

ABSTRACT

The objective of the present invention is to provide a solid catalyst component and a catalyst for polymerization of olefins, which shows a high activity, can lower the rate of forming a polymer having a low molecular weight or a low stereoregular polymer which is soluble in a polymerization solvent and can obtain a high stereoregular polymer in a high yield.

10 The present invention is a solid catalyst component (A) for polymerization of olefins prepared by contacting (a) dialkoxymagnesium, (b) a titanium compound, (c) a diester of an aromatic dicarboxylic acid, (d) an aromatic hydrocarbon and (e) an organic silicon compound containing a hydroxyl group, 15 and a catalyst for polymerization of olefins prepared from the solid catalyst component (A), an organic aluminum compound (B) represented by the general formula $R^2_pAlQ_{3-p}$ and an organic silicon compound (C) represented by the general formula $R^3_qSi(OR^4)_{4-q}$.