

ABSTRACT

The present invention provides a solid catalyst component for polymerization of olefins prepared by allowing a magnesium compound, a titanium compound and an electron donor compound to come in contact with each other, and having a value that a parameter of $S1/S2$ determined by Raman spectroscopic analysis is not less than 0.5 and not more than 10, wherein $S1$ and $S2$ are the values determined by Raman spectroscopic analysis, and $S1$ is a value of peak area of the strongest peak appeared in the range from 360 to 520 cm^{-1} and $S2$ is a value of peak area of the strongest peak appeared in the range from 160 to 340 cm^{-1} . A catalyst comprising the solid catalyst component, an organic aluminum compound and an organic silicon compound is superior in hydrogen response and can produce a polymer of olefins having a high stereoregularity in a high yield.