an olefin polymerization process using this olefin polymerization catalyst are disclosed. According to the solid titanium catalyst component, the olefin polymerization catalyst and the process for preparing an
10 olefin polymer of the invention, an olefin polymer having high stereoregularity and a wide molecular weight distribution can be prepared with high activity, preparation of an olefin polymer excellent not only in molding properties such as high-speed stretchability and high-speed moldability
15 but also in rigidity becomes possible, and besides, production cost can be reduced.