

ABSTRACT

[Problem] To efficiently obtain an α -olefin polymer having a high melting point and a high molecular weight. [Solution to Problem]

The process for preparing an olefin polymer of the present invention

5 is a process for preparing an olefin polymer, comprising polymerizing at least one monomer selected from α -olefins of 2 or more carbon atoms, wherein the polymerization is carried out at a temperature of not lower than 40°C in the presence of a catalyst comprising a transition metal compound component (A) which comprises two or more kinds of transition metal compounds (a) represented by the following formula

10 [A1] and an organometallic compound component (B) which comprises an organometallic compound (b), propylene is contained in the monomer, and the olefin polymer is an olefin polymer whose weight-average molecular weight (M_w) and number-average molecular weight (M_n), as

15 determined by gel permeation chromatography (GPC), satisfy the relationship of $1 \leq (M_w/M_n) \leq 3$, and which has a melting point (T_m), as determined by DSC, of not lower than 150°C and an intrinsic viscosity ($[\eta]$) of not less than 1.5 dl/g.